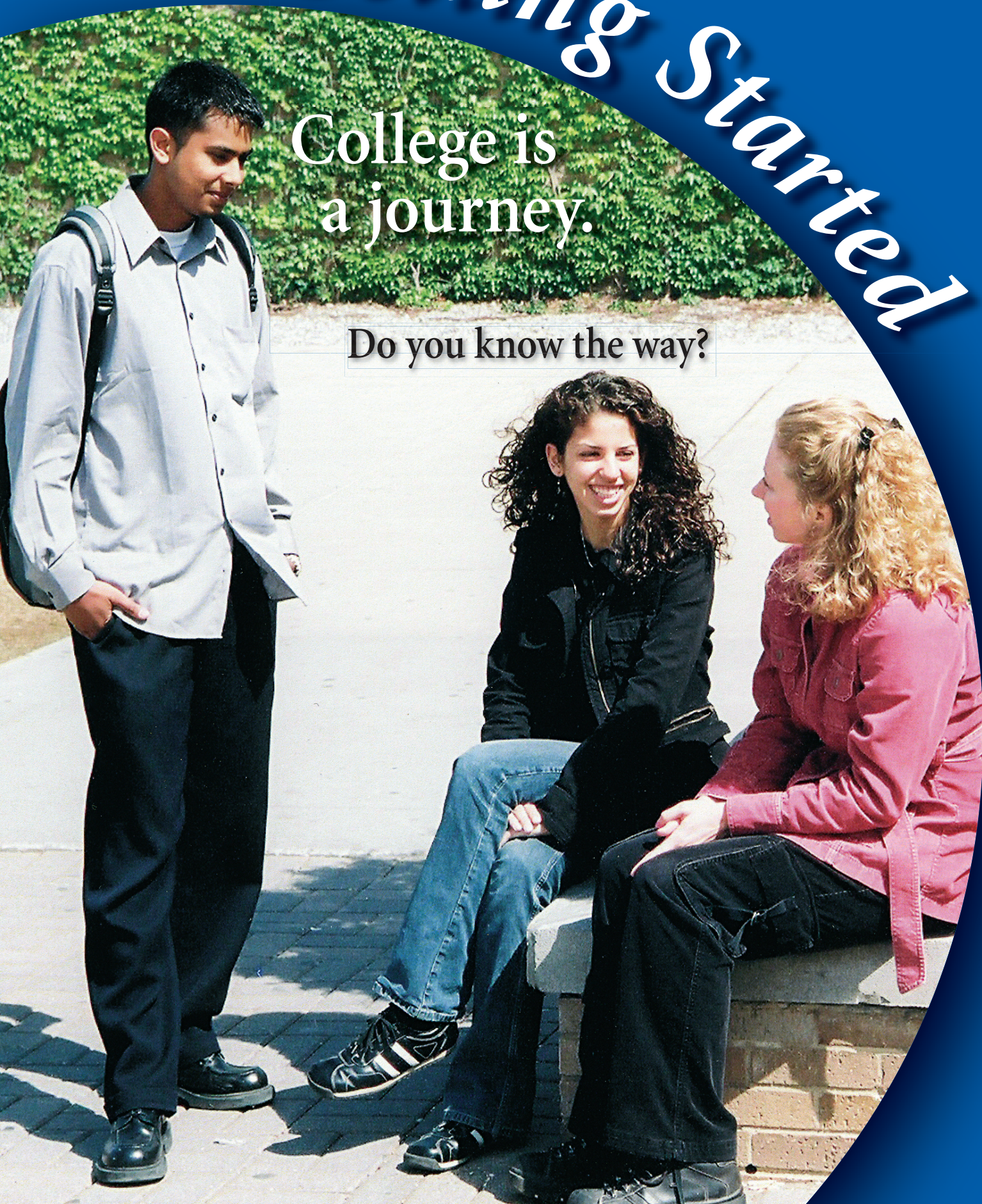
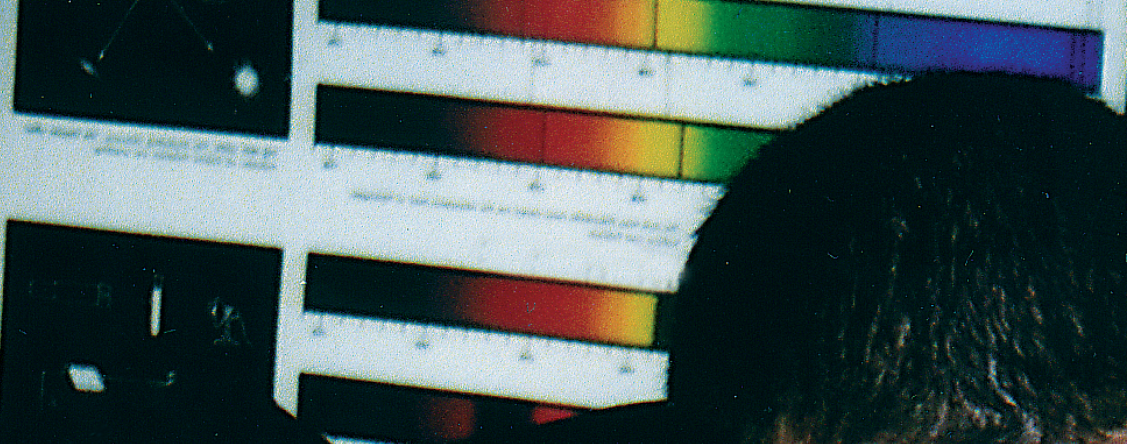


Getting Started

College is
a journey.

Do you know the way?





RECEDING
EDGE OF SUN

APPROACHING
EDGE OF SUN

DIDYM

Applying for Admission

Henry Ford Community College welcomes applications from those holding high school diplomas, General Education Development (GED) certificates, and college credits or degrees. Students may enroll in one course, a series of courses, or a program leading to a certificate or degree. Whatever the goal, HFCC wants each student to have a successful experience.

Current High School Students

Students enrolled in high school may attend HFCC concurrently through the Dual Enrollment or Advancement Plus programs. The credit earned through these programs can be used by students to get a head start at HFCC, or the credits can be transferred to another college after high school graduation.

High School Graduates

Students who have graduated from high school or completed a home school program can be admitted to HFCC. HFCC admits thousands of students from high schools all over southeastern Michigan and beyond each year.

Transfer Students

Students who previously attended another college or university are considered transfer students. Students transfer to HFCC for the quality programs, affordability, convenience, and many other reasons.

Non-Degree Seeking Students

Students who want to take classes for their job, for personal interest or other reasons besides obtaining a degree or certificate may apply as non-degree students.

Guest Students

Students currently attending another college or university and who wish to take one or more courses may attend HFCC as a guest student. HFCC enrolls hundreds of guest students every year, primarily in the spring and summer semesters.

International Students

HFCC welcomes applications from international students. In Fall 2004, students from more than 50 countries were enrolled at HFCC.



How to Apply

Applying for admission as a degree- or certificate-seeking student and registering for classes is an easy six-step process.

Step 1 – Apply for Admission

The best way to apply for admission is on the Web at www.hfcc.edu/apply. The only exception is Dual Enrollment or Advancement Plus students, who must complete a paper application and obtain the appropriate signatures from high school personnel.

Paper applications can be obtained by calling the HFCC Welcome Center at 1-800-585-HFCC, or e-mailing enroll@hfcc.edu.

Students may need to submit transcripts and other official documents depending on their admission category. See page 320 for the complete admission policy and requirements.

ACT or SAT Test

ACT and SAT scores are not required for admission to Henry Ford Community College; however, these exam scores may be used for admission to specialized programs and the Henry Ford II Honors Program.

Step 2 – Course Placement

The student takes the ASSET or COMPASS test, which assesses writing, reading, and numerical skills.

Michigan Merit Scholarship recipients are not required to take HFCC placement exams. These students should

present written proof of their award to the Assessment Office on the main level of the Learning Resources Center (117A-LRC).

Also, students who have taken the ACT and received a score of 21 or higher should contact the Assessment Office at 313-845-6399 to see if their scores exempt them from taking Course Placement to place into the mathematics or English courses they wish to take.

Step 3 – Orientation

The student completes an online orientation at www.hfcc.edu/orient.

Step 4 – Meet with a Counselor

A counselor will help the student with course selection, career goals and other information for a successful start.

Step 5 – Register for Classes

The student registers for classes through WebAdvisor, or in person at the Admission, Registration and Records Office in the lower level of the Learning Resources Center.

Step 6 – Pay for Classes

There are a number of convenient options to help with paying tuition at HFCC, including cash, check, charge card or the EZPay Program. Visit www.hfcc.edu/fa for more information on how to pay for a high-quality HFCC education.

After these easy steps are completed, relax and wait for classes to begin!



Transferring HFCC Credits to Another College

Approximately half of HFCC graduates continue their education at other major institutions. Henry Ford Community College strives to make the transfer process seamless for students.

Articulation Agreements and Transfer Guides

The College has nearly 200 articulation agreements with 14 universities. Articulation agreements guarantee that students who follow the programs outlined in the agreements and complete their associate's degrees will receive full credit when they transfer.

HFCC also maintains more than 400 transfer guides indicating equivalencies at 33 universities for individual courses.

The vast majority of HFCC graduates who transfer to four-year institutions say that HFCC prepared them well for their transfer. They also save thousands of tuition dollars by earning an associate's degree at HFCC first. That money can be used towards earning a bachelor's degree and beyond.

Easily transferable credits. More academic and career choices. Affordable tuition. No wonder HFCC ranks among the top community colleges for university transfer students in southeastern Michigan.

For more information, consult the articulation guides and transfer guides available in the University Transfer, Advising and Career Counseling Center. For a complete list of available articulations, see Appendix A on page 355.

Accreditation

Accreditation ensures that credits from Henry Ford Community College will transfer to other accredited colleges and is an excellent measure of the high-quality education available at HFCC.

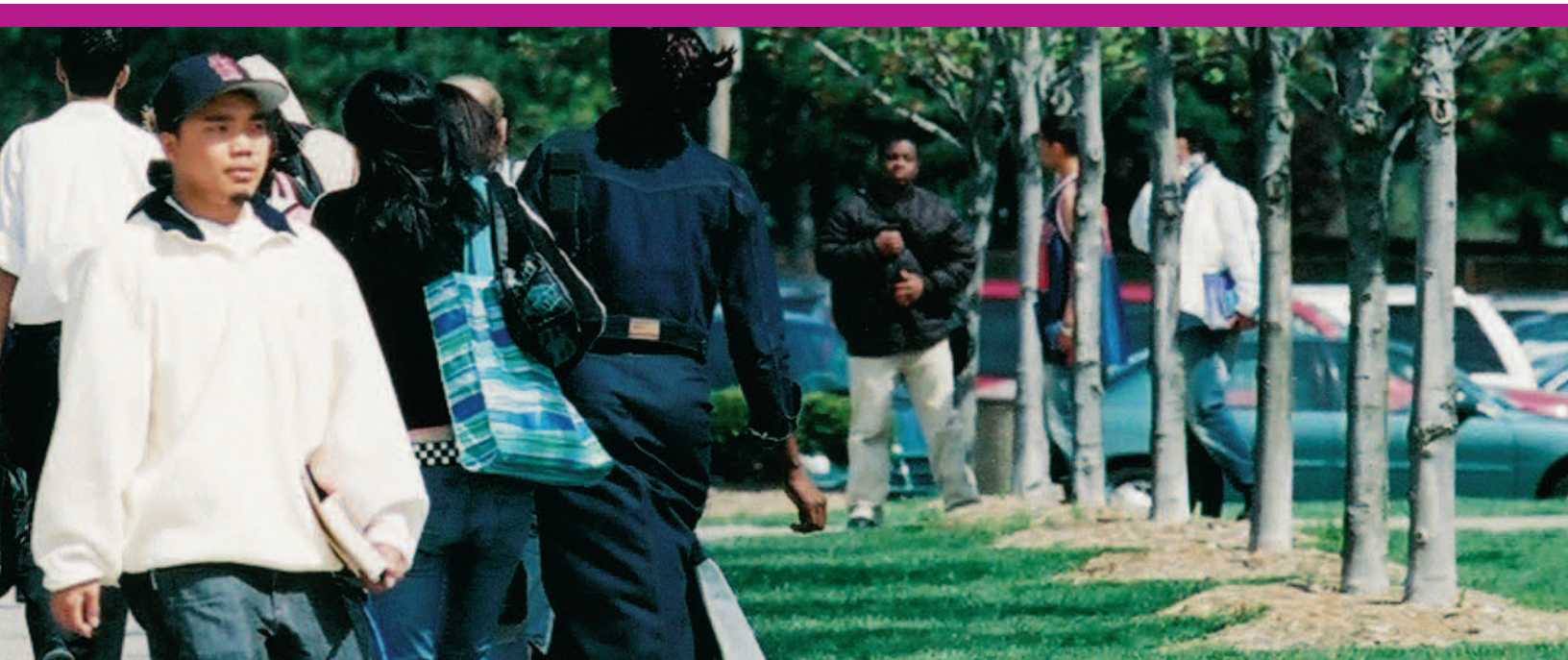
Henry Ford Community College is accredited by The Higher Learning Commission, a Commission of the North Central Association of Colleges and Schools, 30 North LaSalle St., Suite 2400, Chicago, IL 60602-2504. Phone: 1-312-263-0456. Web Address: www.ncahigherlearningcommission.org. HFCC is also accredited by the Michigan Commission on College Accreditation.

Many individual academic programs at HFCC are accredited by their national associations and other governing bodies. You can see the complete list on page 299.

Transfer Credit Guarantee

Henry Ford Community College will refund the tuition of any HFCC graduate for any course passed at HFCC with at least a C grade* if that earned course credit does not transfer to a college or university within two years of having taken the course. Such classes must be listed as transferable on the transfer institution's official curriculum guide sheets on file in the University Transfer, Advising and Career Counseling Center.

*A grade of C minus may not qualify. Also, developmental courses do not generally transfer.





MACRAO Transfer Agreement

The Michigan Association of Collegiate Registrars and Admissions Officers (MACRAO) has established the MACRAO Transfer Agreement, which offers transferability of up to 30 semester credit hours to meet many (and in some cases all) of the General Education Requirements at participating Michigan four-year colleges and universities. Henry Ford Community College students may complete the MACRAO Transfer Agreement as part of an associate's degree or as a stand-alone package. In order to

complete the MACRAO Transfer Agreement, HFCC students must take 30 semester credit hours of 100-level and above college coursework, in the following areas:

- 6 credit hours: English Composition
- 8 credit hours: Science and Mathematics
- 8 credit hours: Social Science
- 8 credit hours: Humanities

Earning a Bachelor's Degree

One of the most important choices that community college students make is deciding whether to pursue additional education after completing their associate's degree or certificate program. Fortunately, HFCC offers students several excellent options.

Henry Ford Community College has a very high transferability rate of courses to four-year colleges and universities. The content and quality of HFCC courses are equivalent to four-year universities, so students can be confident that HFCC courses will "count."

It makes good financial sense to complete an associate's degree at HFCC and then transfer to a four-year university. The tuition cost of completing 60 credit hours at HFCC is approximately \$6,720. Other colleges and universities in Michigan charge up to \$35,000. Students can use the money they save towards completing their bachelor's degree and beyond.

In addition, students can participate in one of the college's distance-learning partnerships with universities in Michigan and Ohio. These innovative collaborations offer both savings and convenience – students save thousands of dollars in tuition while earning a four-year degree onsite at Henry Ford Community College.

HFCC and Franklin University

Graduates can opt to earn a bachelor's degree from Ohio-based Franklin University without leaving the HFCC campus. Degrees are available in one of 10 major areas:

- Accounting
- Applied Management
- Business Administration
- Computer Science
- Digital Communication
- Health Care Management
- Information Technology
- Management
- Management Information Sciences
- Public Safety Management

“ Thanks to HFCC counselors and a scholarship, I have a new career

Interested students should first complete their two-year, 60-credit associate's degree at HFCC, followed by approximately 24 credit hours of "bridge" courses on the HFCC campus. Students then complete their bachelor's degree by electing 40 semester credit hours of Franklin University's online "Capstone Courses."

Although online courses are taught by Franklin University professors, students have the benefit of HFCC's distance-learning resources such as computer assistance, counseling, academic support, and library facilities. Each student in the program is paired with a Student Services Associate at Franklin University who provides continuous support from admission to graduation.

Many students enjoy the flexible scheduling inherent in distance-learning programs. However, interested students are strongly recommended to choose the one-credit hour elective course "Orientation for the Distance Student" at the onset of the degree program to determine whether this form of learning is appropriate for them.

Students interested in HFCC's distance-learning programs will find admissions and other information on the Franklin University Web site at www.alliance.franklin.edu.

HFCC and Michigan Technological University

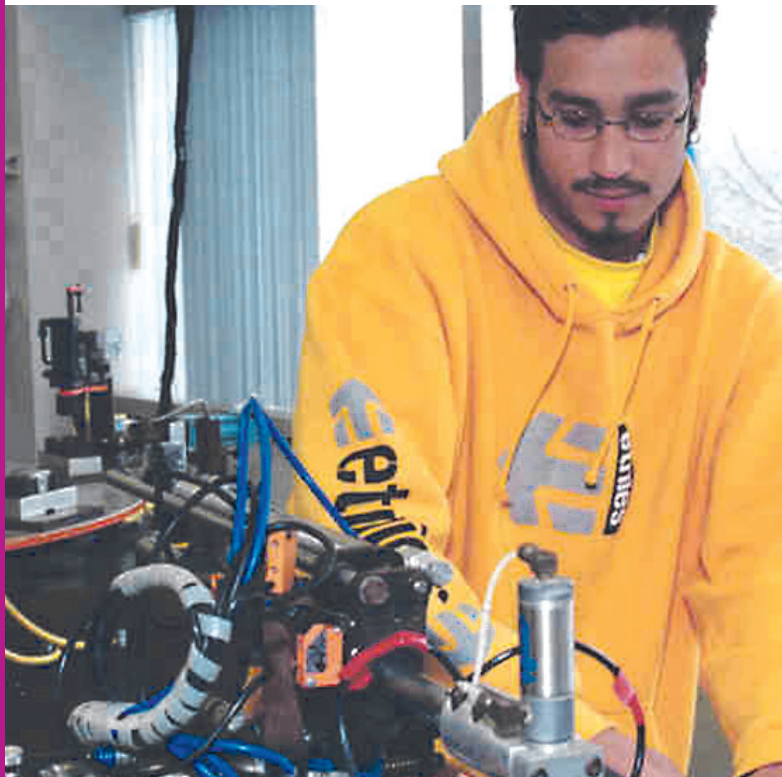
Engineering students can earn a Bachelor of Science in Engineering (BSE) Degree through HFCC's distance-learning program with Michigan Technological University. The degree curriculum emphasizes design and strong computer skills, giving students the choice of two different minor tracks:

Product Design: This option emphasizes mechanical engineering, focusing on the modeling and analysis tools used by the design engineer.

Municipal Engineering: This track emphasizes civil engineering, and emphasizes skills that prepare students for careers in land development, traffic planning, water and wastewater treatment and municipal planning.

Both tracks provide a solid foundation in mathematics, basic sciences, engineering science and design, communications, humanities, and social sciences. Students interested in applying for the Michigan Tech BSE program should have a 2.75 or higher cumulative college grade-point average with proficiency in mathematics and science.

For more information about the program, call **1-800-405-4678**.



path and a 4.0 GPA. I know that I will succeed!"

Gregory Ward, Pre-Engineering Program



Registering For Classes: Steps to Success

Registering for classes is easy and convenient. Below is a listing of the registration process for different categories of students at HFCC:

- New Degree-Seeking Students
- New Nondegree-Seeking Students
- Guest Students
- Returning Students (have registered before at HFCC)

Please follow these steps to success to get started at HFCC!

New Degree-Seeking Students

Degree-seeking students are expected to enroll in a specific HFCC program of study. These students should follow these easy steps for admission and registration:

1. Complete an HFCC Admission Application

Students should fill out an admission application and return it to the Admissions, Registration and Records Office with a check or money order for \$30 and submit one of the following to be admitted:

- Current high school students are required to submit a high school transcript.
- High school graduates need to supply a copy of their high school diploma.
- GED holders need to provide a copy of their general equivalency diploma (GED) and test scores.
- Transfer students should forward official copies of their college transcripts.
- International students must provide proof of graduation from a school equivalent to a U.S. high school.
- Non-U.S. citizens must provide proof of current visa status.

The best way to apply for admission is on the web at www.hfcc.edu/apply. Paper applications can be obtained by calling the HFCC Welcome Center at 1-800-585-HFCC or e-mailing enroll@hfcc.edu.

Students will be notified by mail of their acceptance status.

Note: Health Careers and Nursing applicants must meet special requirements and follow special procedures. Call 313-845-6399 for details.

2. Participate in Course Placement

In order to help students make the best choices in selecting classes, all degree-seeking students are required to participate in Course Placement. Course Placement helps students and their counselor or faculty advisor assess their reading, writing, and math skills. Course Placement is free of charge. Students cannot fail Course Placement.

After the College receives the student's HFCC admission application, the student may participate in Course Placement at the Assessment Center, located on the first floor of the Learning Resources Center (LRC). Students choose from either an untimed computerized assessment or a timed, written multiple-choice test.

The sooner students complete Course Placement, the sooner they will be advised and allowed to enroll, giving them the best selection of classes and times. No appointment is necessary. Course Placement is available on a walk-in basis. Students should allow about two hours to complete the process. For more information about Course Placement students should call the Assessment Office at 313-845-6399.

NOTE: Michigan Merit Scholarship recipients are not required to take HFCC Course Placement.

3. Participate in Orientation

Orientation is the next step in the new student process. Students may view the orientation online in the Assessment Center. Orientation takes about one hour and no appointment is necessary. Orientation is also accessible online at www.hfcc.edu/orient.

4. Meet with a Counselor

A counselor in the University Transfer, Advising and Career Counseling Center will help the student with course selection, career goals and other information for a successful start.

5. Register for Classes

The student registers for classes through WebAdvisor, or in person at the Admission, Registration and Records Office in the lower level of the Learning Resources Center.

6. Payment of Tuition and Fees

Previous balances must be paid in full before registering for a new term.

- Tuition and fees are due by the end of the work week in which you register.
- If total charges are equal to or less than \$600, full payment is required.
- If total charges are greater than \$600, then students have two options:
 - 1) Pay in full, or
 - 2) Sign up for the EZ Pay Program via the Web. A \$600 down payment is required with the balance paid in monthly installments. Information about the EZ Pay Program is available at www.hfcc.edu/ezpay.
- Failure to pay by the due date will result in removal from classes.
- Payments by cash, check, MasterCard, Visa, Discover, financial aid or gift certificate are accepted at the Cashier's Office.
- MasterCard, Visa, or Discover credit card payments may also be made via phone, WebAdvisor or EZ Pay.

Students eligible for financial aid, scholarships, or company sponsorships could qualify for an exemption to the above policy. To verify eligibility, students with financial aid or scholarships should contact the Financial Aid Office at 313-845-9616 and students with company sponsorships should contact the Cashier's Office at 313-845-9641.

New Nondegree-Seeking Students (Personal Interest)

Persons who wish to take credit courses for enrichment, personal development or to continue their education can be admitted as nondegree students.

Note: Financial aid is not available to nondegree-seeking students.

Non-degree seeking students should follow these easy steps for admission and registration:

1. Apply for Admission

The best way to apply for admission is on the Web at www.hfcc.edu/apply. The only exception is Dual Enrollment or Advancement Plus students, who must complete a paper application and obtain the appropriate signatures from high school personnel.



Paper applications can be obtained by calling the HFCC Welcome Center at **1-800-585-HFCC**, or e-mailing **enroll@hfcc.edu**.

Note: A nondegree student must be a high school graduate or have a general equivalency diploma (GED). To take classes, students must meet all course prerequisites listed in the HFCC catalog. Some classes may require placement testing. Graduates of foreign educational institutions must meet English language proficiency standards.

2. Register for Classes

After admission, students can register for classes. Please follow the Returning Student process listed on page ix.

3. Payment of Tuition and Fees

- Previous balances must be paid in full before registering for a new term.
- Tuition and fees are due within one (1) business day of registration.
- If total charges are equal to or less than \$600, full payment is required.
- If total charges are greater than \$600, then students have two options:
 - 1) Pay in full, or
 - 2) Sign up for the EZ Pay Program via the Web. A \$600

down payment is required with the balance paid in monthly installments. Information about the EZ Pay Program is available at **www.hfcc.edu/ezpay**.

- Failure to pay by the due date will result in removal from classes.
- Payments by cash, check, MasterCard, Visa, Discover, financial aid or gift certificate are accepted at the Cashier's Office.
- MasterCard, Visa, or Discover credit card payments may also be made via phone Registration, WebAdvisor or EZ Pay.

Students eligible for scholarships or company sponsorships could qualify for an exemption to the above policy. To verify eligibility, students with scholarships should contact the Financial Aid Office at **313-845-9616** and students with company sponsorships should contact the Cashier's Office at **313-845-9641**.

Guest Students

Guest students are those attending other colleges who wish to take courses at HFCC for transfer credit.

Note: Financial aid is not available to guest students.

Guest students should follow these easy steps for admission and registration:

1. Apply for Admission

Obtain a validated Michigan Uniform Guest Application from the Registrar's Office at your resident college or university. Complete the application, obtain the appropriate signature and seal of your college, and submit it to the Admissions, Registration and Records Office at HFCC. Alternatively, guest students may follow the nondegree-seeking student admission process.

NOTE: Students attending out-of-state colleges should follow the nondegree-seeking student process.



"All of my HFCC credits transferred to Wayne State University. I earned my law degree

2. Register for Classes

After the guest application has been processed, the student may register for classes. Please follow the Returning Student process.

3. Payment of Tuition and Fees

- Previous balances must be paid in full before registering for a new term.
- Tuition and fees are due within one (1) business day of registration.
- If total charges are equal to or less than \$600, full payment is required.

If total charges are greater than \$600, then students have two options:

- 1) Pay in full, or
 - 2) Sign up for the EZ Pay Program via the Web. A \$600 down payment is required with the balance paid in monthly installments. Information about the EZ Pay Program is available at www.hfcc.edu/ezpay.
- Failure to pay by the due date will result in removal from classes.
 - Payments by cash, check, MasterCard, Visa, Discover, financial aid or gift certificate are accepted at the Cashier's Office.
 - MasterCard, Visa, or Discover credit card payments may also be made via phone, WebAdvisor or EZ Pay.

Students eligible for scholarships or company sponsorships could qualify for an exemption to the above policy. To verify eligibility, students with scholarships should contact the Financial Aid Office at 313-845-9616 and students with company sponsorships should contact the Cashier's Office at 313-845-9641.

Returning Students

Returning students should follow these easy steps to register:

1. Register for Classes

Register by touch-tone telephone at 313-317-4100, on the Web at www.hfcc.edu/currentstudents, or in person through the first week of class.

Only former students who have enrolled in any semester since 1990 can register by touch-tone telephone registration or www.hfcc.edu. Students who attended classes before 1990 must register in person at the Admissions, Registration and Records Office.

2. Payment of Tuition and Fees

- Previous balances must be paid in full before registering for a new term.
- Tuition and fees are due within one (1) business day of registration.
- If total charges are equal to or less than \$600, full payment is required.
- If total charges are greater than \$600, then students have two options:
 - 1) Pay in full, or
 - 2) Sign up for the EZ Pay Program via the Web. A \$600 down payment is required with the balance paid in monthly installments. Information about the EZ Pay Program is available at www.hfcc.edu/ezpay.
- Failure to pay by the due date will result in removal from classes.
- Payments by cash, check, MasterCard, Visa, Discover, financial aid or gift certificate are accepted at the Cashier's Office.
- MasterCard, Visa, or Discover credit card payments may also be made via phone, WebAdvisor or EZ Pay.





Students eligible for financial aid, scholarships, or company sponsorships could qualify for an exemption to the above policy. To verify eligibility, students with financial aid or scholarships should contact the Financial Aid Office at 313-845-9616 and students with company sponsorships should contact the Cashier's Office at 313-845-9641.

Schedule of Classes

Students should see the *Schedule of Classes* each semester for specific times and dates of registration. The schedule is on the Web at www.hfcc.edu/schedule or is available at the Welcome Centers.

Buying Books

When it comes to selecting and purchasing textbooks, HFCC offers students plenty of convenient choices.

Students can buy their books in person or use *Textbook Express*, the convenient online textbook ordering service offered by the College Store. With *Textbook Express*, students simply submit their order online and the College Store will have it ready for pick up. The College Store will even ship books to students for a small fee.

Students can pay for textbooks with flexible options: VISA, MasterCard, Discover, financial aid, scholarships or company-sponsored vouchers. Students using financial aid, loans, or scholarships for College Store purchases must present a current student schedule or award letter and picture ID for each purchase. Visit www.hfcc.edu/collegestore for more information.

Book Buy-Back Procedure

Ready to sell back used textbooks? Looking to save money on new ones? The College Store helps students by providing an extensive selection of used books, sold at 75% of the new book price. Always in demand, this stock of used books is replenished with a Book Buy Back program that takes place each semester.

Book Buy-Back is held the week of final exams during fall and winter semesters, and at specially announced times during the spring and summer terms. The College Store does not purchase books from students at any other time.

Course books being used at HFCC may be sold back for up to 50% of the current new book price. Even if certain textbooks are not in demand at HFCC, the book buyer will consider whether they might have value on a national level.

Due to overstocks and edition/title changes, not all books can be bought back. Workbooks also are not eligible for the Book Buy-Back program.

Online Services at HFCC

HFCC has a wide variety of computer and online services to help students achieve their goals. Major services include:

- MyHFCC WebAdvisor
- UCompass Educator
- Novell Network
- Wireless Access
- Computer Labs

A description of each follows.

WebAdvisor

What is MyHFCC WebAdvisor?

WebAdvisor is a secure, web-based tool that allows HFCC students to safely access their college-related information.



Why do I need MyHFCC WebAdvisor?

Current students use WebAdvisor to:

- Register for classes (returning students only; new degree-seeking students register in-person)
- Drop and add classes (prior to the beginning of a semester)
- Pay for classes
- Retrieve grades
- View transcripts
- View and print class schedules
- Check financial aid status
- View account summary

How do I get to MyHFCC WebAdvisor?

From a Web browser, go to www.hfcc.edu/webadvisor and proceed to the student log-in screen.

What is my WebAdvisor ID?

You are assigned a unique WebAdvisor ID the first time you enroll for classes. It allows you to access all student computer services at HFCC. To find your WebAdvisor ID go to www.hfcc.edu/webadvisor. Click “What’s my user ID?” You will be asked to provide your last name and either your social security number or your student number. After you submit this information, a screen will appear that gives your WebAdvisor User ID.

What is my WebAdvisor password?

Your password for all online and network tools is *initially* the four-digit month and date of your birth. For example, if your birthday is June 5 your password will be 0605.

When you enter this 4-digit number, you will immediately be asked to change your password to one of your choice. The password must contain both letters and numbers and must be a minimum of 6 characters and a maximum of 10. You will be asked to enter the password twice, for verification. You have the option of entering a password hint as well. *Use this new password only when you log into WebAdvisor.* Your UCompass password and your Novell Network password will remain the same, the four-digit month and date of your birth.

In the event that you forget your password for WebAdvisor or want to change it for any reason, you can change it by clicking on “What’s My Password?” on the WebAdvisor menu. You will be given three options: select “Reset My Password.” Once you have

provided your name and either social security number or student number, your new password will be sent to your e-mail address.

Registering for Classes Using MyHFCC WebAdvisor

Before using WebAdvisor’s registration feature, you should know exactly what sections and classes you intend to take. You can search for the schedule on WebAdvisor or use the *Schedule of Classes*.



When you are ready to register, click on Register for Classes. At the bottom of the page, click on Express Registration. Once the grid appears that allows you to enter your class selections, make entries only in the far left hand column labeled “Synonym.” The Synonym is the six-digit number that identifies the particular class section you wish to select. It tells the database which semester you wish to register for and the course and section of that course you have chosen. Do not fill in any additional information – just the synonym. Once you click on “Submit” at the bottom of the page and select the semester schedule you wish to see, your schedule for that semester will appear with your name and student number on it. This page can be printed for your record.

Please note: At certain times during each semester, the volume of traffic on WebAdvisor is substantial. This slows down the system. If you are experiencing delays in screens appearing or changing, please be patient. If you double click, thinking that the system is not responding, you are likely to be exited from the system and will have to start over again. As long as the figure at the top right



hand corner of the screen is revolving, the system is processing your request.

Where do I go for help with MyHFCC WebAdvisor?

For help with your WebAdvisor login or password, e-mail myhfcc@hfcc.edu.

UCompass Educator and Online Courses

What is UCompass Educator?

UCompass Educator is HFCC's online classroom system. Only students enrolled in online courses or courses that use UCompass Educator as a supplement to traditional classroom instruction can use UCompass. Your UCompass account is available on the first day of classes at <http://henryford.ucompass.com>.

What is my UCompass Educator ID?

Your Ucompass ID is the same as your WebAdvisor ID.

What is my UCompass Educator password?

Your UCompass password is the four-digit month and date of your birth, i.e. June 5 = 0605.

How do I change my UCompass Educator Password?

The Novell network and UCompass use exactly the same account and password. When you change the Novell network password, the UCompass password changes as well. To change your Novell network and UCompass password, point your browser to <https://my.hfcc.edu>, click on "portal", sign in and follow the instructions.

For more information on changing your Novell Network, wireless, and UCompass password, visit <https://dvc.hfcc.net/helpdesk/000367.htm>.

Where do I go for help with UCompass Educator?

For help with UCompass, contact the HFCC Office of Instructional Technology.

Phone: 313-845-9663, extension 4 or 5

E-mail: support@henryford.ucompass.com

See the Online Learning section on page 316 for complete information about taking one or more of HFCC's high-quality online courses.

Novell Network

What is Novell? Why do I need it?

Novell is the main operating system for the HFCC campus computer network. To use any computer on campus or obtain wireless accesses, you must log into the Novell Network by entering your User ID and password.

What is my Novell Network User ID?

Your User ID is assigned the first time you enroll for classes. It allows you to access all student computer services at HFCC. To get your User ID go to www.hfcc.edu/webadvisor. Click "What's My User ID?" and follow the prompts to find your User ID.



What is my Novell Network password?

Your Novell password is the four-digit month and date of your birth, i.e. June 5 = 0605.

How do I change my Novell Network password?

The Novell network, wireless, and UCompass use exactly the same account and password. When you change the Novell network password, the UCompass password changes as well. To change your Novell network and UCompass password via the Internet point your browser to <https://my.hfcc.edu>, click on “portal”, sign in, and follow the instructions.

For more information on changing your Novell Network, wireless, and UCompass password, visit <https://dvc.hfcc.net/helpdesk/000367.htm>.

Where do I go for help with Novell Network?

For help with your Novell Network login or password, visit the Online Help Desk. From the HFCC Web site, www.hfcc.edu, click “Current Students,” then “Computer Help Desk” on the left-page menu.

Wireless @HFCC

Henry Ford Community College now provides wireless access for all faculty, staff, and registered students. Currently, the wireless network is available in the Library, Student Center, Technical Buildings, Health Careers Education Center, Learning Technology Building, Liberal Arts Building, Science Building and the ASCC Building from 6 a.m. until 10 p.m. daily. This service provides Access to Web based resources only. Browser based e-mail is supported. Printing is not available on the wireless network.

Complete instructions on accessing the Wireless Network can be obtained at <https://dvc.hfcc.net/helpdesk/000171.htm>.

Computers are Available for Students on Campus

These computer labs are open to all students.

Eshleman Library – Media Center, second floor

The Media Center has more than 30 computers which can be used by enrolled students to complete assignments, type papers or access the Internet. Media Center staff can help students logon the first time and give limited help thereafter, but users are expected to have a basic knowledge of computers, software and the Internet. To make computers available equally, time limitations are imposed. The charge is ten cents per page for printing. Computers have Microsoft Windows XP, including Microsoft Word, Access, Excel, PowerPoint and Publisher. Students can also use Internet based services like UCompass and WebAdvisor in the computer lab.

Media Center Hours

Monday – Thursday, 7:30 a.m.-9 p.m.

Friday, 7:30 a.m. – 4 p.m., and

Saturday, 8 a.m. – 5 p.m.

For more information, call the Media Center at **313-845-6386**.

Student Services Computers

Students may use computers outside of the Admissions, Registration and Records Office in the lower level, Learning Resources Center (LRC-013) to register for classes. Computers are available Monday – Thursday, 8:30 a.m. - 6 p.m., and Friday, 8:30 a.m. - 4 p.m. Call the Admissions, Registration and Records Office at **313-845-6403** for more information.

Students may use computers in the lower level, Learning Resources Center (LRC-030) to complete the online FAFSA and other financial aid documents. Computers





are available Monday-Thursday, 8:30 a.m.–6 p.m., and Friday 8:30 a.m. - 4 p.m. Call the Financial Aid Office at **313-845-9616** for more information.

These computer labs open to students enrolled in specific courses and programs.

Business and Economics Division Computer Laboratory

A computer laboratory exclusively for the use of students enrolled in Business and Economics Division classes is available. Computer lab availability will vary each semester. The current computer laboratory schedule is available in the Business and Economics Division Office in the Liberal Arts Building (LA-332), or call **313-845-9645**.

CIS Student Computer Laboratory

Located in the Technology Building (T-194), the CIS Computer Laboratory is exclusively for the use of students enrolled in CIS classes.

Laboratory hours are Monday – Friday, 8 a.m. – 9:45 p.m., and Saturday, 9 a.m. – 4 p.m. Laboratory hours are subject to change. Current hours will be posted outside the laboratory door. For more information, call the CIS Computer Laboratory at **313-845-9255**.

Graphic Design Computer Laboratory

Located in room F-160, this laboratory is exclusively for the use of graphic design students. Laboratory hours change each term. Current operating hours are posted outside the laboratory door. For more information, contact the Fine Arts and Fitness Division Secretary at **313-845-6476**.

Music Technology Computer Laboratory

The Music Technology Computer Laboratory is located in room F-112 and is exclusively for the use of music students. Laboratory hours change each term. Current operating hours are posted outside the laboratory door. For more information, contact the Fine Arts and Fitness Division Secretary at **313-845-6476**.

Nursing Computer Laboratory

Located in the Health Careers Building (H-125), the Nursing Computer Laboratory is exclusively for the use of nursing students to study for and take national nursing examinations, complete assignments, write papers or access the Internet.

During the fall and winter terms, the laboratory hours are Monday, 9 a.m. - noon; Tuesday, Wednesday and Thursday, 8 a.m. – 4 p.m.; Friday, 8 a.m.– 2 p.m.

The laboratory is closed during the Spring/Summer term. For more information, call the Nursing Computer Laboratory at **313-845-6306**.



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2005-2006 Academic Calendar

This calendar is subject to change. Please see the Web site at www.hfcc.edu for future dates and calendar changes.

Fall 2005

August 25	Classes Begin
August 25	Late Registration/Schedule Adjustments
August 26	Late Registration/Schedule Adjustments
August 29	Late Registration/Schedule Adjustments
August 30	Late Registration/Schedule Adjustments
August 31	Late Registration/Schedule Adjustments
September 1	Late Registration/Schedule Adjustments
September 1	Last Day for a 100% Refund
September 2	Last Day for a No-Record Drop at the Registration Office by 4:00 p.m.
September 5	Labor Day – College Closed
September 5	Last Day for a No-Record Drop by WebAdvisor or Touch Tone Registration
September 8	Last Day for a 50% Refund
September 19	12-Week Classes Begin – Fall
September 23	Last Day to Apply for Graduation
October 19	Second 8-Week Courses Begin
October 31	Winter Semester Open Registration Begins
November 10	Last Day to Drop Full Semester Classes
November 23	All Classes End Following Evening Sessions
November 24	Thanksgiving Holiday – College Closed
November 25	Thanksgiving Holiday – College Closed
November 26	Thanksgiving Holiday – College Closed
November 27	Thanksgiving Holiday – College Closed
November 28	All Classes Resume
December 12	Regular Class Meetings End Following Evening Sessions
December 13	Final Exams
December 14	Final Exams
December 15	Final Exams
December 16	Final Exams
December 17	Final Exams
December 17	Classes End
December 19	Grades for Fall Due at 6 p.m. from Instructors
December 20	Grades Submitted by Instructors Available to Students by WebAdvisor or Touch Tone Registration

Winter 2006

November 7	Winter Semester Open Registration Begins
January 2	College Re-Opens
January 9	Classes Begin
January 9	Late Registration/Schedule Adjustments

January 10	Late Registration/Schedule Adjustments
January 11	Late Registration/Schedule Adjustments
January 12	Late Registration/Schedule Adjustments
January 13	Last Day for Late Registration/Schedule Adjustments
January 13	Last Day for 100% Refund
January 16	Martin Luther King, Jr. Day – College Closed
January 20	Last Day for a 50% Refund
January 20	Last Day for a No-Record Drop by 4 p.m.
January 30	12-Week Classes Begin
February 10	Last Day to Apply for Graduation
March 4	Regular Class Meetings End Following Evening Sessions
March 5	Spring Break – No Classes
March 6	Spring Break – No Classes
March 7	Spring Break – No Classes
March 8	Spring Break – No Classes
March 9	Spring Break – No Classes
March 10	Spring Break – No Classes
March 11	Spring Break – No Classes
March 12	Spring Break – No Classes
March 13	All Classes Resume
March 13	Second Eight-Week Classes Begin
March 29	Last Day to Drop Full semester Classes
May 1	Regular Class Meetings End Following Evening Session
May 2	Final Exams
May 3	Final Exams
May 4	Final Exams
May 5	Final Exams
May 6	Final Exams
May 6	Classes End
May 6	Graduation
May 8	Grades for Fall Due at 6 p.m. from Instructors
May 9	Grades Submitted by Instructors Available to Students by WebAdvisor or Touch Tone Registration

Information in this catalog is accurate as of May 1, 2005, and every care has been taken to insure its accuracy; however, the College cannot be responsible for errors and reserves the right to change policies in effect at the time of publication. The catalog was compiled and edited by the Offices of the Vice Presidents/Deans of Academic and Career Education, the Media Services Department, the Enrollment Development Office, and Edward J. Fryzel of the English Division.

Accounting

Associate in Business - Business and Economics Division

Program Code: PTAST.AAS.2005

Mr. William Harvey 313-845-9694 wharvey@hfcc.edu
 Mr. Charles Lacey 313-845-9657 clacey@hfcc.edu

Reuther Liberal Arts Building 326
 Reuther Liberal Arts Building 328

This program is designed to introduce students to the field of Accounting as a possible career choice. Students who enroll in the program typically plan to transfer to a four-year college or university to major in Accounting. A student who completes the program could also consider entering the workforce to work for a small to medium sized business in the Accounting field. A total of 60 to 62 credit hours is required for graduation, with a minimum of 31 credit hours of business and economics courses. Also required are a speech course, a mathematics course, and 9 to 11 credits of general education requirements. Students must also complete the Computer Literacy Requirement.

Students are required to take at least 16 credit hours in accounting courses numbered 131 or higher. A total of 26 credit hours is available for selection, the number of courses selected depending on the four-year program to which a student plans to transfer or the

employment skills desired. Equivalency sheets and transfer guides are available from counselors and advisors.

Counselors and advisors help students plan their course selections. Students are responsible for checking with the four-year institutions of their choice for information about transferability of courses. Those seeking employment after graduation are encouraged to take additional accounting courses to acquire skills commensurate with their planned positions.

Career Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer

guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Lawrence Technological University
- Siena Heights University
- University of Detroit Mercy
- University of Michigan - Dearborn
- Walsh College
- Wayne State University

Courses

A student with a bachelor's degree in any other area of study who desires to enter the accounting profession or sit for the C.P.A. exam can take most of the required classes in this program to qualify. Interested students should see the Director of the Division for information.

Minimum Number of Credits To Graduate (Including Options/Electives): 62

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
BAC 131 - Principles of Accounting	4	D/E	D/E	D/E	D/E
BAC 132 - Principles of Accounting (Continued)	4	D/E	D/E	D/E	E
BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
BEC 151 - Principles of Macro Economics	3	D/E/W/O	D/E/W/O	D/E/O	D/E
BEC 152 - Principles of Micro Economics	3	D/E/W/O	D/E/W/O	D/E/O	D/E
BLW 253 - Business Law and the Legal Environment	4	D/E	D/E	E	
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
One Computerized Accounting Course:					
BAC 141 - Computerized Accounting Aps-Quickbooks	2	D/E	D/E		
BAC 146 - Computerized Accounting Aps-Peachtree	3	D/E	D/E		

Continued on next page

Required Core Courses Continued Credit Hours Fall Winter Spring Summer

Minimum of six credit hours of Advanced Accounting Classes:					
BAC 231 - Asset Accounting	4	E			
BAC 232 - Equity Accounting	3		E		
BAC 235 - Tax Accounting	3	E			
BAC 262 - Cost Accounting	3		E		

Minimum Credit Hours: 33

Required Support Courses Credit Hours Fall Winter Spring Summer

MATH 115 - College Algebra or higher	5	D/E/O	D/E/O	D/E	D/E
SPC 131 - Fundamentals of Speaking	3	D/E/W	D/E/W	D/E	D/E

Minimum Credit Hours: 6

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

Courses	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

Courses	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

Courses	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Required Course Sequence

Term I	BAC 131
Term II	BAC 132

Administrative & Information Management

Associate in Business - Business and Economics Division

Program Code: ADMIS.AB.2001

Ms. Elaine Saneske

313-845-9704

esaneske@hfcc.edu

Reuther Liberal Arts Building 304

This degree program offers instruction, preparation, and guidance needed by administrative professionals in today's competitive work environment. The increased requirement of information and the expansion of computer technology have transformed the office setting. The Administrative and Information Management (AIM) program opens a career path for students interested in entering the administrative field or provides individuals already in the profession with the opportunity to upgrade their skills. The program combines

instruction in the traditional areas of business with the technology of the most commonly used software. Career opportunities associated with the degree include Executive Assistant, Administrative Assistant, Office Manager, Office Supervisor, and Administrative Support among other job titles.

The degree requires a minimum of 60 or 62 credits and an exit typing speed of 40 words per minute. This degree program may transfer to a four-year baccalaureate program, but transferability of specific courses

should be confirmed with the Counseling Office of Henry Ford Community College.

While working toward the AIM degree, students may choose to earn a Certificate in Computer Software Applications and/or a Certificate in Office Administration.

After earning 12 credits, students whose declared major is AIM are eligible to apply for the Frederick P. and Violet Sharpe Scholarship. Students should call the HFCC Foundation Office at 313-845-9620.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
MGT 230 - Principles of Management	3	D/E	D/E	D/E	D/E
MGT 231 - Supervision and Teambuilding	3	D/E	D/E		
MGT 240 - Creative Problem Solving	3	D/E	D/E		
BCA 106 - Introduction to Windows	2	D/E	D/E	D/E	D/E
BCA 125 - Introduction to the Internet & Web Pages	3	D/E	D/E	D/E	E
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
BCA 143 - Word Processing	3	D/E	D/E		
BCA 145 - Spreadsheet Applications	3	D/E	D/E	E	
BCA 147 - Data Base Applications	3	D/E	D/E	E	
BCA 152 - Presentation Software	2	D/E	D/E	D/E	E
BBA 110 - Business Language Skills	3	D/E	D/E		
BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
BBA 133 - Business Behavior and Communication	3	D/E	D/E	E	
BBA 231 - Business Office Communications	3	D/E	D/E		
BBA 235 - Office Administration Practicum	4		D/E		
BCO 191 - Business Cooperative Education OR	1				
BCO 290 - Business Cooperative Education	2				
BMA 110 - Business Mathematics OR	3	D/E	D/E	D/E	
MATH 115 - College Algebra	5	D/E/O	D/E/O	D/E	D/E

Minimum Credit Hours:

Continued on next page

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

Courses	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

Courses	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

Courses	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Recommended Course Sequence

Term 1	BBA 110	BBA 131	BCA 106	BCA 140	ENG 131
Term 2	BBA 133	BCA 125	BCA 143	BMA 110	ENG 132
Term 3	BBA 231	BCA 145	BCO 190	MGT 230	BCA 147
Term 4	BBA 235	POLS 131	BCA 152	MGT 231	MGT 240

Advanced CNC Certificate

Certificate of Achievement - Technology Division

Program Code: CNCAD.CMLT.2004

Ken Wright	313-845-6331	kwright@hfcc.edu	Technology Building 164E
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

In the modern business environment, many employers require substantial skills in the use and application of CNC equipment. The attainment of the Advanced CNC Certificate in Manufacturing Productivity Systems offers evidence to employers that the individual has reached an advanced level of proficiency. It provides students

with the opportunity to improve and build on their current skills and knowledge of CNC. Students enrolled in the program will receive training on the latest equipment used in the industry. The courses required for this certificate are all accepted towards an associate's degree to improve a student's

employability. The certificate can be used as a building block toward an Associate's Degree in Science. Individuals who are already employed may find that the certificate increases the opportunity for promotion. The certificate requires a total of 27.5 credits.

Courses

Required Core Courses	Credit Hour	Fall	Winter	Spring	Summer
MPS 130 - Quality Control Gaging and Inspection	4	E			
MPS 140 - Introduction to CNC	4	D/E	D/E	E	
MPS 145 - CNC Operations	6		E		
MPS 146 - Introduction to CNC Machine Tool Probing 1	1	E			
MPS 147 - Basic Macro Programming for CNC	1.5	E			
MPS 148 - Advanced CNC Probing	1		E		
MPS 150 - SPC In Manufacturing	4		E		
MPS 275 - Advanced CNC Operations	6	E			
Minimum Credit Hours:	27.5				

Advanced Pathways

Certificate of Achievement Trade & Apprentice Division

Program Code: ADPATH.O01.CTAE.2002

Rachel Kristensen	313-845-6454	rakristensen@hfcc.edu	Technology Building 115C
Robert Morrish	313-845-6436	rmorrish@hfcc.edu	Technology Building 115A

The Advanced Pathways in Educational Career Excellence certificate program is intended to develop the basic foundation skills necessary to pass employer-delivered selection tests and prepare students for employment in apprenticeship programs.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
TAMA 110 - Industrial Applications of Basic Math Principles	2	D/E	D/E		D
TAFD 115 - Computer Applications for Skilled Trades	2	D/E	D/E		D/E
TAFD 150 - Applied Technology	3	D/E	D/E		D/E
TADV 90 - Print Reading Fundamentals	2	D/E	D/E		D/E
TAMA 120 - Industrial Applications of Algebraic Principles	3	D/E	D/E		D/E
TAFD 120 - Industrial Safety Awareness	2	D/E	D/E		D/E
TAEL 102 - DC and AC Electricity	3	D/E	D/E		D/E
TAMN 100 - Shop Tools and Techniques	3	D/E	D/E		D/E

Minimum Credit Hours: 20

Recommended Course Sequence

Term 1	TAMA 110	TAFD 115	TAFD 150
Term 2	TADV 90	TAMA 120	TAFD 120
Term 3	TAEL 102	TAMN 100	

The sequence of classes shown above has been set to allow students to successfully complete this series of classes in one year while working part or full-time. The order in which the classes are taken has a logical pattern, building skills as the classes progress. If a student chooses, extra classes may be taken in any semester to accelerate his or her progress through the program. When this is done, pre-requisites must be observed. It is recommended, however, that a student not enroll for more than 9 credit hours in a semester if he or she is working full-time.

Analog Electronics

Certificate of Achievement - Technology Division

Program Code: ELECANALEL.CMLT.2003

Mark Siedlik	313-845-6353	msiedlik@hfcc.edu	Technology Building 211H
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

This certificate can be earned while pursuing an Associate of Applied Science degree in Electrical Technology.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ELEC 103 - Basic Electricity	4	D/E	D/E		
ELEC 106 - Basic Electronics	3	D/E	D/E		
ELEC 155 - Analog Electronics I	3				
ELEC 190 - Electronics Technology Co-op	1				
ELEC 195 - AC/DC Circuit Analysis	3				
ELEC 205 - Analog Electronics II	3				
ELEC 255 - Instrumentation Systems	3				
MATH 103 or higher level Math					
Minimum Credit Hours:	24				

Animation

Certificate of Achievement - Fine Arts and Fitness Division

Program Code: ANIMATE.CMULT.2004

Kirk McLendon

313-845-6487

mclendon@hfcc.edu

MacKenzie Fine Arts Center 149

Animation is one of the five new Graphic Design Certificate Programs offered at HFCC. Earn an Animation Certificate by completing the 36-38 credit hours of core courses. Students may complete an additional 22-24 credit hours of General Education courses to earn an Associate of Arts Degree. Classes are offered throughout the year during the day, evening and weekend.

Animators are artists who create the magic of motion. With animation commonplace on television, movies, and the web, there is a demand for artists with the skill and know-how to produce creative animation. Computer and drawing skills are very important in this field.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
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An additional 22-24 credit hours of General Education courses may be taken with any of the five Graphic Design certificates to obtain an Associate of Arts Degree.

ART 101 - Two-Dimensional Design AND	3	D/E	D/E	D	D
ART 102 - Drawing 1 AND	3	D/E	D/E	D	D
ART 107 - Photoshop/ImageReady AND	3				
ART 108 - Flash AND	3				
ART 112 - Drawing II AND	3	D/E	D/E	D	
ART 130 - History of Graphic Design AND	3	D	D	O	
TCM 157 - Digital Video Editing AND	1	D	D		
ART 113 - Life Drawing I AND	3	D/E	D/E		
ART 208 - Lightwave OR	3				
ART 209 - Maya AND	3				
ART 255 - Animation Basics AND	3		D		
ART 115 - Intermediate Perspective AND	3	E	D	D	
ART 265 - Illustration AND	3				
ART 275 - Advanced Projects	3	D/E/W	D/E/W	D/E/W	D/E/W

Minimum Credit Hours: **37**

Architecture/Construction Technology

Associate in Applied Science - Technology Division

Program Code: ARCON.AAS.2002

Craig Priskorn 313-317-1516 priskorn@hfcc.edu
 David Wiltshire 313-845-9816 djwiltshire@hfcc.edu

Dearborn Heights Center 164B
 Dearborn Heights Center 115D

The associate degree program in Architecture/Construction Technology teaches architectural CAD/drafting and building construction methods and materials. Included are residential and commercial building types and computer-aided drafting. Laboratory classes provide students with experience in the areas of residential and commercial construction materials, cost estimating, architectural CAD/drafting, construction methods, presentation techniques, residential construction practices, and use of surveying equipment.

Students learn the principles of the architectural profession supported by an understanding of the processes of construction through “hands-on” activities designed to provide students with a practical “skill-based” education.

Classes for the ACT Program are located at the Dearborn Heights Center.

Career Opportunities

- Architectural CAD Technician
- Building Construction Technician
- Materials Testing Lab Technician
- Facilities Management Technician
- Builder

- Building Code Inspector
- Architectural Illustrator
- Civil Engineering Technician
- Appraiser
- Structural Steel Detailer
- Construction Estimator
- Building Materials Sales Rep

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor’s degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Eastern Michigan University
- Ferris State University
- Lawrence Technological University
- University of Detroit Mercy
- University of Michigan - Ann Arbor

Additional Program Requirements

Students seeking an ACT associate degree are required to participate in Co-Op for at least one semester. This experience has proven to be invaluable as students try on the career they’ve chosen and earn while they learn. Pay rates generally are compatible with entry-level positions (Average 2004 rate = approx \$13.10/hour) and a high percentage of students are asked to continue their employment after their initial Co-Op semester.

Program Duration Limits/Updates/Changes

See the recommended course sequence under “Required Courses.”

Continued on next page

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ACT 290 - Architecture/Construction Technology Co-op (2 credit hours) is also available.					
ACT 110 - Basic Architectural Drafting	3	D/E	D/E		
ACT 116 - Basic Architectural CAD	4	D/E	D/E		
ACT 121 - Residential Construction Materials	3	D/E	D/E		
ACT 130 - Architectural Graphics	3	D	D/E		
ACT 136 - Intermediate Architectural CAD	4		D/E		
ACT 141 - Residential Construction	3	D/E			
ACT 150 - Residential Detailing	3	D/E	D		
ACT 190 - Architecture/ Construction Technology Co-op	1				
ACT 211 - Commercial Construction Systems	3	D			
ACT 220 - Residential Design	3	D	E		
ACT 233 - Commercial Detailing	3	D/E			
ACT 246 - Construction Estimating	4		D/E		
ACT 260 - Commercial Design Development	3		D/E		
Minimum Credit Hours:	40				

Required ACT Cognate Courses	Credit Hours	Fall	Winter	Spring	Summer
Select a minimum of one ACT Cognate Course.					
ACT 104 - Wood Deck/Patio Construction OR	4			E	
ACT 241 - Advanced Residential Construction OR	4		E		
ACT 205 - Advanced Architectural CAD OR	4			E	
ACT 256 - Advanced Architectural Graphics OR	4	E	D		
ACT 258 - Computerized Architectural Rendering	4	D			E
Minimum Credit Hours:	4				

Mathematics	Credit Hours	Fall	Winter	Spring	Summer
Note: If Math Option 2 is selected, a minimum of 2 additional credit hours from ACT or other related courses are required.					
Math Option 1					
MATH 100 - Basic Technical Mathematics AND	4	D/E	D/E	D	
MATH 103 - Technical Mathematics OR	4	D/E	D/E		
MATH 110 - Intermediate Algebra AND	4	D/E/W/O	D/E/W/O	D/E/O	D/E
MATH 112 - Trigonometry	3	D/E	D/E		
OR					
Math Option 2					
MATH 115 - College Algebra or higher (not MATH 121, MATH 221 or MATH 225)	5	D/E/O	D/E/O	D/E	D/E
Minimum Credit Hours:	7				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
ACT 112 - Computers in Architecture	1	W	W		

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

ENG 135 is recommended for non-transferring students in place of ENG 132

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Recommended Course Sequence

Recommended Course Sequence Option One

Fall I	ACT 110	ACT 112	ACT 116	ACT 121	ACT 141
Winter I	ACT 130	ACT 136	ACT 150	MATH 100	
Fall II	ACT 211	ACT 220	ACT 233	MATH 103	ENG 131
Winter II	ACT 246	ACT 260	ACT 190	POLS 131	ENG 135

Recommended Course Sequence Option Two

Fall I	ACT 110	ACT 112	ACT 116	MATH 100
Winter I	ACT 130	ACT 136	MATH 103	
Fall II	ACT 121	ACT 141	ENG 131	
Winter II	ACT 150	POLS 131	ENG 135	
Term 5	ACT 211	ACT 220	ACT 233	
Winter III	ACT 190	ACT 246	ACT 260	

The sequence for the Required ACT Cognate Course (4 credit hours) is dependent on the course selected and its availability. See <http://www2.hfcc.edu/programs/architecture/courses.htm> for the standard day and evening schedule for ACT courses (subject to change).

Art Foundation

Associate in Arts - Fine Arts and Fitness Division

Program Code: ARTFD.AA.2003

Kevin Donahue

313-317-6686

kdonahue@hfcc.edu

MacKenzie Fine Arts Center 150

The Henry Ford Community College Art Department offers a variety of art courses as well as three programs of study: Art Foundation, Ceramics and Graphic Design. Refer to these headings to find course requirements for each. Course descriptions for all Art Department programs can be found under ART. For specific information on these degree programs and art courses, students should contact an Art faculty advisor. All students receiving an Arts degree from HFCC must participate in a Graduating student Art Exhibition.

Transfer Options/Requirements

The College has articulation

agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation

agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Lawrence Technological University
- University of Michigan - Dearborn

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 62

Art Electives include: Art Education, Art History, Ceramics, Graphic Design, Interior Design, Jewelry, Painting, Photography, Printmaking, and Sculpture.

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ART 101 - Two-Dimensional Design	3	D/E	D/E	D	D
ART 102 - Drawing I	3	D/E	D/E	D	D
ART 105 - Three-Dimensional Design	3	D/E	D/E		
ART 112 - Drawing II	3	D/E	D/E	D	
ART 113 - Life Drawing I	3	D/E	D/E		
ART 116 - Painting I	3		D		
ART 121 - Art History Survey I	3	D/E/W	D/E/W	D/E	D/E
ART 122 - Art History Survey II	3	D/E/W	D/E/W	D/E	D/E
ART 141 - Ceramics I	3	D/E	D/E		
8-9 credit hours of ART electives*					
Minimum Credit Hours:	35				

Required Support Courses

8 credit hours of Science and/or Math (100+ over)*

8 credit hours of Social Science**

Minimum Credit Hours: 16

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	D	D		
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
COUN 114 - Stress Management - A Personal Approach OR	2	D			
HPEA 117 - Weight Train & Phys Conditioning OR	2	D/E	D/E	D/E	D/E
HPEA 217 - Weight Training and Physical Conditioning II OR	2	D/E	D/E	D/E	D/E
HPEA 126 - Aerobic Dance OR	2	D	D	D	D
HPE 140 - Lifetime Wellness OR	2	D/E	D/E		
HPE 142 - Advanced First Aid OR	3				
HPE 153 - Nutrition OR	2	D/E	D/E	D/E	D/E
HPE 155 - Relax Tech for Stress Management	2				

Minimum General Education Hours Required: 11

Additional General College Requirements: 5 credit hours of Social Science 100+ courses (areas include: Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, Social Science and Sociology); 8 credit hours of Science and/or Math 100+ courses (areas include Life Sciences, Physical Sciences and Mathematics);

Auto Air Conditioning, Brakes, Alignment

Technology Division - Certificate of Achievement

Program Code: AUTOACBRAL.CSGL.2003

Howard Freeman	313-845-6368	hfreeman@hfcc.edu	Technology Building 162C
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

Mini-Certificates of Achievement/
Automotive Technology

Upon successful completion of the following courses, the student will, upon application, receive a Certificate of Achievement. These courses can be applied to the Associate in Applied Science Degree in Automotive Technology.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
AUTO 227 - Automotive Air Conditioning	2			E	
AUTO 167 - Brake Clinic	2			E	
AUTO 217 - Automobile Alignment Clinic	2			E	
Minimum Credit Hours:	6				

Auto Tune-Up

Certificate of Achievement - Technology Division

Program Code: AUTOTUNEU.CSGL.2003

Howard Freeman
David Wiltshire

313-845-6368
313-845-9816

hfreeman@hfcc.edu
djwiltshire@hfcc.edu

Technology Building 162C
Technology Building 115D

Mini-Certificates of Achievement/ Automotive Technology

Upon successful completion of the following courses, the student will, upon application, receive a Certificate of Achievement. These courses can be applied to the Associate in Applied Science Degree in Automotive Technology.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
AUTO 187 - Automotive Engine Tune-Up	2			E	E
AUTO 287 - Advanced Automotive Tune-Up	1				E
Minimum Credit Hours:	3				

Automation Controls

Certificate of Achievement - Technology Division

Program Code: ELECAUCTRL.CMLT.2003

Mark Siedlik

313-845-6353

msiedlik@hfcc.edu

Technology Building 211H

David Wiltshire

313-845-9816

djwiltshire@hfcc.edu

Technology Building 115D

This certificate can be earned while pursuing an Associate of Applied Science degree in Electrical Technology.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ELEC 103 - Basic Electricity	4	D/E	D/E		
ELEC 106 - Basic Electronics	3	D/E	D/E		
ELEC 145 - AC/DC Rotating Machines	3				
ELEC 190 - Electronics Technology Co-op	1				
ELEC 195 - AC/DC Circuit Analysis	3				
ELEC 200 - Ladder Diagrams and Motor Controls	3				
ELEC 245 - Programmable Logic Controllers	3				
ELEC 260 - Automation Controls and Robotics	3				
Math 103 or higher level Math					
Minimum Credit Hours:	27				

Automotive Service (ASSET)

Associate in Applied Science - Technology Division

Program Code: ASSET.AAS.2003

Gary Heinz	313-845-6350	gheinz@hfcc.edu	Technology Building 162B
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

Automotive Service (ASSET) is an associate degree program to prepare individuals for service and repair positions in automobile dealerships and independent garages. The program consists of a well-balanced group of courses designed to provide students with the job competencies and skills required for entry-level employment. Students are required to complete 70 credit hours in core, cognate, and general education courses. In addition, students are required to participate in cooperative education at local automobile repair facilities.

Career Opportunities

- Service Technician
- Service Manager

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses

they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Ferris State University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn

Admission Requirements/Eligibility

The ASSET program is a two-year program. New students may enter with the next starting class in Fall 2006.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 67

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
AUTO 100 - Internal Combustion Engines	3	D/E	D/E		
AUTO 108 - Basic Electrical	3				
AUTO 110 - Automotive Electricity	3	D/E	D/E		
AUTO 120 - Fuel Management Systems	2	D/E	D/E		
AUTO 131 - Automotive Ignition Systems	2				
AUTO 132 - Computerized Ignition Systems	2				
AUTO 140 - Automotive Transmissions	3	E	E	E	
AUTO 142 - Electronically Controlled - Transmissions/Transaxles	2			E	
AUTO 145 - Manual Transmissions and Transaxles	4				
AUTO 150 - Diagnosing and Engine Evaluation	2	E	E		
AUTO 160 - Automotive Chassis Units	2	E	E		
AUTO 162 - ABS Brakes	3				
AUTO 165 - Electronic Steering and Suspension	4				
AUT 170 - Related Technical Automotive	4	E	E		
AUTO 224 - Automotive Air Conditioning	2				
AUTO 230 - Automotive Diesel Principles	2	E	E		
AUTO 237 - Computerized Engine/ Vehicle Emission Control Systems	2			E	
ICO 191 - Industrial Co-op	2				
ICO 192 - Industrial Co-op (2)	2				
ICO 291 - Industrial Co-op (3)	2				
ICO 292 - Industrial Co-op (4)	2				

Minimum Credit Hours: 53

Continued on next page

Required Support Courses **Credit Hours** **Fall** **Winter** **Spring** **Summer**

During the Fifth Semester (Winter II) students will be required to take a Business Management Course. This course will be determined by the ASSET department head.

AUSV 135 - Shop Mathematics	2				
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E
Business Management Course-3 credit hours (see note above)					
Minimum Credit Hours:	8				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture	1	W	W		
AH 125 - Computerized Medical Information Systems	3	D	D		
ART 275 - Advanced Projects	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers	3				
CIS 223 - Instructional Technology for Secondary Teachers	3				
HCS 131 - Computers in Health Care	3	E/W	E/W	D	E
HIT 161 - Health Information Processing	2				
TAFD 115 - Computer Applications for Skilled Trades	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 135 - Business and Technical Writing	3				

Required Course Sequence

Fall I	AUT 170	AUTO 160	AUSV 135	AUTO 108	CIS 100	ICO 191
Winter I	AUTO 100	AUTO 110	AUTO 131	AUTO 162	ICO 192	
Spring/Summer I	AUTO 132	AUTO 224	AUTO 120	POLS 131		
Fall II	AUTO 140	AUTO 165	AUTO 150	ENG 131	ICO 291	
Winter II	AUTO 237	AUTO 230	AUTO 145	AUTO 142	ENG 135	ICO 292

During the Fifth Semester (Winter II) students will be required to take a Business Management Course. This course will be determined by the ASSET department head.

Automotive Technology

Associate in Applied Science - Technology Division

Program Code: AUTOT.AAS.2002

Howard Freeman	313-845-6368	hfreeman@hfcc.edu	Technology Building 162C
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

The associate degree program in Automotive Technology includes in-depth material relating to the various systems found on today's vehicles, including electrical, fuel, ignition, power, and drivetrain. This program is designed to provide a thorough knowledge of the technical aspects of the automobile and to develop a certain amount of manual skill in servicing, testing, and diagnosing. The related courses provide a broad background qualifying the individual for employment in numerous fields allied to the automobile industry. Laboratory classes provide students with actual experience to strengthen their understanding of the theory learned in classroom study. The laboratories are equipped with some of the latest equipment being used to service modern automobiles. Included in laboratories are representative types of engines, chassis, transmissions, rear axles, and considerable testing equipment being used today.

Career Opportunities

Career opportunities associated with this program include:

- Product Test Technician
- Dynamometer Technician
- Service Technician
- Diagnostic Technician
- Service Manager
- Parts Manager

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions.

It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn
- Wayne State University

Accreditation

The Associate in Applied Science Degree Program is accredited by National Institute for Automotive Service Excellence (ASE).

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 62

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
AUTO 100 - Internal Combustion Engines	3	D/E	D/E		
AUTO 110 - Automotive Electricity	3	D/E	D/E		
AUTO 120 - Fuel Management Systems	2	D/E	D/E		
AUT 130 - Automotive Ignition Systems	2	E	E	E	E
AUTO 140 - Automotive Transmissions	3	E	E	E	
AUTO 150 - Diagnosing and Engine Evaluation	2	E	E		
AUTO 160 - Automotive Chassis Units	2	E	E		
AUTO 210 - Automotive Engine Dynamometer	2	E		E	
AUTO 220 - Automotive Air Conditioning	2	E	E	E	
AUTO 230 - Automotive Diesel Principles	2	E	E		

Minimum Credit Hours: 23

Continued on next page

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
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Choose a minimum of 14 credit hours from Required Support Courses.

AUTO 142 - Electronically Controlled - Transmissions/Transaxles OR	2			E	
AUTO 167 - Brake Clinic OR	2			E	
AUT 170 - Related Technical Automotive OR	4	E	E		
AUT 180 - Technical Automotive Welding OR	4	E	E		
AUTO 187 - Automotive Engine Tune-Up OR	2			E	E
AUTO 217 - Automobile Alignment Clinic OR	2			E	
AUTO 227 - Automotive Air Conditioning OR	2			E	
AUTO 237 - Computerized Engine/ Vehicle Emission Control System OR	2			E	
AUTO 267 - Small Engines OR	1				D
AUTO 287 - Advanced Automotive Tune-Up	1				E

Minimum Credit Hours: 14

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
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CHEM 131 - Principles of Chemistry	4	D/E	D/E	D	D
MATH 100 - Basic Technical Mathematics AND	4	D/E	D/E	D	
MATH 103 - Technical Mathematics OR	4	D/E	D/E		
MATH 103 - Technical Mathematics AND	4	D/E	D/E		
MATH 112 - Trigonometry OR	3	D/E	D/E		
MATH 110 - Intermediate Algebra AND	4	D/E/W/O	D/E/W/O	D/E/O	D/E
MATH 112 - Trigonometry OR	3	D/E	D/E		
MATH 175 - Precalculus or a higher level of math course	5	D/E/O	D/E/O	D/E	D/E
PHYS 120 - Technical Physics	4	E	E	E	
PHYS 121 - Technical Physics (Continued)	4		E		
PHYS 131 - Liberal Arts Physics	4	D/E/W/O	D/E/W/O	D/O	
PHYS 132 - Liberal Arts Physics (Continued)	4		D/E		D

Minimum Credit Hours: 16

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
TAFD 115 - Computer Applications for Skilled Trades	2	D/E	D/E		D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Automotive Technology

Certificate of Achievement - Technology Division

Program Code: AUTOT.CERT.1985

Howard Freeman	313-845-6368	hfreeman@hfcc.edu	Technology Building 162C
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

The certificate of achievement programs in Automotive Technology teaches the various systems found on today's vehicles, including electrical, fuel, ignition, power, and drive train. These programs are designed to be completed individually or applied to the Associate Degree in Automotive Technology. Because the Certificate of Achievement transfers into the two-year degree program, it is highly recommended that students complete certificate requirements prior to degree requirements. The related courses provide a broad background qualifying the individual for employment in numerous fields allied to the automobile industry.

Laboratory classes provide students with actual experience to strengthen their understanding of the theory learned in classroom study. The laboratories are equipped with some of the latest equipment being used to

service modern automobiles. Included in laboratories are representative types of engines, chassis, transmissions, rear axles, and considerable testing equipment being used today.

Career Opportunities

Career opportunities associated with this program include:

- Product Test Technician
- Service Technician
- Dynamometer Technician
- Service Manager
- Parts Manager

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards

a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Lawrence Technological University
- Wayne State University

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Because the Certificate of Achievement transfers into the two-year degree program, it is highly recommended that students complete certificate requirements prior to degree requirements.

Mini-Certificates of Achievement/Automotive Technology

Upon successful completion of the following courses, the student will, upon application, receive a Certificate of Achievement. These courses can be applied to the Associate in Applied Science Degree in Automotive Technology.

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
AUTO 100 - Internal Combustion Engines	3	D/E	D/E		
AUTO 110 - Automotive Electricity	3	D/E	D/E		
AUTO 120 - Fuel Management Systems	2	D/E	D/E		
AUT 130 - Automotive Ignition Systems	2	E	E	E	E
AUTO 140 - Automotive Transmissions	3	E	E	E	
AUTO 142 - Electronically Controlled - Transmissions/Transaxles	2			E	
AUTO 150 - Diagnosing and Engine Evaluation	2	E	E		
AUTO 160 - Automotive Chassis Units	2	E	E		
AUTO 167 - Brake Clinic	2			E	
AUT 170 - Related Technical Automotive	4	E	E		
AUT 180 - Technical Automotive Welding	4	E	E		
AUTO 187 - Automotive Engine Tune-Up	2			E	E
AUTO 210 - Automotive Engine Dynamometer	2	E		E	
AUTO 217 - Automobile Alignment Clinic	2			E	
AUTO 220 - Automotive Air Conditioning	2	E	E	E	
AUTO 227 - Automotive Air Conditioning	2			E	
AUTO 230 - Automotive Diesel Principles	2	E	E		
AUTO 237 - Computerized Engine/ Vehicle Emission Control System	2			E	
AUTO 287 - Advanced Automotive Tune-Up	1				E
Minimum Credit Hours:	44				

Basic CNC Certificate

Certificate of Achievement - Technology Division

Program Code: CNCBA.CMLT.2004

Ken Wright	313-845-6331	kwright@hfcc.edu	Technology Building 164E
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

In the modern business environment, many employers require substantial skills in the use of CNC equipment. The attainment of the Certificate in Manufacturing Productivity Systems offers evidence to employers that the individual has reached the basic level of proficiency. It provides students with the opportunity to improve their job skills. Students enrolled in the program will receive training on the

latest CNC equipment used in the industry. The courses required for this certificate are all accepted towards an associate's degree to improve a student's employability. The certificate can be used as a building block toward an Associate's Degree in Science. Individuals who are already employed may find that the certificate increases the opportunity for promotion. The certificate requires a total of 21 credits.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
MPS 100 - Manufacturing Processes I	6	D/E	D/E	E	
MPS 130 - Quality Control Gaging and Inspection	4	E			
MPS 140 - Introduction to CNC	4	D/E	D/E	E	
MPS 145 - CNC Operations	6		E		
MPS 146 - Introduction to CNC Machine Tool Probing	1	E			
Minimum Credit Hours:	21				

Basic Electronics

Certificate of Achievement - Technology Division

Program Code: ELECBASEEL.CSGL.2003

Mark Siedlik	313-845-6353	msiedlik@hfcc.edu	Technology Building 211H
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

This certificate can be earned while pursuing an Associate of Applied Science degree in Electrical Technology.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ELEC 103 - Basic Electricity	4	D/E	D/E		
ELEC 106 - Basic Electronics	3	D/E	D/E		
Math 103 or higher level Math					
Minimum Credit Hours:	11				

Biology - Pre-Professional**Associate in Science - Science Division**

Program Code: BIOLG.AS.2002

Linda Brandt

313-545-9729

lbrandt@hfcc.edu

Science Building 104G

The Associate in Science Program in Pre-Professional Biology prepares students to transfer to a 4-year institution to complete a bachelor's degree in the life sciences. It was designed in collaboration with several university biology departments to ensure maximum transferability into the various programs they offer. Because of this flexibility, students must consult the pre-professional biology advisor or the transfer guide for their intended school to select appropriate courses.

Although the minimum requirement for completing the program is 60 credit hours, students may be able to take additional coursework at HFCC and transfer it to the 4-year institution.

Career Opportunities

This degree is designed for students who want to enter careers in areas such as:

- Human Health and Medicine
- Pharmacy
- Genetic Counseling
- Forensic Biology
- Microbiology
- Law
- Veterinary Medicine
- Biotechnology and Genetic Engineering
- Marine Biology
- Natural Resources and Conservation
- Education
- Science Journalism

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to

another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- University of Michigan - Dearborn

Admission Requirements/Eligibility

The career opportunities supported by the Pre-Professional Biology program require strong math and science skills. Students planning to enter this area should take a rigorous high school background including four years of college prep math and science.

The Pre-Professional Biology program, and the Bachelor's of Science degrees to which it can lead, require that students take numerous courses in sequence. Typically, students will take three or more math and science courses each semester in order to make sure that they stay on track to complete the degrees.

Additional Program Requirements

Requirements for majors in different fields of biological science vary, as do the requirements at different 4-year

institutions. Students must consult with a Pre-Professional Biology advisor to plan an appropriate course of study for the area of biological sciences and the college or university to which they intend to transfer.

No courses numbered below 100 will count toward the minimum 60 hours required for graduation with an AS in Pre-Professional Biology.

The minimum requirement for earning the AS in Pre-Professional Biology is 60 credit hours. However, most universities and colleges will accept additional coursework from HFCC transfer students toward BS degree requirements. We encourage students to take advantage of this and to complete as many courses as they can transfer at HFCC.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
BIO 150 - Biology: Organisms, Genes, and Ecology	4	D	E		
BIO 152 - Biology: Cells and Molecular Biology	4	E	D		
CHEM 141 - Principles of General and Inorganic Chemistry I	5	D/E	D/E	D	
CHEM 142 - Principles of General and Inorganic Chemistry II	5	D/E	D/E		
ADDITIONAL CORE COURSES					
Consult your advisor and select 6-10 additional hours from the following:					
BIO 130 - Evolution and Behavior	4	D/E	D/E	E	
BIO 131 - Introductory Biology	4	D/E	D/E	D	D
BIO 141 - Botany	4				
BIO 143 - Zoology	4				
BIO 138 - Environmental Science	3		D		
BIO 233 - Anatomy and Physiology I	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
BIO 251 - Microbiology	5	D/E	D/E		
MATH 175 - Precalculus OR	5	D/E/O	D/E/O	D/E	D/E
MATH 180 - Calculus I OR	5	D/E	D/E	D/E	E
MATH 153 - Calculus for Business, Life and Social Science	5	D/E/O	D/E/O		
PHYS 131 - Liberal Arts Physics	4	D/E/W/O	D/E/W/O	D/O	
PHYS 132 - Liberal Arts Physics (Continued)	4		D/E		D
Minimum Credit Hours:	24				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
6 hours of Humanities (Group I) AND 3 hours of Social Science (Group III)					
Minimum Credit Hours:	9				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
Electives may be chosen from the "Additional Core Courses" listed above, or from courses that meet the requirements of the chosen transfer institution.					
Minimum Credit Hours:	12				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

Continued on next page

Students must consult a Pre-Professional Biology advisor to assure that the options for general education requirements will count toward the degree at the intended transfer institution.

Information for students whose program falls under the new general education requirements:

Students should choose a course from the American Society, Events, Institutions, and Cultures that meets the requirements of the transfer institution.

We recommend that students fulfill the computer literacy requirement by taking the Computer Literacy Test unless one of the alternative courses fulfills degree requirements at the transfer institution.

ENG 135 does not fulfill the requirements for the Associate in Science in Pre-Professional Biology.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test	0	D/E/W	D/E/W	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II	3				

Minimum General Education Hours Required: 9

Building Construction Trades

Associate in Applied Science - Trade & Apprenticeship Division

Program Code: BLDCT.AAS.2002

 Robert Morrish
 Gail Conte

 313-845-6436
 313-845-6360

 rmorrish@hfcc.edu
 gconte@hfcc.edu

 Technology Building 115A
 Technology Building 115B

The Associate in Applied Science for Building Construction Trades is specifically designed for building and construction trades journeypersons who have completed a formal apprenticeship program registered with the Bureau of Apprenticeship and Training, U.S. Department of Labor. Formal classroom-related instruction associated with the sponsored apprenticeship program will be evaluated and up to 20 hours of college credit may be granted for equivalent courses available through the College. Students seeking the degree must then complete an additional 40 credits

and meet the General Education and Computer Literacy requirements of the College.

Career Opportunities

- Foreman
- Project Engineer
- Superintendent
- Estimator

Transfer Options/Requirements

Currently only the carpenters,' electricians,' operating engineers,' iron workers,' plumbers,' and sheet metal workers' apprenticeship school curricula

have been evaluated and approved.

Additional Program Requirements

Evidence of successful completion of the apprenticeship program and documentation of the related instruction, including individual course title, course descriptions, number of contact hours earned for each course, dates of completion for each course, and grade earned (if applicable) must be presented. Approval by the Associate Dean of Trade and Apprentice Education, or a designee, is required.

Courses

Coursework is selected by the student based on his or her personal or career goals and the result of academic assessment tests, transcript evaluations, and career planning sessions included in COUN 120. It is also suggested that students seek the recommendation of a sponsoring Trade Council.

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
COUN 120 - Career Exploration 120	1	D/E/W	D/E/W		
Minimum Credit Hours:	1				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
TAFD 115 - Computer Applications for Skilled Trades	2	D/E	D/E		D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Business Administration

Associate in Business - Business and Economics Division

Program Code: BUSAD.AB.1997

Elaine Saneske
Mr. Jared Boyd

313-845-9645
313-845-9697

esane@hfcc.edu
jboyd@hfcc.edu

Reuther Liberal Arts Building 328
Reuther Liberal Arts Building 319B

This degree program is designed to provide students with the ability to transfer to specific four-year bachelor's degree programs with the maximum number of credits possible. It requires a minimum of 60 or 62 credit hours. A student's program must include math, speech, and the college's general education requirements. The core courses in the program consist of Business Division courses that are most often required by four-year transfer institutions to enter their business programs.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC.

Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career

Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- University of Detroit Mercy
- University of Michigan - Dearborn
- Walsh College
- Wayne State University

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
BAC 131 - Principles of Accounting	4	D/E	D/E	D/E	D/E
BAC 132 - Principles of Accounting (Continued)	4	D/E	D/E	D/E	E
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
BEC 151 - Principles of Macro Economics	3	D/E/W/O	D/E/W/O	D/E/O	D/E
BEC 152 - Principles of Micro Economics	3	D/E/W/O	D/E/W/O	D/E/O	D/E
BLW 253 - Business Law and the Legal Environment	4	D/E	D/E	E	
Minimum Credit Hours:	21				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
SPC 131 - Fundamentals of Speaking	3	D/E/W	D/E/W	D/E	D/E
MATH 115 - College Algebra or higher level math course	5	D/E/O	D/E/O	D/E	D/E
Minimum Credit Hours:					

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

CAD Technology: CATIA**Certificate of Achievement - Technology Division**

Program Code: CATIA.CSGL.2004

Gerald Klein	313-845-6424	gklein@hfcc.edu	Technology Building 162M
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

The use of CATIA V5 is increasing in the automotive and supplier industry. The CATIA certificate enables designers, engineers, and students with some CAD background to become knowledgeable and proficient in this powerful and versatile software. The classes will take you through some of the most commonly used Work Benches: Sketcher, Part, Drafting, Assembly, and Generative Shape Design (surfacing).

Career Opportunities

“By improving their skills on CATIA V5, students will become proficient in the same 3D application that has designed almost 50 percent of the cars on the road today and practically every large aircraft that has been designed in the last 10 years.” (from www.engineering.com)

Admission Requirements/Eligibility

The student must have completed one of the following: DRAF 120, equivalent CAD class, CAD work experience, or have permission of instructor.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
DRAF 123 - Introduction to CATIA V5	2	E/W	E/W	E	E
DRAF 125 - CATIA V5 Level II	2	E/W	E/W	E	E
DRAF 127 - CATIA V5 Level III	2	E/W	E/W	E	E
Minimum Credit Hours:	6				

Ceramics

Associate in Arts - Fine Arts and Fitness Division

Program Code: CERAM.AA.1985

Steven Glazer

313-845-6485

sglazer@hfcc.edu

MacKenzie Fine Arts Center 147

The Ceramics program offers a wide selection of courses both for the first-time potter and the art student interested in the career potential of a studio potter.

The introductory courses, ART 141 and ART 142, concentrate on the handbuilding and wheel-construction methods while the advanced courses offer more specialized studies in glaze making, ceramic sculpture, kiln firing, and even kiln construction. In

advanced courses, the student explores the design and production techniques necessary to be a successful studio potter.

The Associate of Arts Degree in Ceramics is designed to prepare the student in the techniques and aesthetics needed to be self employed in a successful home pottery studio.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ART 101 - Two-Dimensional Design	3	D/E	D/E	D	D
ART 102 - Drawing I	3	D/E	D/E	D	D
ART 105 - Three-Dimensional Design	3	D/E	D/E		
ART 141 - Ceramics I	3	D/E	D/E		
ART 142 - Ceramics II	3	D/E	D/E		
ART 242 - Ceramics III	3	D/E	D/E		
BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
additional 19 credit hours of ART courses					
Minimum Credit Hours:	36				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
8 credit hours of Science* AND 10 credit hours of Social Science**					
Minimum Credit Hours:	18				

Recommended Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
ART 112 - Drawing II	3	D/E	D/E	D	
ART 116 - Painting I	3		D		
ART 161 - Photography I	3	D/E	D/E		
additional 6 credit hours in the ART department					
Minimum Credit Hours:	15				

Continued on next page

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	D	D		
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
COUN 114 - Stress Management - A Personal Approach OR	2	D			
HPEA 117 - Weight Train & Phys Conditioning OR	2	D/E	D/E	D/E	D/E
HPEA 217 - Weight Training and Physical Conditioning II OR	2	D/E	D/E	D/E	D/E
HPEA 126 - Aerobic Dance OR	2	D	D	D	D
HPE 140 - Lifetime Wellness OR	2	D/E	D/E		
HPE 142 - Advanced First Aid OR	3				
HPE 153 - Nutrition OR	2	D/E	D/E	D/E	D/E
HPE 155 - Relax Tech for Stress Management	2				

Minimum General Education Hours Required: 11

Chemistry - Pre-Professional

Associate in Science - Science Division

Program Code: CHEMS.AS.2002

Dr. Laura Yeakel

313-845-9721

lyeakel@hfcc.edu

Science Building 14

The Associate in Science degree in Pre-Professional Chemistry is designed as a transfer degree for students interested in pursuing an American Chemical Society approved chemistry major at a 4-year school. It was designed in collaboration with several university biology departments to ensure maximum transferability into the various programs they offer.

Although the minimum requirement for completing the program is 60 credit hours, students may be able to take additional coursework at HFCC and transfer it to the 4-year institution.

Career Opportunities

A degree in chemistry has been a route for students to enter satisfying careers in areas including (but not limited to):

- Professional Chemistry
- Human Health and Medicine
- Pharmacy and Pharmaceutics
- Materials Science
- Law
- Science Writing
- Environmental Science and Management
- Veterinary Medicine
- Education
- Forensic Science

Transfer Options/Requirements

The College has articulation

agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC.

Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- University of Michigan - Dearborn

Admission Requirements/Eligibility

The career opportunities supported by the Pre-Professional Chemistry program require strong math and

science skills. Students planning to enter this area should take a rigorous high school background including four years of college prep math and science.

The Pre-Professional Chemistry program, and the Bachelor's of Science degrees to which it can lead, require that students take numerous courses in sequence. Typically, students will take several math and science courses each semester in order to make sure that they stay on track to complete the degrees.

Additional Program Requirements

Students must consult with a Pre-Professional Chemistry advisor to plan an appropriate course of study for the college or university to which they intend to transfer.

No courses numbered below 100 will count toward the minimum 60 hours required for the AS in Pre-Professional Chemistry.

The minimum required for earning the AS in Pre-Professional Chemistry is 60 credit hours. However, most universities and colleges will accept additional coursework from HFCC transfer students toward BS degree requirements. We encourage students to take advantage of this and to complete as many courses as they can transfer at HFCC.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CHEM 141 - Principles of General and Inorganic Chemistry I	5	D/E	D/E	D	
CHEM 142 - Principles of General and Inorganic Chemistry II	5	D/E	D/E		
CHEM 241 - Organic Chemistry I	4	D/E	D/E	D	
CHEM 242 - Organic Chemistry II	4	D/E	D/E		
CHEM 243 - Organic Chemistry Laboratory	2	D/E	D/E		
MATH 180 - Calculus I	5	D/E	D/E	D/E	E

Minimum Credit Hours:

25

Continued on next page

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
6 hours of Humanities (Group I) AND 3 hours of Social Science (Group III)					
Minimum Credit Hours:	9				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
To maximize your progress toward your Bachelor's degree, select as many of your electives as possible from this list. Consult your advisor and choose courses appropriate to your intended 4-year major.					
MATH 183 - Calculus II	5	D/E	D/E	E	
MATH 280 - Calculus III	5	D/E	D/E		
PHYS 231 - Engineering Physics	5	D/E	E	D	
PHYS 232 - Engineering Physics (Continued)	5	D	D		
BIO 152 - Biology: Cells and Molecular Biology	4	E	D		
BIO 150 - Biology: Organisms, Genes, and Ecology OR	4	D	E		
CHEM 244 - Organic Chemistry Laboratory II	2				
Minimum Credit Hours:	12				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test	0	D/E/W	D/E/W	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

Students must consult a Pre-Professional Chemistry advisor to assure that the options for general education requirements will count toward the degree at the intended transfer institution.

Information for students whose program falls under the new general education requirements:

Students should choose a course from the American Society, Events, Institutions, and Cultures that meets the requirements of the transfer institution.

We recommend that students fulfill the computer literacy requirement by taking the computer Literacy Test unless one of the alternative courses fulfills degree requirements at the transfer institution.

ENG 135 does not fulfill the requirements for the Associate in Science in Pre-Professional Chemistry.

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II	3				

Minimum General Education Hours Required: 9

Course Sequence

Consult the pre-professional chemistry advisor for suggested course sequences for your intended area of study.

Child Development

Associate in Arts - Other Academic Division

Program Code: CHLD.AA.2000

Janice Gilliland	313-845-9740	JGilliland@hfcc.edu	Reuther Liberal Arts Building 235
Diane Green	313-845-9748	DGreen@hfcc.edu	Learning Resources Center 117

The Pre-Education program was chosen in 2001 as one of the six best community college teacher education programs in America by Recruiting New Teachers, Inc., an affiliate of the Carnegie Foundation of New York.

The Associate in Arts Degree in Child Development requires 60-62 credit hours of course work. Most course work transfers to four-year schools in Michigan. To determine the transferrability of course work students should consult the transfer guides on file in the University Transfer, Advising, and Career Counseling Center located in the Learning Resource Center.

Career Opportunities

Child Development Associate Degreegraduates may choose to work as children’s institution attendants, school child care attendants, nursery school attendants, or child monitors in private homes. Graduates wishing to pursue

a bachelors degree many transfer most if not all of the coursework toward a bachelor’s degree.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor’s degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to

ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Central Michigan University
- Eastern Michigan University
- Madonna University
- Marygrove College
- Siena Heights University
- Spring Arbor College
- University of Detroit Mercy
- University of Michigan - Ann Arbor
- University of Michigan - Dearborn
- Wayne State University

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CHD 201 - Introduction to Creative Child Care	3				
CHD 202 - Portfolio and Assessment Preparation	3				
ENG 246 - Introduction to Children’s Literature	3				
HPE 260 - Health, Nutrition, and PE	3	D/E	D/E		
MATH 121 - Mathematics for Elementary Teachers I	3	D/E	D/E	D/E	
MATH 221 - Mathematics for Elementary Teachers II	3	D/E	D/E	D/E	E
PSY 131 - Introductory Psychology	3				
PSY 152 - Child Psychology	3				
PSY 256 - Educational Psychology	3				
PSY 294 - Educational Psychology Practicum	1				
One course in Science 100 level or higher					

Minimum Credit Hours: 32

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
5 credits Humanities 100 level or higher					

Minimum Credit Hours: 5

Elective Courses

Credit Hours **Fall** **Winter** **Spring** **Summer**

Additional elective courses should be selected from the courses listed on the university transfer guides for the transfer institution of your choice.

ART 119 - Art Education for the Elementary Teacher OR	3	E			
MUS 147 - Basic Music I for the Elementary Classroom Teacher	3	D/E	D/E		
Minimum Credit Hours:	6				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers	3				

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
HPE 140 - Lifetime Wellness	2	D/E	D/E		
HPE 142 - Advanced First Aid	3				

Minimum General Education Hours Required: 11

Child Development

Certificate of Achievement - Other Academic Division

Program Code: CHILD.CMULT.2002

Janice Gilliland	313-845-9740	JGilliland@hfcc.edu	Reuther Liberal Arts Building 235
Diane Green	313-845-9748	DGreen@hfcc.edu	Learning Resources Center 117

The Child Development Associate (CDA) Program was created by the Administration for Children, Youth, and Families to upgrade the quality of child care programs. Currently, the Council for Early Childhood Professional Recognition administers the CDA Credential. This credential is awarded to any individual who demonstrates proficiency in the Competency Goals set by the Council. The proficiency can be developed through course work and regular work in a childcare setting.

The 15-credit Child Care Certificate of Achievement Program is designed to provide the competencies needed for the CDA credential. Students who wish to complete the Associate in Arts in Child Development may apply these credits toward the Associates degree. However, CHD 201 and CHD 202 may not apply toward a Bachelor's Degree in Elementary Education.

Career Opportunities

Completion of this program and successful completion of the CDA

credentialing process would provide the credentials for working as a lead teacher or program director in some child development settings.

Registry/Certification/Licensure Exam Information

Information on the national Child Development Associates can be found at www.cdacouncil.org. The preparation for this credential is addressed in CHD 201 and CHD 202.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CHD 201 - Introduction to Creative Child Care	3				
CHD 202 - Portfolio and Assessment Preparation	3				
HPE 260 - Health, Nutrition, and PE	3	D/E	D/E		
PSY 131 - Introductory Psychology	3				
PSY 152 - Child Psychology	3				
Minimum Credit Hours:	15				

Computer Information Systems

Associate in Applied Science - Technology Division

Program Code: CISYS.AAS.2003

Shannon Scanlon	313-845-6346	sscanlon@hfcc.edu	Technology Building 162J
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

This program, leading to an Associate in Applied Science Degree, teaches information technology and Internet fundamentals, microcomputer technology, LAN technology, operating systems, programming languages (Visual Basic, ASP, C, C++, C#, Java, Javascript, COBOL, Perl and HTML), data base concepts, systems analysis and systems design. Elective courses in Project Management, Information Security, Hardware and Software Troubleshooting and Web Technologies allow the student to pursue specialized study.

Laboratory classrooms and an open computer lab provide students with opportunities to test and debug programs and complete a variety of course assignments.

Career Opportunities

- Network Administration
- Programming
- Computer Support

- Web Developer
- PC hardware and Software Installation and Repair

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to

ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Ferris State University
- Franklin University
- Lawrence Technological University
- Madonna University
- Siena Heights University
- University of Detroit Mercy
- University of Michigan - Dearborn
- Walsh College
- Wayne State University

Courses

Select 12-13 hours from Networking, Web Programming and Development, or Database and Programming Languages in the Electives Courses section, in addition to the Required Core Courses and General Education requirements.

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CIS 100 - Introduction to Information Technology AND	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 111 - SQL for Database Development AND	3				
CIS 112 - Introduction to Networking AND	3				
CIS 125 - Principles of Programming Logic AND	4				
CIS 160 - COBOL Programming OR	3				
CIS 170 - 'C' Programming AND	3				
CIS 220 - System Analysis and Design AND	3				
CIS 129 - Introduction to UNIX with Shell Scripting AND	4				
CIS 230 - C++ Programming OR	3				
CIS 130 - Visual Basic: Net Programming	3				
One Math course numbered 100 or higher (but not Math 121, 127, 221, or 225)					

Minimum Credit Hours: 30

Continued on next page

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
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Students must complete 12-13 credit hours from the courses listed under Networking, Web Programming and Development, or Database and Programming Languages.

CIS 105 - Desktop Operating System Concepts *	4				
CIS 107 - PC Hardware/Software Installation	2				
CIS 113 - Wireless LANs	2				
CIS 114 - Introduction to Novell NetWare Administration	3				
CIS 116 - Advanced Novell NetWare Administration	2				
CIS 124 - Introduction to Windows Server Administration	3				
CIS 157 - A+: Hardware	4				
CIS 158 - A+: Operating Systems	4				
CIS 212 - Networking II	3				
CIS 229 - UNIX System Administration	4				
CIS 295 - Network Design and Implementation	3				

Web Programming and Development Electives

CIS 121 - Introduction to the Internet	2				
CIS 122 - Web/Internet Technologies	3				
CIS 123 - Web Pages	2				
CIS 126 - Advanced HTML	4				
CIS 227 - Web Authoring Design Tools	4				
CIS 224 - Web Multimedia	4				
CIS 222 - Advanced Web/Internet Technologies	4				

Database and Programming Languages Electives

CIS 130 - Visual Basic: Net Programming	3				
CIS 132 - Active Server Pages: Net Programming	3				
CIS 160 - COBOL Programming	3				
CIS 162 - PERL Programming	4				
CIS 170 - 'C' Programming	3				
CIS 171 - Java Programming	3				
CIS 172 - JavaScript Programming	3				
CIS 215 - Advanced Visual BASIC: Net Database Programming	3				
CIS 230 - C++ Programming	3				
CIS 270 - Data Base Systems	3				
CIS 272 - Project Management	4				
CIS 280 - Information Assurance and Security	4	D	O		

Minimum Credit Hours: 12

Job Experience Training	Credit Hours	Fall	Winter	Spring	Summer
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ICO 191 - Industrial Co-op	2				
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Minimum Credit Hours: 2

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Computer Networking Academy

Certificate of Achievement - Technology Division

Program Code: COMPNET.CMULT.2004

Kathryn Fitzner	313-317-1570	kfitzner@hfcc.edu	Technology Building 211B
Todd Browning	313-845-6365	browning@hfcc.edu	Technology Building 211A

Henry Ford Community College's Cisco Networking Academy Program gives students the Internet technology skills for designing, building, and maintaining computer networks. The program combines instructor-led classes, web-based content, online assessment, extensive hands-on labs, and preparation for industry-standard certifications.

Cisco Networking Academy labs enable students to apply what they learn in class by working on actual Cisco routers and switches used in private industry, thus preparing students for lifelong opportunities in the real world.

The Cisco Networking Academy consists of two separate networking programs. The CCNA program provides students with a basic foundation in networking while the CCNP program focuses on complex network configurations and how to diagnose and troubleshoot network problems. Each program is designed to prepare students for specific Cisco career certifications in Cisco's Network Installation and Support career path.

The CCNA program is a four-course sequence designed to prepare students and professionals for the Cisco Certified Network Associate (CCNA) certification exam. The CCNA certification is the first step for associate-level certification in Cisco's Network Installation and Support career path. Students learn how to install and configure Cisco routers and switches in multiprotocol networks using local and wide-area networks (LANs and WANs), provide Level 1 troubleshooting service, and improve network performance and security.

The second program, CCNP, is also a four-course sequence and is designed to prepare students and professionals

for the Cisco Certified Network Professional (CCNP) certification. The CCNP certification is the advanced certification in Cisco's Network Installation and Support career path. The CCNP curriculum trains students to install, configure, and operate local and wide-area networks, and dial access services for organizations of networks from 100 or more nodes with protocols and technologies such as: TCP/IP, OSPF, EIGRP, BGP, ISDN, Frame Relay, STP and VTP.

CCNP focuses on developing skills that enable students to implement scalable networks, build campus networks using multilayer switching technologies, create and deploy a global intranet, and troubleshoot an environment using Cisco router and switches for multiprotocol client hosts and services.

Additional networking courses are offered within the Computer Networking Academy and the Computer Information Systems programs at HFCC. These additional courses can help prepare students for other IT industry certifications, such as CompTIA's Network +, Server +, Security +, and A +.

Career Opportunities

- PC Support Specialist
- Help Desk Technician
- Network Technician
- Network Administrator
- Network Engineer
- and other IT related fields

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to

another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to:

- Davenport University
- Lawrence Technological University
- University of Michigan - Dearborn
- Wayne State University

Required Courses

HFCC's Computer Networking Academy offers two certificates of achievement: CCNA Courses 1 - 4 and Network Infrastructure Essentials. Students may apply for these certificates upon successful completion of the required courses. These courses can also be applied to the Associate of Applied Science, Computer Information Systems/Network Administration degree program.

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Cisco Certified Network Associate (CCNA) Courses

	Credit Hours	Fall	Winter	Spring	Summer
Upon successful completion of the above courses, the students will, upon application, receive a Certificate of Achievement - CCNA Courses 1 - 4.					
CNT 110 - Networking Basics: CCNA 1	4	D/E	D/E		
CNT 120 - Routers and Routing Basics: CCNA 2	4	D/E	D/E		
CNT 210 - Switching Basics and Intermediate Routing: CCNA	4	D/E	D/E	E	
CNT 220 - WAN Technologies: CCNA 4	4	D/E	D/E	E	

Minimum Credit Hours: 16

Cisco Certified Network Professional (CCNP) Courses

	Credit Hours	Fall	Winter	Spring	Summer
Please note that CCNA 1 - 4 course completion or CCNA certification is required before beginning the CCNP program.					
CNT 291 - Advanced Routing: CCNP 1	4				
CNT 292 - Remote Access: CCNP 2	4				
CNT 293 - Multilayer Switching: CCNP 3	4				
CNT 294 - Network Troubleshooting: CCNP 4	4				

Additional Computer Networking Academy Courses

	Credit Hours	Fall	Winter	Spring	Summer
CNT 115 - Network Infrastructure Essentials	4	E	E		
CNT 119 - Introduction Security: Security + Prep	1				
CNT 260 - Multilayer Switching: CCNP 3	4	E	E		

Computer Numerical Control

Associate in Applied Science - Technology Division

Program Code: MFCNC.AAS.2002

Ken Wright	313-845-6331	kwright@hfcc.edu	Technology Building 164E
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

These programs are designed for students interested in adapting ideas to working models or generally refining an engineer's concepts.

Through extensive laboratory experiences, the student acquires skills that are essential in industrial processes, blueprint reading, layout and inspection, numerical control prototype testing, and developing and testing automated, servomechanical, and other mechanical systems. Most students work part time in their fields of endeavor while completing their degree requirements.

All of these programs strongly emphasize the safe and skillful use of tool-room machines. Core courses are individualized to fit the student's personal goals.

Career Opportunities

- Automation and Control Technician
- CNC Set-up Technician
- Engineering Technician

- Quality Controller
- Programmer
- Laboratory Technician
- Tool Analyst
- Pre-production Planner
- Plastic R & D Technician
- Machinist/Toolmaker
- Sales & Service Engineer
- Process Engineer
- Test Technician

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of

HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Ferris State University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 78.5

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
MPS 100 - Manufacturing Processes I	6	D/E	D/E	E	
MPS 110 - Manufacturing Processes II	6	E/W	E	E	
MPS 130 - Quality Control Gaging and Inspection	4	E			
MPS 140 - Introduction to CNC	4	D/E	D/E	E	
MPS 145 - CNC Operations	6		E		
MPS 150 - SPC In Manufacturing	4		E		
MPS 160 - Computer Assisted N/C Programming	4	E	E		
MPS 170 - Advanced Computer Assisted N/C Programming	4			E	
MPS 210 - Non-Traditional Manufacturing Processes	4			E	
MPS 275 - Advanced CNC Operations	6	E			
DRAF 110 - Introduction to Industrial Drafting	3	D/E	D/E	D	
MPS 146 - Introduction to CNC Machine Tool Probing	1	E			
MPS 147 - Basic Macro Programming for CNC	1.5	E			
MPS 148 - Advanced CNC Probing	1		E		
Minimum Credit Hours:	54.5				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
DRAF 120 - Introduction to CAD	4	D/E	D/E	D/E	
MATH 100 - Basic Technical Mathematics AND	4	D/E	D/E	D	
MATH 103 - Technical Mathematics OR	4	D/E	D/E		
MATH 112 - Trigonometry OR	3	D/E	D/E		
MATH 175 - Precalculus or a higher level math class	5	D/E/O	D/E/O	D/E	D/E
PHYS 120 - Technical Physics	4	E	E	E	
Minimum Credit Hours:	15				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	D	D		
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9
 ENG 135 is recommended.

Computer Software Applications

Certificate of Achievement - Business and Economics Division
Program Code: BAIMSOFAPP.CMLT.2003

 Elaine Saneske
 Diane Smith

 313-845-9704
 313-845-9702

 esaneske@hfcc.edu
 dsmith@hfcc.edu

 Reuther Liberal Arts Building 304
 Reuther Liberal Arts Building 330

In today's modern business environment, many occupations require substantial skills in the use of various computer software applications. The attainment of the Certificate in Computer Software Applications offers evidence to employers that the individual has reached a certain level of proficiency in the application of computer software. The certificate provides students with the opportunity to improve

their software applications literacy and job skills. Students enrolled in the program will receive training in Windows operating system software; the Internet; and word processing, spreadsheet, database management, presentation, and web pages application software.

The certificate is often combined with an associate's degree to improve a student's employability. The certificate

can be used as a building block toward a Certificate in Office Administration and/or an Associate in Business Degree in the Administration and Information Management program. Individuals who are already employed may find that the certificate increases the opportunity for promotion.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 19

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
BCA 106 - Introduction to Windows	2	D/E	D/E	D/E	D/E
BCA 125 - Introduction to the Internet & Web Pages	3	D/E	D/E	D/E	E
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
BCA 143 - Word Processing	3	D/E	D/E		
BCA 145 - Spreadsheet Applications	3	D/E	D/E	E	
BCA 147 - Data Base Applications	3	D/E	D/E	E	
BCA 152 - Presentation Software	2	D/E	D/E	D/E	E
Minimum Credit Hours:	19				

Criminal Justice - Corrections/Probation and Parole

Associate in Arts - Social Science Division

Program Code: CORAD.AA.1985

Greg Osowski	313-845-9859	gosowski@hfcc.edu	Reuther Liberal Arts Building 109W
Dan Kearney	313-845-9714	dkearney@hfcc.edu	Reuther Liberal Arts Building 107

The Corrections/Probation and Parole curriculum is designed for those students interested primarily in public service involving work with offenders either within correctional institutions, such as jails or prisons, or in professional work outside correctional institutions, such as work with juveniles and those offenders on probation or parole. The curriculum at HFCC is designed for those seeking careers as correction officers as well as those who will eventually go on to other fields, such as probation and parole.

Career Opportunities

The curriculum prepares students to take various entry-level positions and certification exams. Corrections opportunities exist in almost every area of government. Most persons start out in entry-level positions as corrections officers or in court probation departments upon completion of an associate's degree. For future

advancement in the institutional field or work in probation and parole, a bachelor's degree is highly recommended.

- Counseling
- Prison Corrections Officer
- Probation/Parole Officer
- Social Work

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific

degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Concordia University in Ann Arbor
- Davenport University
- Eastern Michigan University
- Lawrence Technological University
- Madonna University
- University of Detroit Mercy
- University of Michigan - Dearborn

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CRJ 135 - Juvenile Justice	3	D/E/O	D/E/O		
CRJ 136 - Corrections I - Introduction to Corrections	3	D/E	D/E		
CRJ 138 - Probation and Parole	3	D/E	D/E		
CRJ 141 - Corrections Clients - Human Growth and Development	3	D	E		
CRJ 253 - Legal Issues in Corrections/Probation and Parole	4	D	E		
CRJ 286 - Topics in Corrections/Probation and Parole	3	D	E		

Minimum Credit Hours: 19

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
CRJ 131 - Introduction to Law Enforcement and Criminal Justice 131	3	D/E/O	D/E/O	D/O	
PSY 131 - Introductory Psychology 131	3				
SPC 131 - Fundamentals of Speaking 131 OR	3	D/E/W	D/E/W	D/E	D/E
SPC 145 - Interpersonal Communication 145	3	D/E	D/E		
Science and Math - 4 credit hours (Group II) - see Graduation section of the catalog					
Science and Math - 4 credit hours in a lab course (Group II) - see Graduation section of catalog					
Humanities 5 additional credit hours (Group 1) - see Graduation section of the catalog					

Minimum Credit Hours: 22

Continued on next page

Elective Courses

Credit Hours Fall Winter Spring Summer

You may choose any combination of these electives, if needed, to meet minimum graduation requirements. Depending on courses selected to meet the Required Support Courses section above or the General Education requirements, you may or may not need to take courses in this Elective Courses section.

If you have any questions, please see a Criminal Justice Advisor in the Criminal Justice Program.

CRJ 134 - Criminal Investigation OR	3	D/E	D/E		
CRJ 291 - Criminal Justice Internship OR	3	D/E	D/E		
CRJ 234 - Criminalistics: Criminal Investigation Laboratory Techniques	3	E	E		
Minimum Credit Hours:	7				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
HPE 142 - Advanced First Aid	3				

Minimum General Education Hours Required: 11

Criminal Justice - Corrections/Probation and Parole

Certificate of Achievement - Social Science Division

Program Code: CORAD.CERT.1990

Greg Osowski	313-845-9859	gosowski@hfcc.edu	Reuther Liberal Arts Building 109W
Dan Kearney	313-845-9714	dkearney@hfcc.edu	Reuther Liberal Arts Building 107

HFCC offers a 30-hour certificate of completion program in Criminal Justice–Corrections/Probation and Parole which will help the student prepare for an entry-level position. This program is based on the Michigan Department of Corrections recommended courses.

Career Opportunities

- Corrections Officers

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer

to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor’s degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation

agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Concordia University in Ann Arbor
- University of Michigan - Dearborn

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 30

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CRJ 135 - Juvenile Justice	3	D/E/O	D/E/O		
CRJ 136 - Corrections I - Introduction to Corrections	3	D/E	D/E		
CRJ 138 - Probation and Parole	3	D/E	D/E		
CRJ 141 - Corrections Clients - Human Growth and Development	3	D	E		
CRJ 253 - Legal Issues in Corrections/Probation and Parole	4	D	E		
CRJ 286 - Topics in Corrections/Probation and Parole	3	D	E		
Minimum Credit Hours:	19				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
Choose any combination of courses to equal minimum of 11 credit hours.					
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
ENG 131 - Composition OR	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing OR	3				
POLS 131 - Introduction to American Government and Political Science OR	3				
PSY 131 - Introductory Psychology OR	3				
SOC 131 - Introduction to Sociology	3				
Minimum Credit Hours:	11				

Criminal Justice - Law Enforcement

Associate in Arts - Social Science Division

Program Code: LAWEF.AA.1985

Greg Osowski 313-845-9859 gosowski@hfcc.edu Reuther Liberal Arts Building 109W
 Dan Kearney 313-845-9714 dkearney@hfcc.edu Reuther Liberal Arts Building 107

The associate degree program in Law Enforcement is concerned with the preservation of peace, the prevention of crime, and the protection of life and property. A knowledge of the role of criminal justice in our society also serves to emphasize the importance of balancing the needs of society to maintain social order against the need to safeguard individual rights.

The program is designed to prepare students for entry into the public service fields of law enforcement with a full working comprehension of the relationships between public and private concerns.

Career Opportunities

- Federal Law Enforcement
- Law School
- Police Officer

- Private Industry
- State Law Enforcement

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation

agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to:

- Concordia University in Ann Arbor
- Davenport University
- Eastern Michigan University
- Lawrence Technological University
- Madonna University
- University of Detroit Mercy
- University of Michigan - Dearborn

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 62

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CRJ 131 - Introduction to Law Enforcement and Criminal Justice	3	D/E/O	D/E/O	D/O	
CRJ 132 - Police Administration - Staff and Line Operations	3	D/E	D/E		
CRJ 134 - Criminal Investigation	3	D/E	D/E		
CRJ 251 - Criminal Law	4	D/E	D/E		
CRJ 252 - Criminal Procedure	4	D/E	D/E		
CRJ 285 - Topics in Criminal Justice/Law Enforcement	3	D/E	D/E		
Minimum Credit Hours:	20				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
Science and Math -4 credit hours (Group II) - see Graduation section of catalog					
Science and Math- 4 credit hours in course with lab (Group II) -see Graduation section of catalog					
Humanities 5 additional credit hours (Group I) - see Graduation section of catalog					
PSY 131 - Introductory Psychology 131	3				
SPC 131 - Fundamentals of Speaking 131 OR	3	D/E/W	D/E/W	D/E	D/E
SPC 145 - Interpersonal Communication 145	3	D/E	D/E		
Minimum Credit Hours:	19				

Elective Courses **Credit Hours** **Fall** **Winter** **Spring** **Summer**

You may choose any combination of these electives, if needed, to meet minimum graduation requirements. Depending on courses selected to meet the Required Support Courses section above or the General Education requirements, you may or may not need to take courses in this Elective Courses section.

If you have any question, please see a Criminal Justice Advisor in the Criminal Justice Program.

CRJ 135 - Juvenile Justice 135 OR	3	D/E/O	D/E/O		
CRJ 136 - Corrections I - Introduction to Corrections 136 OR	3	D/E	D/E		
CRJ 234 - Criminalistics: Criminal Investigation Laboratory Techniques 234 OR	3	E	E		
CRJ 291 - Criminal Justice Internship 291	3	D/E	D/E		
Minimum Credit Hours:	11				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
HPE 142 - Advanced First Aid	3				

Minimum General Education Hours Required: 11

Culinerian Skills

Certificate of Achievement - Technology Division

Program Code: CULSK.CSGL.2002

Dennis Konarski	313-845-6390	dennis@hfcc.edu	Student and Culinary Arts Center 163E
Jeff Click	313-845-9651	jclick@hfcc.edu	Student and Culinary Arts Center 163D

Culinerian Skills Certificate - Chart
Your Own Course!

These courses provides the foundation for quality food production in a professional kitchen using both lab and lecture classes. Once you've mastered the basics, the opportunities are endless. These courses may be used for the Culinary Arts or Hotel Restaurant Management Associate in Applied Science.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
HOSP 121 - Introduction to Quality Food Preparation - Lecture 121	2	D	D		
HOSP 123 - Introduction to Professional Cooking - Lab 123	6	D	D		
HOSP 140 - Advanced Food Preparation 140	8	D/E	D/E		
Minimum Credit Hours:	16				

Culinary & Baking

Certificate of Achievement - Technology Division

Program Code: CULBK.CMLT.2002

Dennis Konarski
Jeff Click

313-845-6390
313-845-9651

dennis@hfcc.edu
jclick@hfcc.edu

Student and Culinary Arts Center 163E
Student and Culinary Arts Center 163D

Let your creativity shine while learning the various facets of the baking and pastry fields. Students will also explore international cuisine and the art of garde manager by preparing decorative cold food displays.

Career Opportunities

- Bakeries
- Pastry Shops
- Hotels and Private Clubs
- Speciality Food Shops

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

* Only offered during the fall term

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
HOSP 121 - Introduction to Quality Food Preparation - Lecture 121	2	D	D		
HOSP 123 - Introduction to Professional Cooking - Lab 123	6	D	D		
HOSP 140 - Advanced Food Preparation 140	8	D/E	D/E		
HOSP 230 - Pastry and Foods I 230	6	D	W		
HOSP 240 - Pastry and Foods II 240	6	W	D		
HOSP 245 - Hotel and Restaurant Desserts *	3	E			
Minimum Credit Hours:	31				

Culinary Arts Supervision

Certificate of Achievement - Technology Division

Program Code: CULSU.CMLT.2002

Dennis Konarski	313-845-6390	dennis@hfcc.edu	Student and Culinary Arts Center 163e
Jeff Click	313-845-9651	jclick@hfcc.edu	Student and Culinary Arts Center 163d

Chart Your Own Course
- HOSPITALITY STUDIES
CERTIFICATE

Accreditation

Educational Foundation of the National
Restaurant Association

Chefs must have technical knowledge and human resource skills to be successful in today's kitchens. Key components of the supervision certificate include training in food sanitation, nutrition, and managerial techniques.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 39

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
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All of these courses may be used towards an Associate in Applied Science in Culinary Arts.

HOSP 105 - Applied Foodservice Sanitation *	2				
HOSP 110 - Introduction to Hospitality Industry *	3	D/E	D	E	
HOSP 121 - Introduction to Quality Food Preparation - Lecture *	2	D	D		
HOSP 123 - Introduction to Professional Cooking - Lab *	6	D	D		
HOSP 130 - Food and Nutrition *	3	D	E		
HOSP 140 - Advanced Food Preparation *	8	D/E	D/E		
HOSP 210 - Hotel and Restaurant Supervision *	3	D	D/E		
HOSP 230 - Pastry and Foods I *	6	D	W		
HOSP 240 - Pastry and Foods II *	6	W	D		
Minimum Credit Hours:	39				

Recommended Course Sequence

Term 1	HOSP 105	HOSP 110	HOSP 121	HOSP 123
Term 2	HOSP 140	HOSP 210		
Term 3	HOSP 230	HOSP 130		
Term 4	HOSP 240			

Students may take concurrently HOSP 230 and HOSP 240.

Customer Service Professional

Certificate of Achievement - Business and Economics Division

Program Code: CUSRV.CERT.2001

Ms. Diane Smith
Elaine Saneske

313-845-9702
313-845-9645

dsmith@hfcc.edu
esaneske@hfcc.edu

Reuther Liberal Arts Building 330
Reuther Liberal Arts Building 328

This certificate program was developed in consultation with businesses such as Blue Cross Blue Shield, Detroit Edison, and Ford Motor Company to prepare students for a career in customer service. The program emphasizes the development of communication and basic computer skills. It includes training to work as a customer service representative in a business call center. Customer Service Representatives (CSR's) interact with a company's customers by answering questions about such things as products, services, or billings. They enter orders for products, sell tickets, make

reservations, and solve problems that customers are having. CSR's may work in the customer service area of stores or in a call center receiving in-bound calls from a company's customers. You talked with a CSR if you ever made a call:

- to get information about your credit card or bank account.
- to order tickets by phone.
- to buy a product over the phone.
- to ask a question about a product or service.
- to make hotel, airline, or rental car reservations

The Customer Service Professional Certificate program is designed to train you for a career as a CSR. It emphasizes the development of the communication, telephone, computer, and workplace skills necessary to perform effectively as a CSR. It can be completed in one semester. Since all the courses in the certificate program can be applied towards an Associate's Degree in Business, you can use the program as a stepping-stone to the attainment of the Associate's Degree. The Certificate requires a total of 19 credit hours.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 19

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
BCA 101 - Computer Keyboarding 101	3	D/E/W	D/E/W	D/E	D/E
BCA 140 - Software Applications 140	3	D/E/W/O	D/E/W/O	D/E	D/E
BBA 133 - Business Behavior and Communication 133	3	D/E	D/E	E	
BBA 155 - Customer Service & Salesmanship 155	3	D/E	D/E		
BBA 157 - Call Center/Help Desk Practicum 157	1	D	D		
BBA 110 - Business Language Skills 110	3	D/E	D/E		
BBA 231 - Business Office Communications 231	3	D/E	D/E		
Minimum Credit Hours:	19				

Course Sequence

Term 1	BCA 101	BBA 110	BBA 155		
Term 2	BCA 140	BBA 157	BBA 231	BBA 133	

Digital Electronics**Certificate of Achievement - Technology Division**

Program Code: ELECDIGELE.CMLT.2003

Mark Siedlik	313-845-6353	msiedlik@hfcc.edu	Technology Building 211H
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

This certificate can be earned while pursuing an Associate of Applied Science degree in Electrical Technology.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ELEC 103 - Basic Electricity	4	D/E	D/E		
ELEC 106 - Basic Electronics	3	D/E	D/E		
ELEC 115 - Digital Circuits I	3	D/E	D/E		
ELEC 190 - Electronics Technology Co-op	1				
ELEC 195 - AC/DC Circuit Analysis	3				
ELEC 215 - Digital Circuits II	3				
ELEC 295 - Microprocessor Systems	3				
Math 103 or higher level Math					
Minimum Credit Hours:	24				

Dynamometer Technician

Certificate of Achievement - Technology Division

Program Code: DYNATECH.CMULT.2005

Howard Freeman
David Wiltshire

313-845-6368
313-845-9816

hfreeman@hfcc.edu
djwiltshire@hfcc.edu

Technology Building 162C
Technology Building 115D

The certificate enables the student to achieve job entry-level skills in those courses relating directly to the set-up, operation, and data acquisition system commonly employed in automotive chassis and engine dynamometers.

Career Opportunities

- Engineering Technician
- Test Driver
- Dynamometer Technician
- Data Evaluation Specialist

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to

help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of credits earned at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the

appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Lawrence Technological University
- Wayne State University

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 20

Because the Certificate of Achievement transfers into the two-year degree program, it is highly recommended that students complete certificate requirements prior to degree requirements.

Mini-Certificates of Achievement/Automotive Technology

Upon successful completion of the following courses, the student will, upon application, receive a Certificate of Achievement. These courses can be applied to the Associate in Applied Science Degree in Automotive Technology.

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
AUTO 100 - Internal Combustion Engines	3	D/E	D/E		
AUTO 110 - Automotive Electricity	3	D/E	D/E		
AUTO 120 - Fuel Management Systems	2	D/E	D/E		
AUT 130 - Automotive Ignition Systems	2	E	E	E	E
AUTO 150 - Diagnosing and Engine Evaluation	2	E	E		
AUTO 210 - Automotive Engine Dynamometer	2	E		E	
AUTO 230 - Automotive Diesel Principles	2	E	E		
AUTO 237 - Computerized Engine/Vehicle Emission Control System	2			E	
AUTO 187 - Automotive Engine Tune-Up	2			E	E
Minimum Credit Hours:	20				

Education Paraprofessional

Certificate of Achievement - Other Academic Division

Program Code: EDPAR.CMLT.2002

Janice Gilliland 313-845-9740 JGilliland@hfcc.edu Reuther Liberal Arts Building 235
 Diane Green 313-845-9748 DGreen@hfcc.edu Learning Resources Center 117

The 32-hour Education Paraprofessional Certificate of Achievement is designed to increase the students' knowledge in specific content areas and to promote the development of interactional skills necessary for working with children. This certificate also enables those presently employed as paraprofessionals to become more effective as aides. Upon successful completion of the program, students receive a certificate of achievement.

Those who wish to earn an Associate in Arts Degree in Pre-Elementary Education may apply the total hours of the certificate program toward that degree. However, ENG 121 and HPE 142 may not apply toward a Bachelor's Degree in Elementary Education. Please consult the transfer guides in the University Transfer, Advising, and Career Counseling Center.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CIS 221 - Instructional Technology for Elementary Teachers	3				
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II	3				
ENG 246 - Introduction to Children's Literature	3				
ENG 121 - Assisting with Elementary Reading	3				
HPE 142 - Advanced First Aid	3				
MATH 121 - Mathematics for Elementary Teachers I	3	D/E	D/E	D/E	
MATH 221 - Mathematics for Elementary Teachers II	3	D/E	D/E	D/E	E
PSY 131 - Introductory Psychology	3				
PSY 256 - Educational Psychology	3				
PSY 294 - Educational Psychology Practicum	1				
Science at the 100 level or higher					

Minimum Credit Hours: 35

Electrical Technology

Associate in Applied Science - Technology Division

Program Code: ELECT.AAS.2004

Mark Siedlik	313-845-6353	msiedlik@hfcc.edu	Technology Building 211H
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

The Electronics Technology program at HFCC starts with the basic principles of electricity and proceeds to the concepts of solid state components such as diodes, transistors, integrated circuits, and microprocessor systems. More advanced courses show how these fundamental principles are applied to machine control, computers, power supplies, amplifiers, oscillators, industrial control, and instrumentation systems.

Laboratory instruction (about 50% of class time) teaches the use of test equipment, setting up circuits, trouble shooting, and calibrating systems.

The Electronic Technology facilities are state-of-the-art offering the high-tech training necessary to prepare you for job success in today's economy. Working conditions are simulated in five fully-equipped laboratories where students put electrical-electronics theory to practice. Along with hands-on lab experience, computer-simulated circuit analysis is used in most of the electronics courses.

NOTE: Students must complete a minimum of 62 credit hours of study for the Associate of Applied Science Degree consisting of required core, required support, and general education courses. To graduate, the student must fulfill the Computer Literacy Requirement either by successfully completing one of the Computer Literacy Courses (see page 330) or by passing the Computer Literacy Test.

Career Opportunities

This program leads to an associate degree in Electrical/Electronics technology, which prepares individuals for positions in the following careers:

- Computer Service
- Instrumentation Set-up
- Machine Service
- Quality Control
- Research and Development
- Machine Controls
- Instrumentation Repair
- Microprocessor Systems
- Product Evaluation
- Sales

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of credits earned at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Ferris State University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn
- Wayne State University

Continued on next page

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 62

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ELEC 103 - Basic Electricity	4	D/E	D/E		
ELEC 106 - Basic Electronics	3	D/E	D/E		
ELEC 115 - Digital Circuits I	3	D/E	D/E		
ELEC 145 - AC/DC Rotating Machines	3				
ELEC 155 - Analog Electronics I	3				
ELEC 195 - AC/DC Circuit Analysis	3				
ELEC 200 - Ladder Diagrams and Motor Controls	3				
ELEC 205 - Analog Electronics II	3				
ELEC 215 - Digital Circuits II	3				
ELEC 245 - Programmable Logic Controllers	3				
ELEC 255 - Instrumentation Systems	3				
ELEC 260 - Automation Controls and Robotics	3				
ELEC 295 - Microprocessor Systems	3				
Minimum Credit Hours:	40				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
MATH 112 - Trigonometry or higher	3	D/E	D/E		
PHYS 120 - Technical Physics OR	4	E	E	E	
PHYS 131 - Liberal Arts Physics	4	D/E/W/O	D/E/W/O	D/O	
Minimum Credit Hours:	7				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
AUT 170 - Related Technical Automotive OR	4	E	E		
DRAF 110 - Introduction to Industrial Drafting OR	3	D/E	D/E	D/E	
DRAF 120 - Introduction to CAD OR	4	D/E	D/E	D/E	
ELEC 120 - Basic Hydraulics OR	3				
ELEC 185 - Pneumatics OR	3				
ELEC 190 - Electronics Technology Co-op OR	1				
MPS 100 - Manufacturing Processes I OR	6	D/E	D/E	E	
MPS 140 - Introduction to CNC	4	D/E	D/E	E	
Minimum Credit Hours:	6				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers	3				

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Energy Technology

Associate in Applied Science - Trade & Apprentices Division
Program Code: ENGRY.AAS.2004

Gregory Laskowsky	313-317-1550	glaskowsky@hfcc.edu	Technology Building 164D
Robert Morrish	313-845-6436	rmorrish@hfcc.edu	Technology Building 115A

Energy Technology is a degree program that presents an overall study of the principles of energy production and its uses. It provides the student with a rounded background in the principles of measurement, conservation, and operation and repair of residential/commercial heating, air conditioning, and refrigeration equipment.

Career Opportunities

Upon successful completion of the Associate in Applied Science Degree in Energy Technology, the student is qualified for an entry-level position as an energy conservation technician, HVAC service and installation technician, facilities manager or facilities maintenance technician, plant/building energy manager, residential/commercial energy auditor, field service engineer, HVAC design/estimating or sales engineer, field

application engineer, licensed power engineer or building engineer, or representative for power equipment or instrument and control equipment found in buildings of all sizes.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of credits earned at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer

to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Ferris State University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn
- Wayne State University

Courses

All students working towards an Associate in Applied Science in Energy Technology degree must complete all core courses, concentration courses in either Residential Heating/Cooling or Power/Building Engineer, and advanced energy systems skill courses. General Education requirements must be met as well.

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
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The core courses listed are required for all Energy Technology associate degrees, whether the concentration area is in Residential Heating/Cooling or in Power/Building Engineer.

ENT 100 - Basic Workplace Skills (PO)	1	D/E	D/E		
ENT 101 - Introduction to Energy Technology	2	D/E	D/E	D/E	
ENT 105 - Introduction to RACH (PO)	2	D/E	D/E	D/E	
ENT 107 - Applied Instrumentation - Electrical (PO)	2	D/E			
ENT 141 - Power Engineering I- Energy Conversion Fundamental (PO)	2				
ENT 260 - Energy Systems Management (PO)	4		D/E		
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Minimum Credit Hours: 15

Required Concentration Courses

Credit Hours Fall Winter Spring Summer

Students concentrating in Power/Building Engineer must take 17 rather than 16 credits in their concentration. Ten of the credits are courses identified as Power/Building concentrations. The additional 7 credits should be selected from courses identified as Power/Building concentration electives.

ENT 104 - Heating Technology (PO) HVAC concentration	4	D/E	D/E	D/E	
ENT 113 - Refrigeration Technology HVAC concentration	4	E	E		E
ENT 119 - Air Conditioning Technology HVAC concentration	3	E	E		
ENT 108 - Introduction to Heating and Cooling Codes HVAC concentration	2				
ENT 106 - Sheet Metal Fabrication for Systems HVAC concentration	2	D/E	D/E	D/E	
ENT 145 - Power Engineering II - Boilers and Auxiliaries (PO) Power/Building concentration	4				
ENT 256 - Power Engineering III - Steam Plant Operation Lab (PO) Power/Building concentration	4	E	E		
ENT 259 - Power Engineering IV- Plant/Building Operations & Maintenance (PO) Power/Building concentration	2	E	E		
ENT 201 - Applied Instrumentation: Electronics Power/Building concentration elective	3	E	E		
ENT 231 - Applied Digital Control Systems (PO) Power/Building concentration elective	3	E	E		
MFMT 241 - Power Engineering/Refrigeration License Review (OL) Power/Building concentration elective	5				
MFMT 248 - Power Engineering-Steam License Review Course (OL) Power/Building concentration elective	5				
MFMT 116 - HP Boiler Operation/Maintenance And License Prep Course (OL) Power/Building concentration elective	2				
MFMT 115 - Boiler (LP) Heating Plant Operation & Maintenance (OL) Power/Building concentration elective	2	E	E		
ENT 235 - Industrial Controls Calibration Techniques Power/Building concentration elective	3	E	E		
ENT 240 - Control Systems: Microprocessor Based Power/Building concentration elective	3	E	E		

Minimum Credit Hours: 16

Advanced Skills Courses

Credit Hours Fall Winter Spring Summer

Students should select 12 credits from the Advanced Skills courses according to their areas of concentration.

ENT 212 - Light Commercial Heating Systems (PO) HVAC or P/B concentration	3	E	E		
ENT 216 - Light Commercial Refrigeration Systems HVAC or P/B concentration	3				
ENT 219 - RACH Light Commercial Systems HVAC or P/B concentration	3		E		
ENT 265 - Energy Systems Design HVAC concentration	5	D/E	D/E		
ENT 230 - Michigan Mechanical Contractor Licensing Examination Preparation HVAC concentration	4	W			
ENT 201 - Applied Instrumentation: Electronics P/B concentration	3	E			
ENT 231 - Applied Digital Control Systems (PO) P/B concentration	3	E	E		
ENT 240 - Control Systems: Microprocessor Based P/B concentration	3	E	E		
ENT 248 - Power Engineering First Class License Review (PO) P/B concentration	3	E	E		
MFMT 241 - Power Engineering/Refrigeration License Review (OL) P/B concentration	5				
MFMT 248 - Power Engineering-Steam License Review Course (OL) P/B concentration	5				

Minimum Credit Hours: 12

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General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

MFMT 103 is part of the required core.

Student must also take 4 credits from MATH 100 or above and 4 credits from CHEM 131, PHYS 120 or PHYS 131.

Engineering

Associate in Science - Science Division

Program Code: ENGIN.AS.2002

 Associate Dean, Science
 Associate Dean, Mathematics

 313-845-9632 science@hfcc.edu
 313-845-9631

 Science Building 107
 Liberal Arts 244

Engineers use knowledge of mathematics and natural sciences to build structures, design devices, develop new products, and harness the forces of nature. Engineering schools in southeast Michigan can prepare you to enter several fields, including aerospace, chemical, civil, computer, electrical, industrial, mechanical, and biomedical engineering.

The Associate of Science in Pre-Engineering program provides the first two years of a student's engineering education. Articulation agreements guarantee admission to the final two years of engineering school at several universities to students who satisfactorily complete the AS in Pre-Engineering at HFCC. These articulation agreements also maximize the transferability of your HFCC coursework.

Although the core engineering curriculum is fairly standard among accredited engineering schools, students should consult with the engineering advisor to determine which courses they should take, depending on the engineering discipline and the engineering school to which they will transfer.

Although the minimum requirement for completing the program is 60 credit hours, students may be able to take additional coursework at HFCC and transfer it to the 4-year institution.

Career Opportunities

Aerospace engineers design airplanes and spacecraft. (<http://www.bls.gov/oco/ocos028.htm>)

Biomedical engineers research and design things like medical equipment, prosthetics, and surgical devices used in the health care industry. (<http://www.bmes.org>)

Chemical engineers use the principles of both chemistry and engineering in fields as diverse as chemical production, surface coatings, computer design, agriculture, and spacecraft design. (<http://www.aiche.org>)

Civil engineers can specialize in many areas, including structural, transportation, environmental, geotechnical, urban planning, and water resources. (<http://www.asce.org>)

Computer engineers and electrical engineers deal with subjects that range from power distribution to computers and communication. (<http://www.ieee.org>)

Industrial engineers work in a wide variety of fields to make processes go more smoothly. (<http://www.ieenet.org>)

Mechanical engineers design machinery of many different kinds, from automobiles to robots. (<http://www.asme.org>)

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of credits earned at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Lawrence Technological University
- Michigan Technological University
- University of Detroit Mercy
- University of Michigan - Ann Arbor
- University of Michigan - Dearborn
- Wayne State University

Admission Requirements/Eligibility

Engineering school is a rigorous academic program that requires strong math and science skills. Students in engineering programs at 4-year colleges and universities typically take 16-18 credit hours each semester. The majority of these courses are in natural sciences, mathematics, and engineering. Students planning to enter engineering should take a rigorous high school background including four years of college prep math and science.

Most courses that apply toward engineering degrees require calculus as a prerequisite. Engineering schools calculate that, in order to finish a degree in four years, students should start calculus in their first semester in college. If you do not place into calculus, it will take you longer to earn your degree.

Students who are interested in engineering fields, but who do not have a strong aptitude for math may want to investigate programs in engineering technology. Although we do not have a formal degree program, our courses do transfer into the Bachelor of Science

Continued on next page

programs in engineering technology at several universities.

Additional Program Requirements

Requirements for different fields of engineering and schools vary. Students must consult with an engineering advisor to plan an appropriate course of study for the area of engineering and

the college or university to which they intend to transfer.

The minimum requirement for earning the AS in Pre-Engineering is 60 credit hours. However, engineering schools will accept as many as seven additional courses from HFCC transfer students toward BS degrees in engineering. We

encourage students to take advantage of this and to complete as many courses as they can transfer at HFCC.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
MATH 180 - Calculus I	5	D/E	D/E	D/E	E
MATH 183 - Calculus II	5	D/E	D/E	E	
MATH 280 - Calculus III	5	D/E	D/E		
MATH 289 - Differential Equations	4	D/E	D/E		
CHEM 141 - Principles of General and Inorganic Chemistry I	5	D/E	D/E	D	
PHYS 231 - Engineering Physics	5	D/E	E	D	
PHYS 232 - Engineering Physics (Continued)	5	D	D		
Consult the engineering advisor and choose one of the following as appropriate for your program.					
BEC 133 - Basic Economics OR	3	D/E	D/E		
BEC 151 - Principles of Macro Economics OR	3	D/E/W/O	D/E/W/O	D/E/O	D/E
BEC 152 - Principles of Micro Economics	3	D/E/W/O	D/E/W/O	D/E/O	D/E
Minimum Credit Hours:	37				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
6 hours of Humanities (Group I) AND 3 hours of Social Science (Group III)					
Minimum Credit Hours:	9				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
Courses in this section are listed as "elective" because they are not required for all engineering programs. Students should consult with the engineering advisor to choose the proper set of courses for their program of study.					
Choose a minimum of eight credit hours from these courses.					
BIO 131 - Introductory Biology	4	D/E	D/E	D	D
BIO 150 - Biology: Organisms, Genes, and Ecology	4	D	E		
BIO 152 - Biology: Cells and Molecular Biology	4	E	D		
CHEM 142 - Principles of General and Inorganic Chemistry II	5	D/E	D/E		
CIS 170 - 'C' Programming	3				
ENGR 130 - Introduction to Engineering	3	D/E	D/E		
ENGR 201 - Science of Materials	3	E			
ENGR 232 - Statics	3	E			
ENGR 233 - Dynamics	3		E		
BIO 131 - Introductory Biology	4	D/E	D/E	D	D
Minimum Credit Hours:	8				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test	0				

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Students must consult an engineering advisor to assure that the options for General Education requirements will count toward the degree at the intended transfer institution.

Information for students whose program falls under the new general education requirements:

Students should choose a course from American Society, Events, Institutions, and Cultures that meets the requirements of the transfer institution.

Engineering students may use MATH 180 as the prerequisite for CIS 170.

We recommend that students fulfill the Computer Literacy requirement with the computer literacy test, since no other options transfer into the engineering programs.

Students should consult the engineering advisor to determine whether they should fulfill the Information Literacy and Written Communication requirement with ENG 132 or 135.

Recommended Course Sequence

Students should consult an engineering advisor for suggested course sequences for their intended field of engineering.

Environmental Studies

Associate in Science - Science Division

Program Code: ENVIRN.AS.2004

Judy Kelly

313-845-9728

jkelly@hfcc.edu

Science Building 104E

The Associate in Science in Environmental Studies program emphasizes the interdisciplinary nature of environmental problem solving at the local, regional, and international levels. Students completing this program can transfer to Bachelors-level degree programs in four broad areas: land resources, nature studies, resource and policy management, and urban service.

Although the minimum requirement for completing the program is 60 credit hours, students may be able to take additional coursework at HFCC and transfer it to the 4-year institution.

Career Opportunities

Some occupations of Bachelors-level environmental studies majors are:

- Teacher
- National Park Naturalist
- Resource Policy Planner

- Air Quality Analyst
- Regional Land Use Planner
- Public Health Officer
- Public Interest Group Director

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who

intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- University of Michigan - Dearborn

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
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Some of these courses fulfill graduation and general education requirements.

BIO 139 - Environmental Science	4				
BIO 141 - Botany	4				
BIO 143 - Zoology	4				
CHEM 141 - Principles of General and Inorganic Chemistry I	5	D/E	D/E	D	
GEOL 131 - Physical Geology	4	D/E	D/E	D/E	D
GEOG 131 - Principles of Physical Geography	4				
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
BEC 152 - Principles of Micro Economics	3	D/E/W/O	D/E/W/O	D/E/O	D/E
ATMS 131 - Weather and Climate OR	3				
GEOG 231 - Introduction to Geographic Information Systems	3				

Minimum Credit Hours: 34

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
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MATH 112 - Trigonometry or a higher level math course	3	D/E	D/E		
6 hours of Humanities (Group I)					
Required core courses meet the degree requirements for Group II and Group III.					

Minimum Credit Hours: 9

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
Electives should be chosen to meet the requirements of the transfer institution.					
Minimum Credit Hours:	8				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications	3				

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Students must consult an Environmental Studies advisor to assure that the options for general studies requirements will count toward the degree at the intended transfer institution.

Students should choose a course from the American Society, Events, Institutions, and Cultures and the Information Literacy and Written Communications areas that meet the requirements of the transfer institution.

BCA 140 is required for the program and meets the Computer Literacy requirement.

Recommended Course Sequence

Consult the environmental studies advisor for suggested course sequences for your intended area of study.

Firefighter/Paramedic**Associate in Applied Science - Health Careers Division**

Program Code: FFPAR.AAS.2000

Shannon Bruley
Ronald Bodurka313-317-6582
313-845-9877sbruley@hfcc.edu
rbodurka@hfcc.eduHealth Careers Education Center 132
Health Careers Education Center 132

The Firefighter/Paramedic degree program offers a career pathway for individuals seeking an entry-level position with a full-time municipal fire service. This program is a combination of academic education with necessary hands-on skills. Degree recipients will have an associate in applied science, an EMT-Basic license, paramedic certification, Fire Fighter I & II certification and field clinical experience.

The Michigan Fire Fighters' Training Council (MFFTC) sanctions the academies that HFCC recognizes. The MFFTC certifies our instructors for all fire-related classes. The Michigan Department of Community Health (MDCH) has granted the highest level of accreditation to all EMS courses at HFCC. All EMS instructors are currently licensed by MDCH and all lead instructors are licensed Instructor Coordinators. Each staff member holds an individual "specialty" in the field in which they work. This enhances the educational experience at HFCC. Advanced Cardiac Life Support and Pediatric Advanced Life Support are just two examples of the certificates that our successful students earn while in the program.

EMT-Basic Certification and Paramedic Certification

The paramedic program at HFCC reflects the new national curriculum and all successful completers are eligible to take the National Registry certification exams. The college reserves the right to change policies and course requirements in effect at the time of catalog publication. The EMS portion of the program is constantly updated to meet the changing needs of the profession. This is reflected in the high success rate of our graduates

both on the National Registry and in practice.

Career Opportunities

Employment opportunities range from municipal fire services to field and hospital-based emergency care positions. Firefighting positions are highly competitive which is why we encourage all students to complete the A.A.S. as a Firefighter/Paramedic. This 90+/- credit hour associate level program is actually a 3-year degree program. Students who successfully complete the full program can transfer to Siena Heights University as a Senior, with only one year remaining in order to complete a bachelor degree (inverted major with B.A.S., Bachelor of Applied Science). This positions our graduates well above many entry-level applicants for the coveted Firefighter positions.

In EMS, paramedics are in high demand. According to the U.S. Department of Labor, Bureau of Labor Statistics, "Employment of emergency medical technicians and paramedics is expected to grow faster than the average for all occupations through 2012" (Occupational Outlook Handbook, 2004-2005 Reprint). For additional information, view the following web sites:

- U.S. Department of Labor, Bureau of Labor Statistics, <http://www.stats.bls.gov/oco/reprints/ocor009.pdf>
- National Association of Emergency Medical Technicians, <http://www.naemt.org>
- National Registry of Emergency Medical Technicians, <http://www.nremt.org>
- National Highway Transportation Safety Administration, EMS Division, <http://www.nhtsa.dot.gov/people/injury/ems>

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of credits earned at HFCC. See Appendix for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Siena Heights University

Occupational Exposure/Risk

In emergency medical services, both in school and on the job, exposure to infectious diseases and latex may be minimal to moderate depending on the setting in which you are working. Exposure to illness and infectious disease is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines, can reduce the risk to a minimum. Persons who have latex

sensitivity or allergies should consult with a physician prior to entering the program for guidance on the merits of continuing in a health care career.

Admissions Requirements/Eligibility

The first year of studies for the Emergency Medical Services degree is open enrollment. Students should place into ENG 131 in order to be most successful. Students wishing to enter the second year of studies, which includes the paramedic core, must apply through the EMS office in Health Careers. This level of studies begins every FALL semester. Acceptance to the college is granted to most applicants and does not constitute nor guarantee admission to the paramedic core studies. Early advising for course sequencing is highly recommended. Students are accepted into the program based on a "first qualified, first accepted" basis. All potential placements must be registered on the wait list in the EMS office.

For EMS 200 level courses, students will need to satisfy the following prerequisites:

1. EMT-Basic MI License (with a current National Registry Certificate preferred), BIO 233, BIO 234, AH 100, AH 120 & AH 105 (or equivalent)*
2. ASSET Math Score of 39 on the Numerical Skill Unit or COMPASS Pre-Algebra score of 39 or successful completion of Math 075.
3. ASSET Reading Score of 43 or COMPASS reading score of 84 or successful completion of ENG 081.

*A grade of C or better is required for successful completion of all courses (core and support) required in the EMS program. Students not receiving a C or better cannot continue in the program until they have successfully repeated the course(s) failed. Students who do not successfully complete all co-requisite courses in the EMS Program cannot continue with that same class of students. Therefore, students who fail must repeat all coursework (200+ and up) from the beginning up to

the point that they failed, and then progress in sequence with the new class of paramedic students. Students who need to repeat paramedic must request to be put on the waiting list for the following year. Re-admittance is subject to seat capacity and prior performance.

Additional Program Requirements

Health Appraisal:

Each student is required to complete a Health Appraisal Form, copies of which are available in the Health Careers Office. This appraisal includes a physical, blood titers (to validate immunity to childhood immunizations), TB test, Hepatitis B and boosters if necessary. The cost for this appraisal is in addition to the basic tuition and fee schedule.

Students in the EMS program are expected to meet the same physical and mental requirements as emergency medical technicians. A representative job profile, also available in the Health Careers Office, lists the specific physical and mental requirements as well as the environmental conditions of the occupation.

Criminal Background Check and Drug Screen:

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug Screen* is required for all students in EMS programs prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule.

*Students with a history of alcohol related driving offenses and or felony convictions will find it difficult if not impossible to gain employment in public safety careers. For questions regarding this policy, contact the Health Careers Office. Students who are not cleared for clinical through the Health Appraisal, Criminal Background Check and Drug Screen will not be able to complete the EMS education programs and will not be

eligible to receive the subsequent EMS certifications/licenses.

Uniforms:

Uniform shirts are provided through the program at the Basic EMT level. Pants, shoes, work belt, stethoscope, and National Registry exam fees are in addition to the basic tuition and fee schedule.

Job Placement:

Information about career placement and job success is available through either the Health Careers Office or the College's Job Placement Office.

Dual Paramedic/Nursing Candidates: Paramedic candidates dually preparing for nursing will need to complete three additional courses as follows: PSY 131 and PSY 253 and SOC 131. Nursing candidates dually preparing for EMS studies will need to complete three additional courses as follows: AH 100, AH 120, AH 105.

Program Durations Limits/Updates/Changes

Once a student is admitted/enrolled into the paramedic portion of the EMS degree, that student must complete with that same group of students. If for any reason a student must stop attending after successfully completing any portion thereof, and wish to complete, the student must reapply through the EMS office for the desired year of return. Because of the rapid changes in healthcare, legislation, and resulting course content, successfully completed EMS classes must be repeated in order to assure competence. This applies to all second year students who start, stop, and then return for completion. Early advising through the EMS office is essential.

Registry/Certification/Licensure Exam Information

EMS Certification:

If an individual is a convicted felon, it could disqualify him/her from obtaining the necessary National Registry Certification. For the specific National Registry EMS Policy, go to http://www.nremt.org/about/policy_felony.asp

Continued on next page

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test	0	D/E/W	D/E/W	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				

Minimum General Education Hours Required: 9

CLT is the recommended option in order to meet the Computer Literacy requirement since it does NOT ADD to the total number of required credit hours. Students may take one of the other course options which meet this requirement but it is not included in the 90 hours required to graduate.

Although it is not required or included in the total hours for an AAS, Firefighter/Paramedic, the EMS program highly recommends that all EMS students take a Wellness course. HPEA 117 and HPE 155 are excellent options.

Recommended Course Sequence

Spring/Summer I	AH 105	AH 100	ENG 131		
Fall I	EMS 100	EMS 106	EMS 109		
Winter I	AH 120	BIO 233	ENG 132		
Spring/Summer II	BIO 234	POLS 131	CLT 100		
Fall II	EMS 200	EMS 210	EMS 205	EMS 290	
Winter II	EMS 220	EMS 230	EMS 215	EMS 295	
Spring/Summer III	EMS 240	EMS 225	EMS 299	MGT 237	

CLINICAL

Basic:

We require two rotations in the field, usually 8 a.m. to 8 p.m., with Monday through Sunday scheduling options and two rotations in the hospital emergency room, with scheduling options available 24/7. Clinical for EMT Basics will be explained, thoroughly, during the EMS 100 course in the first week of classes.

Continued on next page

Paramedic:

EMS clinicals are made available at the discretion of our host EMS Departments and Hospitals. Students are encouraged to keep flexible schedules during school to accommodate the advanced clinical experience. At the paramedic level (EMS clinical 290, EMS 295 and EMS 299), many of the rotations outside of the ER, are daytimes and during the traditional work week. Examples of this are OR and Cardiac Cath labs. Clinical is explained, in depth, at the Paramedic orientation in August, before the FALL II start of paramedic courses.

Clinical courses, basic and advanced, show TBA in the Time/Day area of the schedule. We try very hard to individualize clinical rotations to each student's needs.

The Second year:

Sequencing for EMS 200+ level course-work is not optional. Paramedic (EMS 200+) courses begin in Fall and end in Spring without exception. Prior to that, courses can be taken in any course/semester order as long as the EMS 100, EMS 106 and EMS 109 courses are taken as co-requisites.

Tech. Prep. Public Safety Pathway (PSP) completers from the Downriver Career Tech. Program:

In order to receive credits, you must complete (with a C or better) at least six credit hours of 100+ level course-work (at HFCC) for each year of HS PSP credit earned. Bring a student copy of your HFCC transcript along with a copy of your FINAL HS transcript to the EMS Program Manager. This is necessary to process a request for credits to be posted by the Admissions, Registration and Records Office. Do not ask your Counselor, Health Career Advisor, or Instructor to post credits. This process must be initiated by the EMS Program Manager. Do not REPEAT courses in which you have earned credit through the PSP program. If you are not sure if you earned credit, contact the EMS Program Manager before you schedule courses.

The courses in the PSP Program are as follows:

Year 1- CRJ 131 (3 credit hours), MFR (5 credit hours, no transfer equivalent)*

Year 2- CRJ 135 (3 credit hours), AH 100 (4 credit hours), and EMS (8 credit hours, no transfer equivalent)*

*Successful completion of MFR and EMS will transfer as 13 credit hours in EMS 100, EMS 106, and EMS 109.

Fitness Leadership

Associate in Applied Science - Fine Arts and Fitness Division

Program Code: FITLD.AAS.2002

Carole Sloan

313-845-6318

csloan@hfcc.net

Athletic Memorial Building 7

The Health and Physical Education curriculum includes two programs in Fitness Leadership. Interested students can enroll in the certificate of achievement program or the two-year Associate in Science degree program.

The Fitness Leadership programs have been established in response to the increasing demand for highly trained, certified exercise instructors and personal trainers in national fitness clubs, corporate fitness centers, area-wide recreation facilities, and hospitals.

Fitness Leadership serves as an excellent foundation for students entering other careers such as nursing, physical therapy, community health and business. Students may find that having two complementary areas of concentration and expertise makes them more marketable.

Both programs offer a wide variety of courses including Exercise Physiology, Nutrition, Methods of Teaching Exercise, and Aquacise.

HFCC's Fitness Leadership instructors are fitness leaders and professionals who are highly qualified to share their training and knowledge to help develop strong and dynamic exercise leaders.

Many HFCC graduates attend Eastern Michigan University or Wayne State University which have strong exercise science programs and excellent transfer agreements with HFCC. The College has articulation guides to ensure that graduates can work toward a bachelor's degree without loss of credits earned at HFCC. Students need to consult the articulation guides available in the University Transfer, Advising and Career Counseling Center. Students

wishing to transfer to other universities should consult the transfer guides on file in the University Transfer, Advising and Career Counseling Center to determine the transferability of HFCC coursework toward those degrees.

Statistics provided by the American Council on Exercise, the American College of Sports Medicine, and other professional exercise organizations have strongly shown that students who have received training from a college perform well on certification exams.

Once a student has registered as a Fitness Leadership Student, he/she should contact Carole Sloan to set up a course of study so that courses can be completed in a timely fashion suitable to the student's needs.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 63

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
HPE 127 - Aquacise AND	1				
HPE 140 - Lifetime Wellness AND	2	D/E	D/E		
HPE 150 - Physiology of Exercise AND	3	E	D		
HPE 151 - Methods of Teaching Aerobic Exercise AND	3	D	E		
HPE 152 - Tests and Measurements AND	2	D	D		
HPE 153 - Nutrition AND	2	D/E	D/E	D/E	D/E
HPE 154 - Facility and Equipment Management AND	2	D	D		
HPE 192 - Internship in Physical Education	2	D/E	D/E		

Minimum Credit Hours: 21

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
*Any course starting with HPE					
**Team sports includes Basketball, Bowling, Softball, and Volleyball					
***Dance course includes Jazz Dance, Modern Dance, and Tap Dance					

BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
BIO 233 - Anatomy and Physiology I	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
HPEA 117 - Weight Train & Phys Conditioning	2	D/E	D/E	D/E	D/E
2 credit hour HPE course*					
1 course in a team sport**					
1 dance course***					

Minimum Credit Hours: 30

Continued on next page

Recommended Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
MATH 110 - Intermediate Algebra AND	4	D/E/W/O	D/E/W/O	D/E/O	D/E
MATH 112 - Trigonometry AND	3	D/E	D/E		
MATH 115 - College Algebra AND	5	D/E/O	D/E/O	D/E	D/E
MATH 175 - Precalculus AND	5	D/E/O	D/E/O	D/E	D/E
PHYS 133 - Principles of Physics AND	4	D/E	D/E		
BIO 131 - Introductory Biology AND	4	D/E	D/E	D	D
BIO 143 - Zoology	4				
Minimum Credit Hours:	10				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	D	D		
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
HPE 140 - Lifetime Wellness OR	2	D/E	D/E		
HPE 142 - Advanced First Aid OR	3				
HPE 153 - Nutrition OR	2	D/E	D/E	D/E	D/E
HPE 155 - Relax Tech for Stress Management	2				

Minimum General Education Hours Required: 10

Fitness Leadership

Certificate of Achievement - Fine Arts and Fitness Division

Program Code: FITLD.CERT.1990

Carole Sloan

313-845-6318

csloan@hfcc.net

Athletic Memorial Building 7

The Health and Physical Education curriculum includes two programs in Fitness Leadership. Interested students can enroll in the certificate of achievement program or the two-year Associate in Science degree program.

The Fitness Leadership programs have been established in response to the increasing demand for highly trained, certified exercise instructors and personal trainers in national fitness clubs, corporate fitness centers, area-wide recreation facilities, and hospitals.

Fitness Leadership serves as an excellent foundation for students entering other careers such as nursing, physical therapy, community health and business. Students may find that having two complementary areas of concentration and expertise makes them more marketable.

Both programs offer a wide variety of courses including Exercise Physiology, Nutrition, Methods of Teaching Exercise, and Aquacise.

HFCC's Fitness Leadership instructors are fitness leaders and professionals who are highly qualified to share their training and knowledge to help develop strong and dynamic exercise leaders.

Transfer Options/Requirements

Many HFCC graduates attend Eastern Michigan University or Wayne State University which have strong exercise science programs and excellent transfer agreements with HFCC. The College has articulation to ensure that graduates can work toward a bachelor's degree without loss of credits earned at HFCC. Students need to consult the articulation guides available in the University Transfer, Advising and

Career Counseling Center. Students wishing to transfer to other universities should consult the transfer guides on file in the University Transfer, Advising and Career Counseling Center to determine the transferability of HFCC coursework toward those degrees.

Career Opportunities

Statistics provided by the American Council on Exercise, the American College of Sports Medicine, and other professional exercise organizations have strongly shown that students who have received training from a college perform well on certification exams. Those who will benefit from the Fitness Leadership programs include aerobic instructors, physical educators, personal trainers, athletes, health-care professionals, nutritionists, and exercise enthusiasts.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
HPE 142 - Advanced First Aid	3				
HPE 150 - Physiology of Exercise	3	E	D		
HPE 151 - Methods of Teaching Aerobic Exercise	3	D	E		
HPE 152 - Tests and Measurements	2	D	D		
HPE 153 - Nutrition	2	D/E	D/E	D/E	D/E
HPE 127 - Aquacise	1				
HPE 154 - Facility and Equipment Management	2	D	D		
HPE 192 - Internship in Physical Education	2	D/E	D/E		
HPE 140 - Lifetime Wellness	2	D/E	D/E		
BIO 233 - Anatomy and Physiology I	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
SPC 131 - Fundamentals of Speaking	3	D/E/W	D/E/W	D/E	D/E
Minimum Credit Hours:	32				

General Business - No Concentration

Associate in Business - Business and Economics Division

Program Code: GBNOC.AB.1985

Elaine Saneske	313-845-9645	esaneske@hfcc.edu	Reuther Liberal Arts Building 328
Mr. Jared Boyd	313-945-9697	jboyd@hfcc.edu	Reuther Liberal Arts Building 319B

The Associate in Business Degree without a concentration is the most basic and flexible degree offered by the Business Division. It requires 60 or 62 credit hours, with a minimum of 20 in the business area. Additionally, a student's program must include math, speech and HFCC general education requirements. Students should meet with counselors in the Counseling Office or Business Division faculty to discuss the courses that are most appropriate for their particular circumstance.

The degree is designed to enable students to customize their academic program to meet their specific goals. It is often utilized by students who are interested in transferring to a four-year college and are looking for flexibility in the courses they take. Students can combine this degree with certificate programs in the Business Division or with a degree in another area to improve their employability. The Division offers the following certificates:

- Computer Software Applications
- Customer Service Professional
- Industrial Distribution, Level I
- Office Administration
- Small Business Management and Entrepreneurship
- Supervision

Courses

Students are required to take any 20 credit hours of Business Division courses to complete this program. These are courses with the following prefixes: BAC, BBA, BCA, BCO, BEC, BFN, BLW, BMA, LGA, or MGT. A student's program must include BMA 110 (Business Mathematics) or a class from the Mathematics Division numbered MATH 115 or higher. Also, to meet the computer literacy requirement a student should take BCA 140 (Software Applications).

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
BMA 110 - Business Mathematics 110 OR MATH 115 - College Algebra or a higher level MATH course	3	D/E	D/E	D/E	
	5	D/E/O	D/E/O	D/E	D/E

Minimum Credit Hours:

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	D	D		
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E	D/E	
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

To meet the computer literacy requirement, students are strongly encouraged to take BCA 140.

Graphic Design

Associate in Arts - Fine Arts and Fitness Division

Program Code: GPHDS.AA.2004

Kirk McLendon

313-845-6487

mclendon@hfcc.edu

MacKenzie Fine Arts Center

The College offers five certificate programs within the Graphic Design area: Animation, Illustration, Multimedia Design, Print Design, and Web Design, as well as an Associate of Arts Degree in Graphic Design.

Students who complete the course requirements for one of the Certificate Programs and the Required Support Courses listed below and meet other College requirements listed below are eligible for an Associate of Arts Degree in Graphic Design.

Students may take classes during fall, winter, spring, and summer semesters. Students should refer to the Schedule Planner at www.hfcc.edu/graphicdesign which shows the frequency and time of day Graphic Design classes are offered during the year. Students are also encouraged to meet a Graphic Design advisor to plan their schedule. Students may call **313-845-6487** or email **graphicdesign@hfcc.edu** to schedule an advising appointment.

Courses

*Students who have completed ART 106, 166, 266, or 267 should refer to the substitution chart below to see how these discontinued classes fit into the new programs.

*ART 106 may be substituted for ART 107.

*ART 166 may be substituted for ART 109 or 110.

*ART 266 may be substituted for ART 275.

*ART 267 may be substituted for ART 275.

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Completed Certificate Program

Complete a certificate in Animation, Illustration, Multimedia Design, Print Design, or Web Design to fulfill at least the first 36 hours of the Associate in Arts degree.

Minimum Credit Hours: 36

Required Support Courses

Additional General College Requirements:

5 credit hours of Social Science 100+ courses (areas include: Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, Social Science and Sociology)

8 credit hours of Science and/or Math 100+ courses (areas include Life Sciences, Physical Sciences and Mathematics)

Minimum Credit Hours: 13

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ART 275 - Advanced Projects	3	D/E/W	D/E/W	D/E/W	D/E/W

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
COUN 114 - Stress Management- A Personal Approach OR	2	D			
HPEA 117 - Weight Train & Phys Conditioning OR	2	D/E	D/E	D/E	D/E
HPEA 217 - Weight Training and Physical Conditioning II OR	2	D/E	D/E	D/E	D/E
HPEA 126 - Aerobic Dance OR	2	D	D	D	D
HPE 140 - Lifetime Wellness OR	2	D/E	D/E		
HPE 142 - Advanced First Aid OR	3				
HPE 153 - Nutrition OR	2	D/E	D/E	D/E	D/E
HPE 155 - Relax Tech for Stress Management	2				

Minimum General Education Hours Required: 11

Heating & Cooling

Certificate of Achievement - Trade & Apprentice Division

Program Code: HCOOL.CMLT.2003

Gregory Laskowsky	313-317-1550	glaskowsky@hfcc.edu	Technology Building 164D
Robert Morrish	313-845-6436	rmorrish@hfcc.edu	Technology Building 115A

This 18 credit hour Heating and Cooling program is a job entry preparation certificate in Heating and Cooling for residential service. The courses provide theory and hands-on exposure to the basics of electricity, air conditioning, heating, and refrigeration technology. Sheet metal fabrication and heating and cooling installation, troubleshooting and design are included. A student successfully completing this certificate should be ready to sit for air conditioning (ARI or ACCA) and EPA Refrigerant Recovery exams to be certified as an entry-level residential service technician.

Career Opportunities

Upon successful completion of the Associate in Applied Science Degree in Energy Technology, the student is qualified for an entry-level position as an:

- energy conservation technician
- HVAC service and installation technician
- facilities manager or facilities maintenance technician
- plant/building energy manager
- residential/commercial energy auditor
- field service engineer

- HVAC design/estimating or sales engineer
- field application engineer
- licensed power engineer or building engineer
- or representative for power equipment or instrument and control equipment found in buildings of all sizes.

Courses

All courses in the certificate program may be applied to an Associate of Applied Science degree in Energy Technology.

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ENT 105 - Introduction to RACH (PO)	2	D/E	D/E	D/E	
ENT 107 - Applied Instrumentation - Electrical (PO)	2	D/E			
ENT 106 - Sheet Metal Fabrication for Systems	2	D/E	D/E	D/E	
ENT 104 - Heating Technology (PO)	4	D/E	D/E	D/E	
ENT 113 - Refrigeration Technology	4	E	E		E
ENT 119 - Air Conditioning Technology	3	E	E		

Minimum Credit Hours: 18

Heating and Cooling

Certificate of Achievement - Trade & Apprentice Division

Program Code: HCOOL.CERT.1990

Gregory Laskowsky
Robert Morrish

313-317-1550
313-845-6436

glaskowsky@hfcc.edu
rmorrish@hfcc.edu

Technology Building 164D
Technology Building 115A

This 34 credit hour certificate program is intended for the student who would like to take the next step into the advanced residential and light commercial heating and cooling industry. Entry-level theory and hands-on experiences are provided as well as advanced courses in commercial heating and refrigeration, light commercial controls, heating and cooling mechanical codes, installation, energy management and energy system design. Students successfully completing this certificate may take ARI or ACCA air conditioning exams

and the EPA Refrigerant Recovery exam and will be prepared to sit for the State of Michigan Mechanical Contractors Test.

Career Opportunities

Upon successful completion of the Associate in Applied Science Degree in Energy Technology, the student is qualified for an entry-level position as an:

- energy conservation technician
- HVAC service and installation technician

- facilities manager or facilities maintenance technician
- plant/building energy manager
- residential/commercial energy auditor
- field service engineer
- HVAC design/estimating or sales engineer
- field application engineer
- licensed power engineer or building engineer
- or representative for power equipment or instrument and control equipment found in buildings of all sizes.

Courses

All courses in this certificate program apply towards an Associate of Applied Science degree in Energy Technology.

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ENT 100 - Basic Workplace Skills (PO)	1	D/E	D/E		
ENT 101 - Introduction to Energy Technology	2	D/E	D/E	D/E	
ENT 105 - Introduction to RACH (PO)	2	D/E	D/E	D/E	
ENT 107 - Applied Instrumentation - Electrical (PO)	2	D/E			
ENT 108 - Introduction to Heating and Cooling Codes	2				
ENT 106 - Sheet Metal Fabrication for Systems	2	D/E	D/E	D/E	
ENT 109 - HVAV Installation and Start-Up	2	D	D	D	
Minimum Credit Hours:	13				

Residential Service Technician Courses	Credit Hours	Fall	Winter	Spring	Summer
ENT 104 - Heating Technology (PO)	4	D/E	D/E	D/E	
ENT 113 - Refrigeration Technology	4	E	E		E
ENT 119 - Air Conditioning Technology	3	E	E		
Minimum Credit Hours:	12				

Advanced Commercial/Industrial/Design Courses	Credit Hours	Fall	Winter	Spring	Summer
Select 9 credits from the Advanced Commercial/Industrial/Design courses.					
ENT 212 - Light Commercial Heating Systems (PO)	3	E	E		
ENT 216 - Light Commercial Refrigeration Systems	3				
ENT 219 - RACH Light Commercial Systems	3				
ENT 230 - Michigan Mechanical Contractor Licensing Examination Preparation	4	W			
ENT 260 - Energy Systems Management (PO)	4		D/E		
ENT 265 - Energy Systems Design	5	D/E	D/E		
Minimum Credit Hours:	9				

Highpress Boiler-Steam & Refrigeration Lic Review

Certificate of Achievement - Trade & Apprentices Division

Program Code: ENTPHPBOIL.CSGL.2003

Gregory Laskowsky	313-317-1550	glaskowsky@hfcc.edu	Technology Building 164D
Robert Morrish	313-845-6436	rmorrish@hfcc.edu	Technology Building 115A

Students completing this 16 credit hour certificate program receive a diploma which may be presented to local license examiners toward meeting minimum experience requirements needed to sit for the exam for a High Pressure Boiler Operators License, a Low Pressure Boiler Operators License, 4th Class N.I.U.L.P.E. License or a Refrigeration Operators License.

Career Opportunities

Upon successful completion of the Associate in Applied Science Degree in Energy Technology, the student is

qualified for an entry-level position as an:

- energy conservation technician
- HVAC service and installation technician
- facilities manager or facilities maintenance technician
- plant/building energy manager
- residential/commercial energy auditor
- field service engineer
- HVAC design/estimating or sales engineer
- field application engineer

- licensed power engineer or building engineer
- or representative for power equipment or instrument and control equipment found in buildings of all sizes.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ENT 105 - Introduction to RACH (PO)	2	D/E	D/E	D/E	
ENT 107 - Applied Instrumentation - Electrical (PO)	2	D/E			
ENT 141 - Power Engineering I- Energy Conversion Fundamental (PO)	2				
ENT 145 - Power Engineering II - Boilers and Auxiliaries (PO)	4				
ENT 256 - Power Engineering III - Steam Plant Operation Lab (PO)	4	E	E		
ENT 259 - Power Engineering IV- Plant/Building Operations & Maintenance (PO)	2	E	E		
Minimum Credit Hours:	16				

Hospitality Culinary

Associate in Applied Science - Technology Division

Program Code: CULIN.AAS.2002

Dennis Konarski	313-845-6390	dennis@hfcc.edu	Student and Culinary Arts Center 163E
Jeff Click	313-845-9651	jclick@hfcc.edu	Student and Culinary Arts Center 163D

The employment growth in the hospitality industry drastically outpaces the work force, thus opening up a wide range of career opportunities in a diversified job market. The Food Service Industry is one of the oldest industries in the world. One of the complex divisions in today's industry is the food and beverage department. In order to be successful in this area, it is necessary for employees to have knowledge of menu planning, purchasing, and creating memorable dining experiences. Students will acquire the specialized skills needed in many aspects of kitchen operations. Laboratory classes provide students with hands-on experience serving and preparing quantities of food in the new facilities of the Student and Culinary Arts building.

Henry Ford Community College and Eastern Michigan and Madonna University have developed an articulation agreement designed to facilitate the educational mobility of students. Students following a specifically designed transfer agreement are able to complete three years at Henry Ford Community College and

one full year at Madonna University with a Bachelor's of Science degree in Hospitality Management.

In working towards the degree, students can earn a Certificate of Achievement in various Hospitality Studies areas. Students enrolled in the Culinary Arts program are eligible to apply for various scholarships.

Career Opportunities

- Hotels, Motels and Motor Inns
- Commercial Food Establishments
- Clubs
- College Food Services / Institutional Operations
- Airlines
- Recreational Centers
- Resort and Tourist Operation

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC.

See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Ferris State University
- Madonna University

Accreditation

Accrediting Commission of the American Culinary Federation Educational Foundation of the National Restaurant Association

Continued on next page

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 66

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
* Must be taken concurrently. *HOSP 280 AND HOSP 285 can be used for HOSP 121 and HOSP 123 for evening students.					
+ Students may take HOSP-190 for 2 semesters instead of HOSP-290					
HOSP 105 - Applied Foodservice Sanitation	2				
HOSP 110 - Introduction to Hospitality Industry	3	D/E	D	E	
HOSP 121 - Introduction to Quality Food Preparation - Lecture *	2	D	D		
HOSP 123 - Introduction to Professional Cooking - Lab *	6	D	D		
HOSP 130 - Food and Nutrition	3	D	E		
HOSP 140 - Advanced Food Preparation	8	D/E	D/E		
HOSP 150 - Dining Room Operation (Fifty-One O One)	3	D/E	D/E		
HOSP 160 - Food and Beverage Purchasing	3	E	D		
HOSP 170 - Food and Beverage Controls	3	E	D		
HOSP 210 - Hotel and Restaurant Supervision	3	D	D/E		
HOSP 230 - Pastry and Foods I	6	D	W		
HOSP 240 - Pastry and Foods II	6	W	D		
HOSP 290 - Hospitality Studies Co-op +	2	D/E/W	D/E/W	D/E/W	D/E/W
Minimum Credit Hours:	50				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
* See prerequisite for BMA 110 Business Mathematics					
BMA 110 - Business Mathematics* OR	3	D/E	D/E	D/E	
MATH 110 - Intermediate Algebra OR or higher math course	4	D/E/W/O	D/E/W/O	D/E/O	D/E
Minimum Credit Hours:	3				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
If a 4-credit math support course is taken, then only 3 credits is required in electives.					
HOSP 101 - Wines of the World	1	E			
HOSP 103 - Major Wine Grape Varieties	1	E			
HOSP 108 - Creative Cookery	3				
HOSP 115 - International Cooking	4			D	
HOSP 221 - Front Office Procedures	3				
HOSP 245 - Hotel and Restaurant Desserts	3	E			
HOSP 280 - Culinary Art, Food I	3	E	E		
HOSP 285 - Culinary Art, Food II	3	E	E		
Minimum Credit Hours:	4				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Recommended Course Sequence

Term 1	HOSP 105	HOSP 121	HOSP 123
Term 2	HOSP 140		
Term 3	HOSP 230		
Term 4	HOSP 240		
Term 5	HOSP 115	HOSP 221	

Students should not limit themselves to the above courses per term. New students need to be advised by Program Director or the University Transfer, Advising and Career Counseling Center.

Hospitality ProManagement

Certificate of Achievement - Technology Division

Program Code: HRMGT.CMLT.2002

Dennis Konarski	313-845-6390	dennis@hfcc.edu	Student and Culinary Arts Center 163E
Jeff Click	313-845-9651	jclick@hfcc.edu	Student and Culinary Arts Center 163D

Hospitality Pro(Professional)
Management Certificate

control, purchasing, marketing, and
training at the front office level.

Modern-day management practices
have become not only beneficial,
but necessary in today's increasingly
complex hospitality/travel industry.
Key components of the Professional
Management Certificate include cost

Career Opportunities

- Mid Management Careers

Accreditation

Educational Foundation of the National
Restaurant Association

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses

Credit Hours

Fall

Winter

Spring

Summer

All the above courses may be used for an associate in applied science in Hospitality Studies.

HOSP 105 - Applied Foodservice Sanitation	2				
HOSP 110 - Introduction to Hospitality Industry	3	D/E	D	E	
HOSP 130 - Food and Nutrition	3	D	E		
HOSP 150 - Dining Room Operation (Fifty-One O One)	3	D/E	D/E		
HOSP 160 - Food and Beverage Purchasing	3	E	D		
HOSP 170 - Food and Beverage Controls	3	E	D		
HOSP 210 - Hotel and Restaurant Supervision	3	D	D/E		
HOSP 221 - Front Office Procedures	3			D/E	
HOSP 250 - Hospitality and Travel Marketing	3	E	D		

Minimum Credit Hours: 26

Hospitality Service Career

Certificate of Achievement - Technology Division

Program Code: HRSER.CSGL.2002

Dennis Konarski
Jeff Click

313-845-6390
313-845-9651

dennis@hfcc.edu
jclick@hfcc.edu

Student and Culinary Arts Center 163E
Student and Culinary Arts Center 163D

Hospitality Service Career Certificate

The Service Career field is endless with opportunities and challenging with so many types of dining operations positions available. Remarkable service from servers, managers and restaurant owners is a must for winning and keeping customers.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
These courses may be used for the Culinary Arts or Hotel Restaurant Management Associate in Applied Science.					
HOSP 101 - Wines of the World	1	E			
HOSP 105 - Applied Foodservice Sanitation	2				
HOSP 110 - Introduction to Hospitality Industry	3	D/E	D	E	
HOSP 150 - Dining Room Operation (Fifty-One O One)	3	D/E	D/E		
Minimum Credit Hours:	9				

Hotel Restaurant & Institution Management

Associate in Applied Science - Technology Division

Program Code: HRMGT.AAS.2002

Dennis Konarski	313-845-6390	dennis@hfcc.edu	Student and Culinary Arts Center 163E
Jeff Click	313-845-9651	jclick@hfcc.edu	Student and Culinary Arts Center 163D

The Lodging Industry has advanced considerably from the simple “home away from home” philosophy. Over the years, technology has transformed the complex divisions in the hotel industry into an international enterprise of tourism. Computers, economics, personnel management and interpersonal communication are all skills which are required for success in the hotel and restaurant fields.

This degree program can also be used as a transfer vehicle to a four-year baccalaureate program, but transferability of specific courses should be checked with the HFCC University Transfer, Advising and Career Counseling Office. Henry Ford Community College and Madonna University and Eastern Michigan University have developed an articulation agreement designed to facilitate the educational mobility of students.

Students following a specific designed transfer agreement are able to complete 3 years at Henry Ford Community College and 1 year at the above Universities with a Bachelor’s of Science degree in Hospitality Management.

In working towards the degree, students can earn various Certificate of Achievements in Hospitality Studies. Students enrolled in the Hotel/Restaurant Management program are eligible to apply for various scholarships.

Accreditation

The Hotel/Restaurant Management program is fully accredited by the Educational Foundation of the National Restaurant Association.

Career Opportunities

- Global Foodservice and Lodging Industry
- Hotel Operations
- Hospitality Marketing / Sales
- Event Planning
- Hospitality computer specialist
- Mid Management positions

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor’s degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Ferris State University

- Madonna University
- Educational Foundation of the National Restaurant Association

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 68

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
*Must be taken concurrently.					
HOSP 280 AND HOSP 285 can be used for HOSP 121 and HOSP 123 for evening students.					
+ Students may take HOSP 190 (minimum of 150 working hours) for (2 semesters); instead of HOSP 290 - (minimum of 300 hours)					
HOSP 105 - Applied Foodservice Sanitation	2				
HOSP 110 - Introduction to Hospitality Industry	3	D/E	D	E	
HOSP 121 - Introduction to Quality Food Preparation - Lecture *	2	D	D		
HOSP 123 - Introduction to Professional Cooking - Lab *	6	D	D		
HOSP 130 - Food and Nutrition	3	D	E		
HOSP 140 - Advanced Food Preparation	8	D/E	D/E		
HOSP 150 - Dining Room Operation (Fifty-One O One)	3	D/E	D/E		
HOSP 160 - Food and Beverage Purchasing	3	E	D		
HOSP 170 - Food and Beverage Controls	3	E	D		
HOSP 210 - Hotel and Restaurant Supervision	3	D	D/E		
HOSP 221 - Front Office Procedures	3			D/E	
HOSP 250 - Hospitality and Travel Marketing	3	E	D		
HOSP 290 - Hospitality Studies Co-op +	2	D/E/W	D/E/W	D/E/W	D/E/W
Minimum Credit Hours:	44				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
*See prerequisite for BMA 110 Business Mathematics					
BAC 110 - Practical Accounting OR	4	D/E	D/E	D/E	D/E
BAC 131 - Principles of Accounting	4	D/E	D/E	D/E	D/E
BMA 110 - Business Mathematics * OR	3	D/E	D/E	D/E	
MATH 110 - Intermediate Algebra OR a higher-level math course	4	D/E/W/O	D/E/W/O	D/E/O	D/E
Minimum Credit Hours:	7				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
* Highly recommended					
HOSP 101 - Wines of the World	1	E			
HOSP 103 - Major Wine Grape Varieties	1	E			
HOSP 115 - International Cooking	4			D	
BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
BCA 140 - Software Applications *	3	D/E/W/O	D/E/W/O	D/E	D/E
BEC 133 - Basic Economics	3	D/E	D/E		
BEC 151 - Principles of Macro Economics	3	D/E/W/O	D/E/W/O	D/E/O	D/E
BEC 152 - Principles of Micro Economics	3	D/E/W/O	D/E/W/O	D/E/O	D/E
PSY 131 - Introductory Psychology	3				
SPC 131 - Fundamentals of Speaking	3	D/E/W	D/E/W	D/E	D/E
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E
MGT 232 - Human Resources Management	3	D/E	D/E		
Minimum Credit Hours:	7				

Continued on next page

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Recommended Course Sequence

Term 1	HOSP 105	HOSP 110	HOSP 121	HOSP 123
Term 2	HOSP 130	HOSP 140	HOSP 150	
Term 3	HOSP 210	HOSP 221		

Illustration

Certificate of Achievement - Fine Arts and Fitness Division

Program Code: ILLUS.CMULT.2003

Kirk McLendon

313-845-6487

mclendon@hfcc.edu

MacKenzie Fine Arts Center 149

Illustration is one of the five new Certificate Programs offered at HFCC. Earn an Illustration Certificate by completing the 36-38 credit hours of core courses. Students may complete an additional 22-24 credit hours of General education courses to earn an Associate of Arts Degree. Classes are offered throughout the year during the day, evening and weekend.

As long as there have been newspapers, books, and magazines, there has been a need for hand-drawn art that tells a story or communicates an idea. Illustrators need to have excellent drawing skills, know the history of their craft, and be proficient with programs such as Photoshop and Illustrator.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
An additional 22-24 credit hours of General Education courses may be taken with any of the five Graphic Design certificates to obtain an Associate of Arts Degree.					
ART 101 - Two-Dimensional Design	3	D/E	D/E	D	D
ART 102 - Drawing I	3	D/E	D/E	D	D
ART 107 - Photoshop/ImageReady	3				
ART 112 - Drawing II	3	D/E	D/E	D	
ART 121 - Art History Survey I	3	D/E/W	D/E/W	D/E	D/E
ART 165 - Graphic Design I	3	E	E		
ART 113 - Life Drawing I	3	D/E	D/E		
ART 130 - History of Graphic Design	3	D	D	O	
ART 265 - Illustration	3				
ART 115 - Intermediate Perspective	3	E	D	D	
ART 116 - Painting I	3		D		
ART 255 - Animation Basics	3		D		
Minimum Credit Hours:	36				

Industrial Distribution: Level 1**Certificate of Achievement - Business and Economics Division**

Program Code: BADMCUSTSV.CMLT.2003

Elaine Saneske

313-845-9645

esaneske@hfcc.edu

Reuther Liberal Arts Building 328

Mr. Robert Morrish

313-845-6436

rmorrish@hfcc.edu

Reuther Liberal Arts Building 115A

This certificate program was developed in consultation with the Power Train Distributors Association. The Level 1 certificate is designed to provide students with the skills necessary to serve in a customer service capacity in the industrial distribution industry. A student completing the program would also be qualified for customer service positions working for a wholesaler

or distributor in another field. The certificate is intended to enable students to apply for an entry-level position. The program emphasizes the development of the communication and customer service skills required to succeed in a business distribution system. The Certificate requires a total of 22 credit hours.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
BBA 110 - Business Language Skills	3	D/E	D/E		
BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
BBA 133 - Business Behavior and Communication	3	D/E	D/E	E	
BBA 155 - Customer Service & Salesmanship	3	D/E	D/E		
BBA 157 - Call Center/Help Desk Practicum	1	D	D		
BBA 231 - Business Office Communications	3	D/E	D/E		
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
TAMA 110 - Industrial Applications of Basic Math Principles	2	D/E	D/E		D
Minimum Credit Hours:	22				

Course Sequence

Term 1	BBA 110	BBA 131	BBA 155	BCA 140
Term 2	BBA 133	BBA 157	BBA 231	TAMA 110

Industrial Distribution: Level 2

Certificate of Achievement - Trade & Apprentice Division

Program Code: TAEDINDST.CMLT.2003

Miles Jarvis	313-317-6502	mjarvis@hfcc.edu	Technology Building 164B
Robert Morrish	313-845-6436	rmorrish@hfcc.edu	Technology Building 115A

Students can take their industrial distribution career to the next level as a technical representative. Combining product specification and application with customer service, this is a rewarding and challenging career for those with both technical aptitude and an interest in sales.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses **Credit Hours** **Fall** **Winter** **Spring** **Summer**

BBA 262, TADV 090 or TAGD 110, TAFD 120, TAMA 120, TAFD 150, and TAMN 100 are required courses. Four additional credits are to be selected from TAEI 102, TAMT 110, TAIM 100, TAFP 150, and TAMT 200.

BBA 262 - Physical Distribution and Logistics	3				
TADV 90 - Print Reading Fundamentals OR	2	D/E	D/E		D/E
TAGD 110 - Basic Shape and Size Interpretation	3	D/E	D/E		D/E
TAFD 120 - Industrial Safety Awareness	2	D/E	D/E		D/E
TAMA 120 - Industrial Applications of Algebraic Principles	3	D/E	D/E		D/E
TAFD 150 - Applied Technology	3	D/E	D/E		D/E
TAMN 100 - Shop Tools and Techniques	3	D/E	D/E		D/E
TAEI 102 - DC and AC Electricity OR	3	D/E	D/E		D/E
TAMT 110 - Mechanical Power Transmission OR	2	D/E	D/E	D/E	D/E
TAIM 100 - Industrial Materials OR	3	D/E	D/E		E
TAFP 150 - Fluid Power Systems OR	4	D/E	D/E		D/E
TAMT 200 - Predictive Maintenance- Shaft Alignment	2	E	E		E

Minimum Credit Hours: 20

Industrial Drafting & CAD Technology

Associate in Applied Science - Technology Division
Program Code: DFCAD.AAS.2002

Gerald Klein	313-845-6424	gklein@hfcc.edu	Technology Building 162M
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

Our drafting program is designed and equipped to offer you experience in the latest CAD programs and their applications. Manual drafting is taught in the intro class to give you a solid background in the basics of drafting standards and projection. Those basic skills are then applied in CAD design, detailing, and problem solving in the advanced courses. The curriculum gives you experience in a wide variety of drafting specialties including: layout and detailing in product design, machine element drafting, fixture design, and die design. Courses in advanced CAD techniques will help you achieve a high degree of proficiency in the use of the latest design software.

Career Opportunities

“Opportunities should be best for individuals with at least 2 years of postsecondary training in drafting and

considerable skill and experience using computer-aided design and drafting (CADD) systems. The middle 50 percent (of mechanical drafters) earned between \$32,100 and \$51,950”. (Bureau of Labor Statistics)

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor’s degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions.

It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend. Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (**313-845-9612, counseling@hfcc.edu**, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Central Michigan University
- Davenport University
- Eastern Michigan University
- Ferris State University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn
- Wayne State University

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
DRAF 110 - Introduction to Industrial Drafting	3	D/E	D/E	D/E	
DRAF 120 - Introduction to CAD	4	D/E	D/E	D/E	
DRAF 130 - Technical Descriptive Geometry	3	D	D		
DRAF 142 - Industrial Detailing	4	D	D		
DRAF 210 - Die Design	3	D			
DRAF 220 - Machine Element Drafting	2	D			
DRAF 230 - Jigs, Fixtures, Tools	3		D		
DRAF 240 - Product Drawing	2		D		
DRAF 255 - CAD Advanced Techniques	4	D	E		
DRAF 260 - Advanced CAD Applications Solid Modeling	4	E	D		
MPS 100 - Manufacturing Processes I 100	6	D/E	D/E	E	

Minimum Credit Hours: 38

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
MATH 100 - Basic Technical Mathematics AND	4	D/E	D/E	D	
MATH 103 - Technical Mathematics OR	4	D/E	D/E		
MATH 110 - Intermediate Algebra AND	4	D/E/W/O	D/E/W/O	D/E/O	D/E
MATH 112 - Trigonometry OR	3	D/E	D/E		
MATH 175 - Precalculus OR	5	D/E/O	D/E/O	D/E	D/E
MATH 180 - Calculus I	5	D/E	D/E	D/E	E
PHYS 120 - Technical Physics OR	4	E	E	E	
PHYS 131 - Liberal Arts Physics	4	D/E/W/O	D/E/W/O	D/O	
Minimum Credit Hours:	9				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
DRAF 123 - Introduction to CATIA V5	2	E/W	E/W	E	E
DRAF 125 - CATIA V5 Level II	2	E/W	E/W	E	E
DRAF 127 - CATIA V5 Level III	2	E/W	E/W	E	E
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E
ELEC 103 - Basic Electricity	4	D/E	D/E		
ELEC 120 - Basic Hydraulics	3				
ICO 191 - Industrial Co-op	2				
Minimum Credit Hours:	1				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Continued on next page

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	D	D		
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Recommended Course Sequence

Term 1	DRAF 110	DRAF 120
Term 2	DRAF 130	DRAF 142

Interior Design

Associate in Arts - Fine Arts and Fitness Division

Program Code: INDSG.AA.1985

Pamela Banduric

313-845-9814

pbanduri@hfcc.net

MacKenzie Fine Arts Center 148

Interior Design courses provide a solid basic foundation of study, emphasizing the development of theoretical and technical skills within a human environment and behavior context. Art foundation and specialized courses in Interior Design are integrated throughout the course of study.

This area of study is designed to build upon sequential courses with specialized course work in anthropometrics and ergonomics, environment and behavior, architectural and furniture history, textiles, interior construction and

materials, environmental systems, graphic communications and rendering and six interior design studio classes. Computer applications are used across the core courses to help students to develop a broad range of computer skills as they can be applied to Interior Design.

Students who take the appropriate courses are equipped to seek entry level positions in the field of Interior Design and the related disciplines or to transfer to a four year program. The first 42 credit hours listed meet minimum curriculum guidelines for NCIDQ

exam qualification. The Interior Design specific sequence, which starts with ART 180 and ART 181, begins once a year with the Fall semester. Prospective Interior Design majors should meet with Pamela Banduric to discuss their course of study. This is essential as courses are offered in sequence. Call Pamela Banduric, Interior Design Program Director at 313-845-9814 or e-mail pbanduri@hfcc.edu to schedule an appointment or for further information.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 64

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ART 101 - Two-Dimensional Design	3	D/E	D/E	D	D
ART 102 - Drawing I	3	D/E	D/E	D	D
ART 105 - Three-Dimensional Design	3	D/E	D/E		
ART 180 - Design and User Needs	3	D/E			
ART 181 - Interior Design - Studio I	3	D/E			
ART 182 - Interior Design Materials and Construction Components	3		D/E		
ART 183 - Interior Design Studio II	3		D/E		
ART 184 - Textiles for Interiors	3			D/E	
ART 280 - History of Styles: Architecture, Interiors, and Furnishings	3	D/E			
ART 281 - Interior Design Studio III	3				
ART 282 - Interior Design Environmental Systems	3		D/E		
ART 283 - Lighting for Interior Design - Studio IV	3		D/E		
ART 285 - Professional Practice for Interior Design - Studio V	3			D	
ART 287 - Interior Design Synthesis - Studio VI	3	D/E			
Minimum Credit Hours:	42				

Continued on next page

Required Support Courses **Credit Hours** **Fall** **Winter** **Spring** **Summer**

*Math/Science includes: Astronomy, Biology, Chemistry, Geology, Physical Science, Physics, Mathematics, Science, Atmospheric Studies.

**Social Science courses includes: Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, Social Science, Sociology.

***Any course starting with HPE or HPEA

8 credit hours of Science and/or Math (100+ over)* AND
 8 credit hours of Social Science** AND
 2 credit hours of HPE***

Minimum Credit Hours: **22**

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	D	D		
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
COUN 114 - Stress Management - A Personal Approach OR	2	D			
HPEA 117 - Weight Train & Phys Conditioning OR	2	D/E	D/E	D/E	
HPEA 217 - Weight Training and Physical Conditioning II OR	2	D/E	D/E	D/E	D/E
HPEA 126 - Aerobic Dance OR	2	D	D	D	D
HPE 140 - Lifetime Wellness OR	2	D/E	D/E		
HPE 142 - Advanced First Aid OR	3				
HPE 153 - Nutrition OR	2	D/E	D/E	D/E	D/E
HPE 155 - Relax Tech for Stress Management	2				

Minimum General Education Hours Required: 11

Required Course Sequence

Fall I	ART 180	ART 181	ART 101
Winter I	ART 182	ART 183	ART 102
Spring I	ART 184	ART 105	
Fall II	ART 280	ART 281	
Winter II	ART 282	ART 283	
Sp/Summer II	ART 285		
Fall III	ART 287		

Legal Assistant

Associate in Business - Business and Economics Division

Program Code: LEGAT.AB.2003

Mr. Kevin Adams	313-845-9693	kadams@hfcc.edu	Reuther Liberal Arts Building 332
Elaine Saneske	313-845-9645	esaneske@hfcc.edu	Reuther Liberal Arts Building 340

The Legal Assistant program is designed to prepare students for a career in the legal profession. Legal Assistants perform important legal support work such as legal research, legal document preparation, client and witness interviewing, interfacing with courts and administrative agencies and the application of technical information. Legal Assistants must work under the supervision of an attorney. Upon completion of the program, graduates may choose to enter the workforce as Legal Assistants or may choose to continue their education by transferring to a four-year baccalaureate degree institution. Students wishing to transfer should meet with a counselor in the University Transfer Advising and Counseling Office or Business Division faculty to

discuss the requirements of the specific institution to which they are interested in transferring. The degree requires a minimum 60 credit hours.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who

intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend. Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn
- Walsh College

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
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BLW 253 and LGA 120 are prerequisites for LGA 121. LGA 121 is the prerequisite for LGA 122. LGA courses above LGA 122 may be taken concurrently with LGA 121.

BLW 253 - Business Law and the Legal Environment	4	D/E	D/E	E	
LGA 120 - Introduction to the Law and Paralegalism	2	E	E		
LGA 121 - Legal Writing and Research I	2	E	E		
LGA 122 - Legal Writing and Research II	3	E	E		
LGA 130 - Trial Practice and Appeals Civil and Criminal	3		E		
LGA 135 - Family Law	3		E		
LGA 136 - Probate Administration (Administration of Decedents Estates)	3	E			
LGA 137 - Property Law	2	E			
LGA 138 - Corporate and Tax Law	3		E		
LGA 139 - Commercial Law and Collection	2	E			
LGA 141 - Personal Injury and Torts	3	E			
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E

Minimum Credit Hours:

Suggested Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
LGA 133 - Wills, Trusts	2				
LGA 292 - Legal Assistant Internship	2	D/E/W	D/E/W	D/E/W	D/E/W
LGA 293 - Legal Assistant Internship	3	D/E/W	D/E/W	D/E/W	D/E/W
LGA 294 - Legal Assistant Internship	4	D/E/W	D/E/W	D/E/W	D/E/W
CRJ 251 - Criminal Law	4	D/E	D/E		

Minimum Credit Hours:

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II	3				

Minimum General Education Hours Required: 9

Speech 131 Fundamentals of Speaking must be taken as a General Education course.

Six additional credit hours must be selected from the courses listed below:

Social and Behavioral Sciences: BEC 133; POLS 132, 135, 152, 153, 154, 155; PSY 131, 161, 253; ANTH 131, 151, 152; SOC 132, 151, 152, 251; HIST 111, 112, 113, 130, 151, 152, 155, 157.

English: ENG 231, 233, 234, 235.

Foreign Language: ARA 131, 132; FRE 131, 132; GER 131, 132; SPN 131, 132.

Humanities: HUM 101.

Mathematics: MATH 112, 115, 140.

Sciences: BIO 130, 131, 139.

Fine Arts: ART 121, 122; MUS 130, 132, 133; STH 131, 238.

Criminal Justice: CRJ 131.

Recommended Course Sequence

Fall I	BLW 253	LGA 120	ENG 131
Winter I	LGA 121	ENG 132	
Spring I	LGA 122		

Paralegals are not lawyers and are not permitted to provide legal services directly to the public except as permitted by law.

Management

Associate in Business - Business and Economics Division

Program Code: MNGMT.AB.1985

 Ms. Corinne Asher
 Elaine Saneske

 313-845-9867
 313-845-9645

 cashier@hfcc.edu
 esaneske@hfcc.edu

 Reuther Liberal Arts Building 319B
 Reuther Liberal Arts Building 328

This degree program is designed to improve and develop management skills. Students who are currently employed and are seeking to improve their management and supervisory skills to increase their opportunity for promotion often utilize it. Skills attained in the management program are useful in many different arenas. An understanding of fundamental management principles is essential to the operation of many different types of organizations, such as health

care, fitness clubs, food services and automotive repair to name a few. Combining a management degree with courses in other areas is a sensible way to increase an individual's employability after graduation. In working towards this degree, students earn a Certificate in Supervision. Students can also combine this degree with other certificate programs in the Business Division to improve their employability.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
MGT 230 - Principles of Management	3	D/E	D/E	D/E	D/E
MGT 231 - Supervision and Teambuilding	3	D/E	D/E		
MGT 240 - Creative Problem Solving	3	D/E	D/E		
BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
BBA 133 - Business Behavior and Communication	3	D/E	D/E	E	
BBA 110 - Business Language Skills	3	D/E	D/E		
BBA 231 - Business Office Communications	3	D/E	D/E		
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
BMA 110 - Business Mathematics	3	D/E	D/E	D/E	
BAC 110 - Practical Accounting OR	4	D/E	D/E	D/E	D/E
BAC 131 - Principles of Accounting	4	D/E	D/E	D/E	D/E
Minimum Credit Hours:	32				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
SPC 131 - Fundamentals of Speaking	3	D/E/W	D/E/W	D/E	D/E
Minimum Credit Hours:					

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
Select a minimum of 6 credit hours from this group					
MGT 232 - Human Resources Management OR	3	D/E	D/E		
MGT 237 - Psychology in the Workplace OR	3	D/E			
MGT 238 - Labor-Management Relations OR	3		D/E		
MGT 241 - Small Business Management & Entrepreneurship	3	D/E	D/E		
Minimum Credit Hours:	6				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Manufacturing Productivity Systems

Associate in Applied Science - Technology Division

Program Code: MFENG.AAS.2002

Ken Wright	313-845-6331	kwright@hfcc.edu	Technology Building 164E
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

These programs are designed for students interested in adapting ideas to working models or generally refining an engineer's concepts.

Through hands-on experience, the student acquires skills that are essential in industrial processes, blueprint reading, layout and inspection, numerical control prototype testing, and developing and testing automated, servomechanical, and other mechanical systems. Most students work part time in their fields of endeavor while completing their degree requirements.

All of these programs strongly emphasize the safe and skillful use of tool-room machines. Core courses are individualized to fit the student's personal goals.

Career Opportunities

- Automation and Control Technician
- Engineering Technician
- Quality Controller
- CNC Programmer

- Laboratory Technician
- CNC Set-Up Technician
- Tool Analyst
- Pre-production Planner
- Plastic R & D Technician
- Machinist/Toolmaker
- Sales & Service Engineer
- Process Engineer
- Test Technician

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions.

It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Eastern Michigan University
- Ferris State University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn

Registry/Certification/Licensure Exam Information

Optional HAAS Technical Education Council Level 1 and 2 Certification

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 65

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
MPS 100 - Manufacturing Processes I	6	D/E	D/E	E	
MPS 110 - Manufacturing Processes II	6	E/W	E	E	
MPS 120 - Practical Problems In Machine Tools I	4	E	E		
MPS 125 - Practical Problems in Machine Tools II	4	E	E		
MPS 130 - Quality Control Gaging and Inspection	4	E			
MPS 140 - Introduction to CNC	4	D/E	D/E	E	
MPS 145 - CNC Operations	6		E		
MPS 150 - SPC In Manufacturing	4		E		
MPS 210 - Non-Traditional Manufacturing Processes	4			E	

Minimum Credit Hours: 42

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
DRAF 110 - Introduction to Industrial Drafting	3	D/E	D/E	D/E	
MATH 100 - Basic Technical Mathematics AND	4	D/E	D/E	D	
MATH 103 - Technical Mathematics OR	4	D/E	D/E		
MATH 112 - Trigonometry OR	3	D/E	D/E		
MATH 175 - Precalculus or a higher level math class	5	D/E/O	D/E/O	D/E	D/E
PHYS 120 - Technical Physics	4	E	E	E	

Minimum Credit Hours: 14

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
6 credit hours from the below list of courses					
AUT 170 - Related Technical Automotive	4	E	E		
DRAF 120 - Introduction to CAD	4	D/E	D/E	D/E	
DRAF 130 - Technical Descriptive Geometry	3	D	D		
ELEC 103 - Basic Electricity	4	D/E	D/E		
ELEC 120 - Basic Hydraulics	3				
ELEC 106 - Basic Electronics	3	D/E	D/E		
MPS 160 - Computer Assisted N/C Programming	4	E	E		
Minimum Credit Hours:	6				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	D	D		
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Manufacturing Trades

Associate in Applied Science - Trade & Apprentice Division

Program Code: MFGTD.AAS.2002

Robert Morrish, Associate Dean 313-845-6436 rmorrish@hfcc.edu
 Gail Conte, Coordinator 313-845-6360 gconte@hfcc.edu

Technology Building 115A
 Technology Building 115B

The Associate in Applied Science for Manufacturing Trades is designed for industrial apprentices or other skilled trades persons who have completed or are in the last semester of related instruction requirements for journeyman certification or the equivalent. Students may apply the credits earned in their trade programs toward the 60 credit hours required for the degree.

Career Opportunities

- Group Leader
- Production Foreman
- Skilled Trade Foreman
- Tool Engineer
- Service Technician
- Product Design
- Quality Control Technician
- Tool Designer

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to

ensure the transferability of the courses they take to the institution they plan to attend. Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Eastern Michigan University
- Ferris State University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn
- Wayne State University

Courses

Apprenticeship programs vary in the number of credit hours earned. The minimum number is 38. All program requirements must be met in order for an apprentice to qualify for a certificate.

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses

Credit Hours

Minimum Credit Hours: 38

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
TAFD 115 - Computer Applications for Skilled Trades	2	D/E	D/E		D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Materials Join & Fab Gas Tung & Metal Arc Welding

Certificate of Achievement - Trade & Apprentice Division

Program Code: TAEDMJGWLD.CMLT.2003

Kevin Ridge	313-317-4136	karidge@hfcc.edu	Technology Building 165C
Robert Morrish	313-845-6436	rmorrish@hfcc.edu	Technology Building 115A

The courses in this program extend the skills learned in the Materials Joining and Fabrication Basic Certificate to include one of the most advanced welding techniques required in the manufacture and repair of products made from materials requiring special fabricating procedures. The skills acquired will enable the student to pursue welding jobs that require advanced knowledge and skills and that offer higher pay.

Courses

This program adds two courses - TAMJ 120 and TAFD 150 - to the Materials Joining and Fabrication Basic Certificate.

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
TADV 90 - Print Reading Fundamentals	2	D/E	D/E		D/E
TAMJ 110 - Materials Joining and Fabrication Fundamentals	3	D/E	D/E		D/E
TAMJ 115 - Advanced Materials Joining and Fabrication	2	D/E	D/E		E
TAMJ 145 - MJ & F: Advanced Gas Torch Techniques	2	E	E		
TAMJ 120 - Materials Joining and Fabrication: GTAW/GMAW Techniques	2	E	E		E
TAFD 150 - Applied Technology	3	D/E	D/E		D/E
Minimum Credit Hours:	14				

Materials Joining & Fabrication

Certificate of Achievement - Trade & Apprentice Division

Program Code: TAEDMJFAB.CSGL.2003

Kevin Ridge	313-317-4136	karidge@hfcc.edu	Technology Building 165C
Robert Morrish	313-845-6436	rmorrish@hfcc.edu	Technology Building 115A

The manufacturing and service industries use welding as a means to build and repair products. The courses included in this certificate focus on the skills needed in Electric Arc Welding, MIG Welding, and Oxygen Fuel Gas Cutting. Students will learn to weld

in all four positions (flat, horizontal, vertical, and overhead) using the latest technology and equipment. Upon successful completion of this certificate, the student will have the skills necessary for a job entry position.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
Course pre-requisites must be observed.					
TADV 90 - Print Reading Fundamentals	2	D/E	D/E		D/E
TAMJ 110 - Materials Joining and Fabrication Fundamentals	3	D/E	D/E		D/E
TAMJ 115 - Advanced Materials Joining and Fabrication	2	D/E	D/E		E
TAMJ 145 - MJ & F: Advanced Gas Torch Techniques	2	E	E		
Minimum Credit Hours:	9				

Materials Joining & Fabrication Tool & Die Welding

Certificate of Achievement - Trade & Apprentice Division

Program Code: TAEDMJTWLD.CMLT.2003

Kevin Ridge

313-317-4136

karidge@hfcc.edu

Technology Building 165C

Robert Morrish

313-845-6436

rmorrish@hfcc.edu

Technology Building 115A

The courses in this certificate extend the knowledge and skill development acquired in the two previous certificates. The courses cover a highly specialized area in welding concerning alloys, steels, and cast irons that are used in the tool and die industries. All

manufacturing and service companies required tooling and dies that perform specific functions. These objects require special materials for their construction and require sophisticated welding procedures to ensure successful production and repair.

Courses

This certificate adds two new courses - TAMJ 240 and TAIM 100 - to the GTAW/GMAW certificate.

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
Course prerequisites must be observed.					
TADV 90 - Print Reading Fundamentals	2	D/E	D/E		D/E
TAMJ 110 - Materials Joining and Fabrication Fundamentals	3	D/E	D/E		D/E
TAMJ 115 - Advanced Materials Joining and Fabrication	2	D/E	D/E		E
TAMJ 145 - MJ & F: Advanced Gas Torch Techniques	2	E	E		
TAMJ 120 - Materials Joining and Fabrication: GTAW/GMAW Techniques	2	E	E		E
TAFD 150 - Applied Technology	3	D/E	D/E		D/E
TAMJ 240 - MJ & F: Tool and Die Welding	3		E		
TAIM 100 - Industrial Materials	3	D/E	D/E		E
Minimum Credit Hours:	20				

Materials Joining & Fabrication Welder

Certificate of Achievement - Trade & Apprentice Division

TAEDMJFWLD.CMLT.2003

Kevin Ridge 313-317-4136 karidge@hfcc.edu
 Robert Morrish 313-845-6436 rmorrish@hfcc.edu

Technology Building 165C
 Technology Building 115A

The courses in this certificate will aid in developing the necessary skills for people interested in becoming welders qualified in a specific welding area. Such welders are known as Certified Welders. The two primary agencies used by welders for certification are

the American Society of Mechanical Engineers (ASME) and the American Welding Society (AWS). Students will perform the qualifying procedures in the college welding lab, and when completed, test pieces will be processed at a local private testing lab.

Courses

This certificate adds three new courses - TAMJ 125, TAMJ 230, and TAMJ 235 - to the Tool and Die Welding certificate.

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
Course prerequisites must be observed.					
TADV 90 - Print Reading Fundamentals	2	D/E	D/E		D/E
TAMJ 110 - Materials Joining and Fabrication Fundamentals	3	D/E	D/E		D/E
TAMJ 115 - Advanced Materials Joining and Fabrication	2	D/E	D/E		E
TAMJ 145 - MJ & F: Advanced Gas Torch Techniques	2	E	E		
TAMJ 120 - Materials Joining and Fabrication: GTAW/GMAW Techniques	2	E	E		E
TAED 150 - Applied Technology	3	D/E	D/E		D/E
TAMJ 240 - MJ & F: Tool and Die Welding 240	3		E		
TAIM 100 - Industrial Materials	3	D/E	D/E		E
TAMJ 125 - MJ & F: ASME Pipe and Pressure Vessel Welding	2	E	E		E
TAMJ 230 - MJ & F: ASME Pipe and Pressure Vessel Certification	2	E	E		E
TAMJ 235 - MJ & F: GTAW and GMAW Certification	2	E	E		E
Minimum Credit Hours:	26				

Medical Assistant

Certificate of Achievement - Health Careers Division

Program Code: MASST.CERT.1990

R. Bodurka

313-845-9877

rbodurka@hfcc.edu

Health Careers Education Center 132

The Medical Assistant program is a Level II (Complex Skills Certificate) program designed to prepare professional multi-skilled individuals for employment in physicians' offices, clinics, and other ambulatory health care facilities. Both administrative and clinical duties are emphasized in the classroom and laboratory with directed practical experience in selected physicians' offices, hospitals, and clinics.

The medical assistant may be responsible for patient scheduling, receptionist duties, medical record management, correspondence, insurance procedures, and accounts receivable. Clinical duties may include: interviewing and teaching patients; taking vital signs; preparing patients for assisting the physician during examination; performing routine laboratory testing, phlebotomy, and electrocardiography; sterilizing supplies; and administering medications. A medical assistant with sufficient training and experience may become responsible for office management.

The Medical Assistant Program requires approximately 33 credits to earn a certificate. Students in the program will have the opportunity to practice their skills using a wide variety of equipment. Prior to graduation, students will have earned certificates in CPR for infants, children and adults. Externships are arranged and supervised by program faculty utilizing many of the large clinical agencies in this region.

Career Opportunities

According to recent reports from the U.S. Bureau of Labor Statistics, employment of medical assistants is expected to grow much faster than the average for all occupations

through the year 2010 as the health services industry expands because of technological advances in medicine, and a growing and aging population.

Employment growth will be driven by the increase in the number of group practices, clinics, and other healthcare facilities that need a high proportion of support personnel, particularly the flexible medical assistant who can handle both administrative and clinical duties. Medical assistants primarily work in outpatient settings, where much faster than average growth is expected.

Information about career placement and job success is available through either the Health Careers Office or the College's Placement Office.

Occupational Exposure/Risk

Since medical assistants deal with the public, they must have good communication skills and a courteous manner. They have to put patients at ease as well as explain physicians' instructions. The clinical duties require a reasonable level of manual dexterity and visual acuity, and medical assistants must respect the confidential nature of medical and patient information.

In medical assisting, both in school and on the job, exposure to infectious diseases and latex may be minimal to moderate depending on the setting in which you are working. Those with latex sensitivity or allergies should consult with a physician prior to entering the program for guidance on the merits of continuing in a health care career. During the course of the program students learn infection control guidelines and procedures and strict adherence to these guidelines will reduce the risk of exposure to infectious diseases.

Admission Requirements/Eligibility

Formal admission to this program is required; however, students are permitted to take the first semester series of courses prior to being formally accepted and admitted into the program. AH 100, BIO 134, MOA 100, MOA 110, MOA 120 and PSY 131 may be taken prior to the formal acceptance into the program. Beginning with the second semester series of classes such as MOA 150, students must then satisfy the program's admission criteria and be formally accepted into the program by the Health Careers Division. Acceptance to the College does not constitute nor guarantee admission to the Medical Assistant Program. Admission to the program is based upon satisfying the admission requirements.

Admission Requirements

- A minimum high school grade-point average of C+ (2.5) or a minimum average score of 55 on the GED test, or a minimum college grade-point average of C (2.0) for both transfer students and Henry Ford Community College students.
- An ASSET/COMPASS score of 43/84 or successful completion of English 081.
- An ASSET/COMPASS score of 39/39 for numerical skills or completion of MATH 101 or MATH 074 with a grade of C or better.
- Typing proficiency of at least 30 words per minute as a prerequisite for MOA 170.

Developmental work may be assigned to qualify applicants for placement if minimum requirements have not been met.

Good physical and mental health as determined by a physician. Students in the Medical Assistant program are expected to meet the same physical and mental requirements as an employed medical assistant. A representative

Medical Assistant Job Profile, available upon request from the Health Careers Office, lists the specific physical and mental requirements as well as the environmental conditions of the occupation. Each student must have a physical examination. HFCC's Assisted Learning Services Office is available for students with disabilities requiring accommodation.

Criminal Background Check and Drug Screen

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug Screen is required for all students in MOA program prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule. For questions regarding this policy, contact the Health Careers Office.

Students who are not cleared for clinical through the Health Appraisal, Criminal Background Check and Drug Screen will not be able to complete the program.

Additional Program Requirements

The Medical Assistant program may be completed in one year following a full-time schedule if the admission criteria are satisfied, or the program may be extended and completed on a part-time basis. In either case, careful scheduling is required and each student must satisfy the program's admission criteria. Students are strongly encouraged to consult the Health Careers Advisor in planning their class schedules.

While MOA 110, AH 100, PSY 131 and BIO 134 follow both day and evening schedules, the remaining courses in the program follow primarily a day schedule. Students should contact the Health Careers Office for specific schedule information.

Program Duration Limits/Updates/Changes

All educational experiences are under the guidance of the MOA program. Student progress is evaluated in the classroom, laboratory and clinical setting throughout the program.

Progression in the program is based upon the student meeting the following requirements:

1. Adherence to the program requirements outlined in the MOA Student Handbook.
2. Achievement of a minimum grade of C or better in all MOA and required courses including the last in the sequence (MOA 190).
3. Maintenance of an overall cumulative grade-point average of 2.0 or better.
4. All MOA courses taken at HFCC must be successfully completed within three consecutive calendar years.

Registry/Certification/Licensure Exam Information

Upon completion of the accredited program, students will be eligible for AAMA Certified Medical Assistant (CMA) examination. This program is one of the few select medical assistant programs in this region to maintain accreditation through CAAHEP. Many employers prefer medical assistants that are either CMAs or at least CMA eligible. The CMA credential is a national certification recognized by employers across the country.

Accreditation

The Medical Assistant program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of

the Curriculum Review Board of the American Association of Medical Assistants Endowment (AAMAE).

Commission on Accreditation of Allied Health Education Programs, 35 East Wacker Drive, Suite 1970, Chicago, IL 60601-2208, 312-553-9355

Accreditation standards require that students do not receive compensation/payment, monetary or otherwise, from any clinical site for any portion of their clinical externship (MOA 190 Medical Office Externship).

Continued on next page

Courses

Students must maintain a minimum "C" grade or better in all MOA required and support courses including the last in the sequence (MOA 190).

Minimum Number of Credits To Graduate (Including Options/Electives): 33

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
Accreditation standards require that students do not receive compensation/payment, monetary or otherwise, from any clinical site for any portion of their clinical externship (MOA 190 Medical Office Externship).					
MOA 100 - Medical Office Procedures I-Administrative	3	D/E	D		
MOA 110 - Processing Health Insurance Claims	2	D/E	D		
MOA 120 - Medical Office Computer Applications	2	D	D/E		
MOA 150 - Medical Office Assistant Procedures II- Clinical Offered only during the Winter semester	5		D		
MOA 160 - Basic X-Ray Techniques	2	E	D/E	D/E	
MOA 170 - Medical Correspondence	3		D		
MOA 190 - Medical Office Externship	4	D		D	
Minimum Credit Hours:	21				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
BIO 134 - Essentials of Anatomy and Physiology OR	5				
AH 100 - Medical Terminology	4	D/E/W	D/E/W	D/E	D
BIO 233 - Anatomy and Physiology I AND	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
PSY 131 - Introductory Psychology	3				
Minimum Credit Hours:	12				

Course Sequence Recommended

Fall I	AH 100	BIO 134	MOA 100	MOA 110	MOA 120
Winter I	MOA 150	MOA 160	MOA 170	PSY 131	
Spring I	MOA 190				

Medical Receptionist/Billing

Certificate of Achievement - Health Careers Division

Program Code: MEDRB.CMULT.2003

R. Bodurka

313-845-9877

rbodurka@hfcc.edu

Health Careers Education Center 132

The Medical Receptionist-Biller program is a Level II (Complex Skills Certificate) program designed to provide entry-level skills for medical insurance billing specialists in physicians' offices and clinics. This program is designed for the health care worker who handles the information necessary for reimbursement of services from the insurance carriers.

The Medical Receptionist-Biller program prepares students for positions as medical insurance billing specialists in the area of ambulatory health care.

The medical insurance biller is responsible for collection of preadmission/pretreatment insurance information through submission of claims to insurance carrier or patient. Verification of insurance coverage and determination of whether any predetermination, precertification, or second-opinion requirements exist is another important aspect of the job.

Training is provided in verification of insurance coverage, assignment of diagnostic and procedural codes, and both manual and computerized claim preparation. Review and follow-up procedures for the major carriers are included in addition to posting and balancing of accounts.

The Medical Receptionist-Biller program may be completed in one year by attending full time, or it may be extended following a part-

time schedule. In either case, careful scheduling is required. Students are encouraged to consult the Health Careers Advisor in planning their class schedules.

Interested students should work closely with the Health Careers Advisor in order to develop their own individual educational plan. For additional information or an appointment, students should contact the Health Careers Office at 313-845-9877.

Career Opportunities

The employment outlook for medical receptionist-billers is good, but competitive especially for entry-level positions. Information about career placement is available through the College's Placement Office which also assists students in finding employment.

Admission Requirements/Eligibility

The Medical Receptionist-Biller Program does not have program specific admission requirements. However, to be an effective medical receptionist-biller, you should have strong basic math skills and solid keyboarding skills. Interested students must work closely with an HFCC academic advisor in order to develop their own individual education plan.

The Medical Receptionist-Biller program may be completed in one year by attending full time, or it may be extended following a part-

time schedule. In either case, careful scheduling is required. Students are strongly encouraged to consult the Health Careers Advisor in planning their class schedules.

Additional Program Requirements

Progression in the program is based upon the student meeting the following requirements:

- Achievement of a minimum grade of C or better in all MOA, required, and support courses.
- Maintenance of an overall cumulative grade-point average of 2.0 or better.

Students who decide to continue their education may apply the credits earned through this program towards an Associate degree at HFCC. Contact HFCC's Counseling Office for additional details.

Program Duration Limits/Updates/Changes

All MOA courses must be successfully completed within three consecutive calendar years.

HFCC continuously attempts to improve each program, and as a result courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration.

Continued on next page

Courses

Progression in the program is based upon the student meeting the following requirements:

- Achievement of a minimum grade of C or better in all MOA, required, and support courses.
- Maintenance of an overall cumulative grade-point average of 2.0 or better.

While HFCC attempts to rotate classes following both a day and evening schedule, there is no guarantee that all MOA classes will be rotated on both schedules. Students should contact the Health Careers Office for specific schedule information. Please note that MOA 180 and MOA 200 are only offered as evening courses during the Winter semester.

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
AH 100 - Medical Terminology	4	D/E/W	D/E/W	D/E	D
MOA 100 - Medical Office Procedures I-Administrative	3	D/E	D		
MOA 110 - Processing Health Insurance Claims Must be taken in Fall semester to prepare for MOA 180 and 200.	2	D/E	D		
MOA 120 - Medical Office Computer Applications Must be taken in Fall semester to prepare for MOA 180.	2	D	D/E		
MOA 170 - Medical Correspondence	3		D		
MOA 180 - Computerized Medical Billing Only offered in Winter semester	2		E		
MOA 200 - Advanced Physician Billing Techniques Only offered in Winter semester	3		E		
BIO 134 - Essentials of Anatomy and Physiology OR	5				
BIO 233 - Anatomy and Physiology I AND	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
Minimum Credit Hours:	24				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
The program requires a total of 8 credits hours selected from the elective courses listed.					
BAC 110 - Practical Accounting OR	4	D/E	D/E	D/E	D/E
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
PSY 131 - Introductory Psychology OR	3				
SPC 131 - Fundamentals of Speaking OR	3	D/E/W	D/E/W	D/E	D/E
Minimum Credit Hours:	8				

Course Sequence Recommended

Fall I	AH 100	BIO 134	MOA 100	MOA 110	MOA 120
Winter I	MOA 170	MOA 180	MOA 200	BAC 110	BCA 140
Spring I	PSY 131				

The Medical Receptionist-Biller program may be completed in one year by attending full time, or it may be extended following a part-time schedule. In either case, careful scheduling is required. Students are encouraged to consult the Health Careers Advisor in planning their class schedules.

While HFCC attempts to rotate classes following both a day and evening schedule, there is no guarantee that all MOA classes will be rotated on both schedules. Students should contact the Health Careers Office for specific schedule information. Please note that MOA 180 and MOA 200 are only offered as evening courses during the Winter semester.

Multimedia Design

Certificate of Achievement - Fine Arts and Fitness Division

Program Code: MULTMED.CMULT.2004

Kirk McLendon

313-845-6487

mclendon@hfcc.edu

MacKenzie Fine Arts Center 149

Multimedia Design is one of the five new Certificate Programs offered at HFCC. Earn a Multimedia Design Certificate by completing the 36-38 credit hours of core courses. Students may complete an additional 22-24 credit hours of General Education courses to earn an Associate of Arts Degree. Classes are offered throughout the year during the day, evening and weekend.

Computers did not simplify the lives of graphic designers, but made them more interesting. Designers working in multimedia must be able to blend animation, audio, video, and graphic design into a cohesive arrangement. Design skills and computer savvy are important for multimedia design.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
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An additional 22-24 credit hours of General Education courses may be taken with any of the five Graphic Design certificates to obtain an Associate of Arts Degree.

ART 101 - Two-Dimensional Design	3	D/E	D/E	D	D
ART 102 - Drawing 1	3	D/E	D/E	D	D
ART 107 - Photoshop/ImageReady	3				
ART 108 - Flash	3				
ART 165 - Graphic Design 1	3	E	E		
TCM 151 - Digital Audio Editing	1	D	D		
TCM 251 - Audio Production	3	D	D		
ART 211 - Director	3				
ART 245 - Interactive Design	3				
TCM 157 - Digital Video Editing	1	D	D		
TCM 257 - Video Production	3	D	D		
ART 255 - Animation Basics	3		D		
ART 130 - History of Graphic Design	3	D	D	O	
ART 275 - Advanced Projects	3	D/E/W	D/E/W	D/E/W	D/E/W

Minimum Credit Hours: 38

Music

Associate in Arts - Fine Arts and Fitness Division

Program Code: MUSIC.AA.1985

Kevin Dewey

313-845-6474

kdewey@hfcc.net

MacKenzie Fine Arts Center 132

These courses are designed for music majors, liberal arts and technical students, and members of the community. Music Literature and Music Appreciation fulfill the Humanities requirement for liberal arts and technical students. Performing groups, such as the Jazz Band and the Show Choir, are open to all by audition.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
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*Choir includes: Concert Choir 1, 2, 3, or 4 (MUS 107, 108, 207, 208); Wind Ensemble 1, 2, 3, or 4 (MUS 109, 110, 209, 210); Jazz Ensemble 1, 2, 3, or 4 (MUS 111, 112, 211, 212); or Show Choir 1, 2, 3, or 4 (MUS 143, 144, 243, 244)

**Applied Music (MUS 113, 115, 213, 215)

4 credit hours of choir and/or instrumental band* AND

4 Credit hours of Applied Music** AND

MUS 118 - Class Piano II AND	2	D/E	D/E		
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MUS 132 - Music Literature AND	3		E		
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MUS 138 - Music Theory I AND	3	D		D	
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MUS 139 - Music Theory II AND	3	D/E		D	
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MUS 141 - Sight Singing/Ear Training I AND	2	D/E		D/E	
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MUS 142 - Sight Singing/Ear Training II AND	2	D/E		D/E	
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MUS 152 - Music Notation with Finale I AND	2	D/E		D/E	
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MUS 232 - Music History I OR	3	D/E		D/E	
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MUS 233 - Music History II	3	D/E		D/E	
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Minimum Credit Hours:	28				
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Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
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*Social Science courses includes: Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, Social Science, Sociology.

**Math/Science includes: Astronomy, Biology, Chemistry, Geology, Physical Science, Physics, Mathematics, Science, Atmospheric Studies.

***Any course starting with HPE or HPEA

5 credit hours of Social Sciences* AND

8 credit hours of Math/Science (100+over)** AND

2 credit hours of HPE***

Minimum Credit Hours:	24				
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General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	D	D		
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
HPEA 117 - Weight Train & Phys Conditioning OR	2	D/E	D/E	D/E	D/E
HPEA 217 - Weight Training and Physical Conditioning II OR	2	D/E	D/E	D/E	D/E
HPEA 126 - Aerobic Dance OR	2	D	D	D	D
HPE 140 - Lifetime Wellness OR	2	D/E	D/E		
HPE 142 - Advanced First Aid OR	3				
HPE 153 - Nutrition OR	2	D/E	D/E	D/E	D/E
HPE 155 - Relax Tech for Stress Management	2				

Minimum General Education Hours Required: 11

Network Administration

Associate in Applied Science - Technology Division
Program Code: NETADMIN.AAS.2003

Brent Fulton	313-845-6426	brent@hfcc.edu	Technology Building 162
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

This program, leading to an Associate in Applied Science Degree in Network Administration, teaches computer repair, network concepts and terminology, and Unix, Novell NetWare, and Microsoft Windows Server Administration as well as Cisco training on a variety of Cisco Systems equipment.

Laboratory classrooms provide the student with opportunities to build, configure, and troubleshoot personal computers in the lab. Students will also install, configure and troubleshoot operating systems, connect personal computers to Local Area Networks and troubleshoot common network problems; perform Unix, Novell and Microsoft Windows Server Administration tasks on classroom servers, and install, configure and troubleshoot Cisco Systems switches and routers.

Career Opportunities

- PC Software Installation
- PC Hardware Installation
- Network Administration
- Computer Network Support Specialist
- Network Control and Systems Technician

- LAN/WAN Technician
- Cabling Installation Technician

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612,

counseling@hfcc.edu, Learning Resource Center).

Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Ferris State University
- Lawrence Technological University

Registry/Certification/Licensure Exam Information

The AAS degree in Network Administration prepares students to successfully complete a number of Industry Certification Exams, including Comp-TIA A+, Comp-TIA Network+, Comp-TIA Server+, Comp-TIA Security+, Novell NetWare Certified Network Administrator (CNA), Microsoft Windows Server Administration (MCP), and Cisco Systems Certified Network Associate (CCNA). These certification tests are administered at HFCC's M-TEC Center, 3601 Schafer Rd., Dearborn, MI 48126, 313-317-6600. Payment and scheduling of these exams are through the Pearson-Vue Web site (<http://www.pearsonvue.com>).

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 68

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 125 - Principles of Programming Logic	4				
CNT 110 - Networking Basics: CCNA 1	4	D/E	D/E		
CIS 114 - Introduction to Novell NetWare Administration	3				
CIS 124 - Introduction to Windows Server Administration	3				
CIS 129 - Introduction to UNIX with Shell Scripting	4				
CIS 229 - UNIX System Administration	4				
CNT 120 - Routers and Routing Basics: CCNA 2	4	D/E	D/E		
CNT 210 - Switching Basics and Intermediate Routing: CCNA 3	4	D/E	D/E	E	
CNT 220 - WAN Technologies: CCNA 4	4	D/E	D/E	E	
CIS 295 - Network Design and Implementation	3				

Minimum Credit Hours: 40

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
MATH 100 - Basic Technical Mathematics	4	D/E	D/E	D	

Minimum Credit Hours:

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
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Select 14 credit hours from the list above.

CIS 105 - Desktop Operating System Concepts	4				
CIS 112 - Introduction to Networking	3				
CIS 113 - Wireless LANs	2				
CIS 116 - Advanced Novell NetWare Administration	2				
CIS 157 - A+: Hardware	4				
CIS 158 - A+: Operating Systems	4				
CIS 212 - Networking II	3				
CIS 162 - PERL Programming	4				
CNT 240 - Network Operating Systems: Server + Prep	4				
CNT 260 - Network Security: Security + Prep	4	E	E		
ICO 191 - Industrial Co-op	2				

Minimum Credit Hours: 14

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Network Infrastructure Essentials

Certificate of Achievement - Technology Division

Program Code: CSCODVCABL.CSGL.2003

Kathryn Fitzner	313-3171-570	kfitzner@hfcc.edu	Technology Building 211B
Todd Browning	313-845-6365	browning@hfcc.edu	Technology Building 211A

The Network Infrastructure Essentials Certificate of Achievement is offered through HFCC's Computer Networking Academy program. Students may apply for this certificate upon successful completion of the the Network Infrastructure Essentials course. This is a basic course designed for students interested in the physical aspects of voice and data network cabling and installation. The course focuses on cabling issues related to data and voice connections and provides

an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmission.

Students will develop skills in reading network design documentation, part list set up and purchase, pulling and mounting cable, cable management, choosing wiring closets and patch panel installation and termination as well as installing jacks and cable testing. This

hands-on, lab-oriented course stresses documentation, design, and installation issues, as well as laboratory safety, on-the-job safety, and working effectively in group environments.

Career Opportunities

Cable Installer/Technician, Network Technician, Network Administrator

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Courses	Credit Hours	Fall	Winter	Spring	Summer
CNT 115 - Network Infrastructure Essentials	4	E	E		
Minimum Credit Hours:	4				

Upon completion of the below course, the student will, upon application, receive a Certificate of Achievement for Network Infrastructure Essentials.

Networking

Associate in Applied Science - Technology Division

Program Code: CISPNETWRK.AAS.2003

Shannon Scanlon

313-845-6346

sscanlon@hfcc.edu

Technology Building 162J

This program leading to an Associate in Applied Science Degree in Network Administration teaches computer repair; network terminology and concepts; and Unix, Novell, NetWare, and Microsoft Windows Server Administration; along with Cisco training on a variety of Cisco equipment.

Laboratory classrooms provide students with opportunities to build, configure and troubleshoot personal computers in the lab. The student will also install, configure and troubleshoot operating systems; connect personal computers to Local Area Networks and troubleshoot common network problems; perform Unix, Novell and Microsoft Windows Server Administrator tasks on the classroom servers; and install, configure and troubleshoot Cisco switches and routers.

To earn an associate degree, the student must complete 68 credit hours of course work. There are 40 credit hours of required Computer Information Systems core courses and 14 to 15 hours of General Education courses. The remaining 14 credit hours necessary for graduation are chosen from a list

of required support courses in the networking area. For more information visit our Web site on the Internet at www.hfcc.edu.

Career Opportunities

- PC Software Installation
- PC Hardware Installation
- Network Administration
- Computer Network Support Specialist
- Network Control and Systems Technician
- LAN/WAN Technician
- Cabling Installation Technician

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC.

Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of

HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to:

- University of Michigan - Dearborn

Registry/Certification/Licensure Exam Information

These are potential industry certifications available to students in this program:

- Comp-TIA A+
- Comp-TIA Network +
- Novell NetWare Certified NetWare Administrator (CNA)
- Microsoft Windows Server Administration (MCP)
- Cisco Certified Network Associate (CCNA)

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 68

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 125 - Principles of Programming Logic	4				
CNT 110 - Networking Basics: CCNA 1	4	D/E	D/E		
CIS 114 - Introduction to Novell NetWare Administration	3				
CIS 124 - Introduction to Windows Server Administration	3				
CIS 129 - Introduction to UNIX with Shell Scripting	4				
CIS 229 - UNIX System Administration	4				
CNT 120 - Routers and Routing Basics: CCNA 2	4	D/E	D/E		
CNT 210 - Switching Basics and Intermediate Routing: CCNA 3	4	D/E	D/E	E	
CNT 220 - WAN Technologies: CCNA 4	4	D/E	D/E		E
CIS 295 - Network Design and Implementation	3				
One Math course numbered 100 or higher (but not Math 121, 127, 221, or 225)					

Minimum Credit Hours: 40

Continued on next page

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
Select 14 hours from the Required Support Courses area.					
CIS 105 - Desktop Operating System Concepts	4				
CIS 112 - Introduction to Networking	3				
CIS 113 - Wireless LANs	2				
CIS 116 - Advanced Novell NetWare Administration	2				
CIS 157 - A+: Hardware	4				
CIS 158 - A+: Operating Systems	4				
CIS 212 - Networking II	3				
CIS 162 - PERL Programming	4				
CNT 115 - Network Infrastructure Essentials	4	E	E		
CNT 260 - Network Security: Security + Prep	4	E	E		
Minimum Credit Hours:	14				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 235 - American Literature Before 1900 OR	3				
ENG 236 - American Autobiography OR	3				
CRJ 131 - Introduction to Law Enforcement and Criminal Justice OR	3	D/E/O	D/E/O	D/O	
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Nursing

Associate in Applied Science - Nursing Division

Program Code: NURSE.AAS.2002

Dr. Katherine M. Bradley	313-845-9661	kbradley@hfcc.edu	Health Careers Education Center 122
Anna Brown	313-845-9635	abrown@hfcc.edu	Health Careers Education Center 122

Henry Ford Community College has Michigan's first associate degree nursing program, established in 1953. The HFCC Nursing program has received national recognition for curricula design, teaching strategies and for collaborative work with hospitals and nursing organizations in defining competencies of associate degree nursing graduates.

The program of study combines 65 credits of general education and nursing courses in the classroom with selected laboratory and clinical experiences in providing nursing care to clients in structured health care settings. General education courses required of the nursing major must be taken prior to or concurrent with nursing courses as stipulated in the curriculum. Nursing courses must be taken in consecutive semesters. Students must achieve a minimum grade of C or better in every required general education and nursing course. (Courses may be repeated only once in order to obtain a grade of C or better.)

Applicants to the nursing program should be aware that at the Associate Degree level involves the provision of direct care to clients. It is characterized by the application of verified knowledge in the skillful performance of nursing functions. In order to be considered for admission or to be retained in the program, all applicants should possess:

1. Sufficient visual acuity necessary for accurate assessment and nursing care, such as required in the accurate preparation and administration of medications and for observation of clients.
2. Sufficient auditory perception to receive verbal communication from clients and members of the health team and to assess the health status of people through the

use of monitoring devices such as cardiac monitors, stethoscopes, IV infusion pumps, doppler, and fire alarms, as well as cries for help.

3. Sufficient gross and fine motor coordination to respond promptly and to implement the skills required in meeting health care needs of clients, including the manipulation of equipment.
4. Sufficient physical abilities to move around in client rooms and work and treatment areas and administer cardiopulmonary procedures.
5. Sufficient strength to perform physical activities frequently requiring the ability to push and pull objects more than fifty pounds and to transfer objects and persons of more than one-hundred pounds.
6. Sufficient communication skills (speech, reading, writing) to interact with clients and to communicate their health status and needs promptly and effectively.
7. Sufficient intellectual and emotional capability to plan and implement care for clients.
8. Sufficient psychological stability essential to perform at the required levels in the clinical portions of the nursing program.
9. Capability to sustain long periods of concentration to make decisions such as selecting correct techniques, equipment, and safety measures to assure maximum care and safety of clients. A person under the influence of alcohol or consciousness-altering drugs could not meet the above criterion.
10. Sufficient physical stamina to remain standing for long periods of time.

Career Opportunities

The health care industry in the region is and will continue to be one of the largest employers of graduates in Southeastern Michigan. Opportunities

for nursing exist in hospitals, clinics and home health care. The average starting salary for HFCC graduates exceeds the national average.

According to the Bureau of Labor Statistics the employment of registered nurses is expected to grow faster than the average for all occupations through 2012. In fact, more new jobs are expected to be created for RNs than any other occupation (US Bureau of Labor and Statistics).

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Eastern Michigan University
- Madonna University

Continued on next page

- Michigan State University
- Oakland University
- University of Detroit Mercy
- University of Michigan - Ann Arbor
- Wayne State University

Occupational Exposure/Risk

Applicants who consider a career in nursing should be aware that during the course of their nursing education and subsequent employment they are likely to be working in situations where exposure to infectious diseases is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines, however, can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the nursing program of study.

Latex Allergies

Since 1989, health care providers and their patients have experienced a rise in allergic responses to latex. Gloves, tubing, and other products used in the care of clients are frequently made from latex. Immediate hypersensitivity responses to natural rubber latex (NRL) occur to one or more NRL proteins. The result can be contact urticaria, angioedema, allergic rhinitis, asthma, or anaphylaxis. Early recognition of sensitization to NRL is crucial to prevent the occurrence of life-threatening reactions in sensitized healthcare workers.

In nursing, both in school and on the job, exposure to latex consistently occurs. If a student is or becomes sensitized to latex, it is suggested that another career choice be considered. Non-latex gloves or those without powder (reduces airborne particles of NRL) can be purchased, but it is impossible at this time to get totally away from the problem. The Nursing Division strongly advises those students sensitized or allergic to latex to consult a physician for guidance on the merits of continuing in a health care career.

NRL sensitized students who choose to continue in the nursing program do so at their own risk. Neither the college nor the Nursing Division can be responsible for the problems resulting from such a decision.

Admission Requirements/Eligibility

In order to be admitted into the nursing program certain procedures must be followed and academic requirements fulfilled. Applicants must first be admitted to the College and designate Nursing as their curriculum. Applicants must have a high school grade-point average of 2.7 or higher. If any college courses have been taken, a cumulative grade-point average of 2.7 or higher is required. The program has a limited enrollment and admits the bulk of its students in the fall semester. A small group of students is admitted for the winter semester. Admission is on a first-qualified, first-served basis. Students are encouraged to complete the admission requirements as early as possible.

The three stages for admission to the Nursing program are:

1. Applicants obtain copies of the specific admission requirements from the Admissions Office.
2. Applicants must meet the admission requirements.
3. Applicants are invited to and must attend pre-enrollment and orientation meetings scheduled by the Associate Dean of Nursing. Final acceptance is contingent upon fulfilling and maintaining minimum program requirements and submitting proof of the following by the deadline dates:
 - A. Health insurance
 - B. Physical examination
 - C. Required immunizations
 - D. BLS certification for health care providers

Admission Requirements

Education

- A. GPA (Most current course of study is considered)
 1. High School academic grade-point average (2.7 or higher).
OR
 2. Minimum G.E.D. test score of 550 or higher
OR
 3. Completion of 12 credit hours at HFCC (2.7 or higher)
OR
 4. Transfer credit GPA of 2.7 or higher. (If not achieved, a GPA of 2.7 or higher must be established with 12 credit hours taken at HFCC).
- B. Biology
High school grade-point average of B (3.0) in a one-year laboratory course. This requirement may also be satisfied with the successful completion of BIO 131, Introduction to Biology, or its transfer equivalent with a minimum grade of C (2.0).
- C. Chemistry
High school grade-point average of B (3.0) a one-year laboratory course. This requirement may also be satisfied with the successful completion of CHEM 131, Preparatory Chemistry, or its transfer equivalent with a minimum grade of C (2.0).
- D. Math
High school grade-point average of B (3.0) in a one-year math course. This requirement may also be satisfied with the successful completion of MATH 074, or its transfer equivalent, or its equivalent with a minimum grade of C (2.0).
- E. Placement Tests
Placement testing, required developmental course work, and all admission requirements must be completed before students are considered for admission to the program. This requirement is satisfied by passing the Nursing Entrance Test (NET) offered by the Nursing Division. NET testing requires a minimum composite percentage of 65. Take advantage of free assistance through the Learning Lab.

1. Math Proficiency
Applicants schedule the test. A minimum of 65 is required. The test may be retaken only once before required remediation (MATH 074). Retesting is allowed.

2. Reading Level Ability
The NET reading requirement may be satisfied by passing the test with an instructional level of 55, or greater. All applicants who score below the acceptable level after one retest are required to take developmental course work.

F. Basic Life Support for Healthcare Professionals
All students are required to complete a course in Basic Cardiac Life Support for Healthcare Professionals. This course should be taken between May and July, just prior to entering the nursing program.

G. Completion of ENG 131 and ENG 132 with a 'C' (2.0) or better.

H. Completion of PSY 131 with a 'C' (2.0) or better.

I. Successful completion of a criminal background check and drug screening, according to HFCC policy.

Additional Program Requirements

Completion of the non-nursing required support courses is strongly recommended prior to program entry.

Criminal Background Check and Drug Screen:

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug Screen* is required for all students in EMS programs prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule.

*Students with a history of alcohol related driving offenses and or felony convictions will find it difficult if not impossible to gain employment in health careers.

A required criminal background check is free for those who have resided in Michigan for the past three years.

Those who have not, must pay for a background check through their local police station and the Federal Bureau of Investigation. The process will be explained in Information Sessions for new nursing students. Drug screening must also be paid by the student.

This also is explained during the new student Information Session. Students who are not cleared for clinical through the Physical Examination, the Criminal Background Check and the Drug Screen will not be able to complete the nursing program.

Program Duration Limits/Updates/Changes

Progression and Graduation

The nursing program is designed to keep pace with the times. It is subject to change without notice to comply with requirements of accrediting agencies, clinical facilities, or the College, to meet the changing health care needs of society, and to prepare students for nursing now and for the future. For current information, students should contact the Nursing Office.

All educational experiences are under the direction and guidance of the nursing faculty. Student progress is evaluated in the clinical setting, classroom, and nursing laboratories. Progression in nursing courses is based on a student's:

1. Adherence to program requirements as outlined in the Nursing Student Handbook.
2. Achievement of the minimum grade of C (2.0) for nursing and other required support courses.
3. Competency in math dosage calculation.
4. Competency in pharmacology.
5. Satisfactory clinical performance.

Withdrawal and Readmission

Students who are not successful in a nursing course do not progress to the next nursing course (with the exception of NSG 150/NSG 155 both offered the same semester). Unsuccessful students withdraw from the program. Students who receive less than a C grade in

theory, fail to maintain competency in math dosage calculation, or receive an unsatisfactory grade in clinical practice for any nursing course are unsuccessful. Students not successful in passing a nursing course may be considered for readmission to the nursing program one time only.

All readmission applicants are considered only after first-time applicants are accepted into the course or program. Acceptance for readmission also depends on the following:

1. Applicant's overall performance.
2. Steps taken for remediation.
3. Availability of space.
4. Program duration limits.

Students who are not successful in first-semester nursing courses may reapply to restart the program through the Admissions Office. Readmission into the second, third, or fourth semester is done by petitioning the Associate Dean and nursing faculty after completing an exit interview. After the first semester, students may restart the program one time only.

Students not successful in nursing courses must have an exit interview with the Associate Dean and must indicate in writing their interest in being readmitted to a nursing course sixty days or more in advance of the first day of class and demonstrate that remediation is fulfilled. Students who readmit to a nursing course more than one time must re-enter through recommendation of the Admissions/Readmission Committee and positive faculty recommendation.

Program Duration Limits

All nursing courses taken at Henry Ford Community College or other colleges must be successfully completed within a total of three consecutive calendar years. BIO 233/234, Anatomy and Physiology, or transfer Anatomy and Physiology laboratory courses that were taken five or more years prior to enrollment in beginning nursing courses must be repeated. BIO 233/234

Continued on next page

may be repeated one-time to achieve a passing grade.

Nursing Program Changes

The College reserves the right to change policies in effect at the time of catalog publication. The Nursing Program continuously updates its program of study to meet changing health needs. It is highly suggested that Biology 233 and 234, Anatomy and Physiology I and II, and Psychology 131, Introductory Psychology be completed before admission to the Nursing Program to assist a student’s success. Further up-to-date information concerning curriculum and requirements for admission, progression, and graduation is available to applicants and other students upon request from the Nursing Office in the Health Careers Educational Center Building (H-122)

or the Admissions Assistant for Health Careers/Nursing in the Learning Resource Center.

Registry/Certification/Licensure Exam Information

The nursing program prepares graduates for entry-level positions in the nursing profession. Successful completion of the program of study qualifies graduates to receive an Associate in Applied Science degree and apply to take the National Council Licensure Examination leading to state licensure as a registered nurse.

Applicants should be aware that the Michigan Board of Nursing might deny a license to an applicant who has been convicted of a criminal offense or is addicted to drugs or alcoholic beverages.

Accreditation

The program is approved by the Michigan State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (60 Broadway, New York, New York, 10016).

Student Complaints

Student complaints regarding the Nursing Program may be reported directly to the National League for Nursing Accrediting Commission (NLNAC), 61 Broadway, New York, New York 10016. The telephone number is 212-363-5555.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 65

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
Each nursing course may be repeated only once. If any nursing course is failed after two attempts, the student will no longer qualify for the HFCC nursing program.					
NSG 120 - Nursing and Health Care Systems I	2	D	D		
NSG 126 - Nursing and Self-Care I	7	D/E	D		
NSG 150 - Nursing and Self-Care II	5		D/E	D	D
NSG 155 - Nursing and Self-Care III	5		D/E	D	D
NSG 220 - Nursing and Self-Care IV	10	D/E			
NSG 250 - Nursing and Self-Care V	7		D/E		
NSG 255 - Nursing and Health Care Systems II	3		D/E		

Minimum Credit Hours: 39

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
AH 120 - Pharmacology for Allied Health	3	E	D/E		
BIO 233 - Anatomy and Physiology I	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
PSY 131 - Introductory Psychology	3				
PSY 253 - Life Span Development	3				
SOC 131 - Introduction to Sociology	3				
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II	3				
Computer Literacy Test (CLT 100) or Equivalent Course					

Minimum Credit Hours: 26

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
AH 125 - Computerized Medical Information Systems OR	3	D	D		
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
HCS 131 - Computers in Health Care	3	E/W	E/W	D	E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				

Minimum General Education Hours Required: 9

If the computer competency is not satisfied by testing CLT 100, one of the computer competency courses listed in Computer Literacy must be taken.

Required Course Sequence

Fall I	NSG 120	NSG 126	BIO 233	AH 120
Winter I	NSG 150	NSG 155	BIO 234	PSY 253
Spring/Summer I	SOC 131			
FALL II	NSG 220			
Winter II	NSG 250	NSG 255		

ENG 131/132 and PSY 131 must be completed prior to entering the Nursing Program. It is recommended to complete all other required General Education courses prior to starting the nursing program or during Spring/Summer semesters.

Nursing Care Skills

Certificate of Achievement - Nursing Division

Program Code: NURSE.CSGL.2002

Katherine Bradley	313-845-9661	kbradley@hfc.eduf	Health Careers Education Center 122
Patrice Irving	313-845-6534	pirving@hfcc.edu	Health Careers Education Center 1031

This 11-week program prepares you to work as a Nurse Aide. The program also makes a great foundation for the associate degree program in Nursing. Complete the 16 credits in the Nursing Assistant Program successfully for an immediate job placement. If you begin work as a Nurse Aide, many employers will help you pay for your associate degree!

Nurse Aides assist nurses in rendering care to clients with varying degrees of wellness and illness. They work in acute and chronic settings, as well as the home. The basic nursing skills necessary to perform the duties of a nurse aide are acquired. The course incorporates 90 hours of theory, 128 hours of laboratory practice, and 52 hours in a clinical agency. Mastery of learning principles prevail. Students repeat theory and clinical testing to meet 80% theory and 100% skills competency, within the time parameters of the course. Successful mastery allows testing at the state level to receive the C.E.N.A. designation

Career Opportunities

Students who complete the Nursing Care Skills 100 course work in hospitals, nursing homes and in home health care. They often return to school at a later date to become nurses or other health care workers.

Occupational Exposure/Risk

Applicants who consider a career in health careers should be aware that

during their education and subsequent employment they are likely to be working in situations where exposure to infectious diseases is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines, however, can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the program of study.

Latex Allergies

Since 1989, health care providers and their patients have experienced a rise in allergic responses to latex. Gloves, tubing, and other products used in the care of clients are frequently made from latex. Immediate hypersensitivity responses to natural rubber latex (NRL) occur to one or more NRL proteins. The result can be contact urticaria, angioedema, allergic rhinitis, asthma, or anaphylaxis. Early recognition of sensitization to NRL is crucial to prevent the occurrence of life-threatening reactions in sensitized healthcare workers. Both in school and on the job, exposure to latex consistently occurs. If a student is or becomes sensitized to latex, it is suggested that another career choice be considered. Non-latex gloves or those without powder (reduces airborne particles of NRL) can be purchased, but it is impossible at this time to get

totally away from the problem. The Nursing Division strongly advises those students sensitized or allergic to latex to consult a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue do so at their own risk. Neither the college nor the Nursing Division can be responsible for the problems resulting from such a decision.

*Students with a history of alcohol-related driving offenses and or felony convictions will find it difficult if not impossible to gain employment in health careers. A drug screening and criminal background check are required to enter the program. The criminal background check is free for those who have resided in Michigan for the past three years. Those who have not resided in Michigan for three years or more must pay for a background check through their local police station and the Federal Bureau of Investigation. The process will be explained in Information Sessions in the Nursing Skills Program. Drug screening must also be paid by the student. This also is explained during the new student Information Session. Students who are not cleared for clinical placement through the Physical Examination, the Criminal Background Check and the Drug Screen will not be able to complete the NCS 100 course.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
NCS 100 - Competency Evaluated Nurse Aide	16	D	D	D	D
Minimum Credit Hours:	16				

Nursing for LPNs

Associate in Applied Science - Nursing Division

Program Code: NURLP.AAS.2002

Katherine Howe
Katherine Bradley

313-845-6366
313-845-9635

khowe@hfcc.edu
kbradley@hfcc.edu

Health Careers Education Center 120J
Health Careers Education Center 122

LPN-ADN students who have attended an accredited LPN program and who have an active Michigan PN license to practice are welcome to apply to the nursing program at HFCC as advanced placement students.

Licensed Practical Nurses may earn credit toward their Associate Degree in Nursing by written examination and demonstration of clinical competence, submission of a portfolio, or the taking of an accelerated track in selected courses. Each applicant must meet the minimum requirements for acceptance into the Nursing program. Reasonable modifications of the requirements may be made by the Facilitator of the LPN Advanced Placement program or the Associate Dean of Nursing.

Interested students should contact the LPN-ADN Facilitator to inquire about program details and how you can make a smooth transition into the associate degree nursing program. Contact: khowe@hfcc.edu or 313-845-6366.

Career Opportunities

The health care industry in the region is and will continue to be one of the largest employers of graduates in Southeastern Michigan. Opportunities for nursing exist in hospitals, clinics and home health care. The average starting salary for HFCC graduates exceeds the national average.

According to the Bureau of Labor Statistics the employment of registered nurses is expected to grow faster than the average for all occupations through 2012. In fact, more new jobs are expected to be created for RNs than any other occupation (US Bureau of Labor and Statistics).

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC.

Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Eastern Michigan University
- Madonna University
- Michigan State University
- Oakland University
- University of Detroit Mercy
- University of Michigan - Ann Arbor
- Wayne State University

Occupational Exposure/Risk

Applicants who consider a career in nursing should be aware that during the course of their nursing education

and subsequent employment they are likely to be working in situations where exposure to infectious diseases is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines, however, can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the nursing program of study.

Latex Allergies

Since 1989, health care providers and their patients have experienced a rise in allergic responses to latex. Gloves, tubing, and other products used in the care of clients are frequently made from latex. Immediate hypersensitivity responses to natural rubber latex (NRL) occur to one or more NRL proteins. The result can be contact urticaria, angioedema, allergic rhinitis, asthma, or anaphylaxis. Early recognition of sensitization to NRL is crucial to prevent the occurrence of life-threatening reactions in sensitized healthcare workers. In nursing, both in school and on the job, exposure to latex consistently occurs. If a student is or becomes sensitized to latex, it is suggested that another career choice be considered. Non-latex gloves or those without powder (reduces airborne particles of NRL) can be purchased, but it is impossible at this time to get totally away from the problem. The Nursing Division strongly advises those students sensitized or allergic to latex to consult a physician for guidance on the merits of continuing in a health care career.

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NRL sensitized students who choose to continue in the nursing program do so at their own risk. Neither the college nor the Nursing Division can be responsible for the problems resulting from such a decision.

Admission Requirements/Eligibility

In order to be admitted into the nursing program certain procedures must be followed and academic requirements fulfilled. Applicants must first be admitted to the College and designate Nursing as their curriculum. Applicants must have a high school grade-point average of 2.7 or higher. If any college courses have been taken, a cumulative grade-point average of 2.7 or higher is required. The program has a limited enrollment and admits the bulk of its students in the fall semester. A small group of students is admitted for the winter semester. Admission is on a first-qualified, first-served basis. Students are encouraged to complete the admission requirements as early as possible. The three stages for admission to the Nursing program are:

1. Applicants obtain copies of the specific admission requirements from the Admissions Office.
2. Applicants must meet the admission requirements.
3. Applicants are invited to and must attend pre-enrollment and orientation meetings scheduled by the Associate Dean of Nursing. Final acceptance is contingent upon fulfilling and maintaining minimum program requirements and submitting proof of the following by the deadline dates:
 - A. Health insurance
 - B. Physical examination
 - C. Required immunizations
 - D. BLS certification for health care providers

ADMISSION REQUIREMENTS

Education

- A. GPA (Most current course of study is considered)
 1. High School academic grade-point average (2.7 or higher).
 OR

2. Minimum G.E.D. test score of 550 or higher
OR
3. Completion of 12 credit hours at HFCC (2.7 or higher)
OR
4. Transfer credit GPA of 2.7 or higher. (If not achieved, a GPA of 2.7 or higher must be established with
12 credit hours taken at HFCC).

B. Biology

High school grade-point average of B (3.0) in a one-year laboratory course. This requirement may also be satisfied with the successful completion of BIO 131, Introduction to Biology, or its transfer equivalent with a minimum grade of C (2.0).

C. Chemistry

High school grade-point average of B (3.0) a one-year laboratory course. This requirement may also be satisfied with the successful completion of CHEM 131, Preparatory Chemistry, or its transfer equivalent with a minimum grade of C (2.0).

D. Math

High school grade-point average of B (3.0) in a one-year math course. This requirement may also be satisfied with the successful completion of MATH 074, or its transfer equivalent, or its equivalent with a minimum grade of C (2.0).

E. Placement Tests

Placement testing, required developmental course work, and all admission requirements must be completed before students are considered for admission to the program. This requirement is satisfied by passing the Nursing Entrance Test (NET) offered by the Nursing Division. NET testing requires a minimum composite percentage of 65. Take advantage of free assistance through the learning lab.

1. Math Proficiency

Applicants schedule the test. A minimum of 65 is required. The test may be retaken only once before required remediation (MATH 074). Retesting is allowed.

2. Reading Level Ability

The NET reading requirement may be satisfied by passing the test with an instructional level of 55, or greater. All applicants who score below the acceptable level after one retest are required to take developmental course work.

F. Basic Life Support for Healthcare Professionals

All students are required to complete a course in Basic Cardiac Life Support for Healthcare Professionals. This course should be taken between May and July, just prior to entering the nursing program.

G. Completion of ENG 131/ ENG 132 with a "C" (2.0) or better.

H. Completion of PSY 131/253 with a "C" (2.0) or better.

I. Successful completion of a criminal background check and drug screening, according to HFCC policy.

Additional Program Requirements

All LPN-ADN students must have BIO 233/234, PSY 131/253, and ENG 131/132 completed successfully prior to entry to the nursing program.

In addition LPNs must submit to the Nursing Program Office:

1. The LPN Advanced Placement application.
2. An official transcript from the applicant's practical nursing school.
3. Proof of a current LPN Michigan license.
4. Documentation of current nursing experiences.

Specific procedures for the Advanced Placement track may be obtained from the Nursing Office located in the Health Careers Placement Center (H-122).

All nursing students must pass a drug test and a criminal background check. If you have lived in Michigan for the past three years, the background check is free. If you have not resided in Michigan for the past three years, you must pay for a background check through your local police station and the Federal Bureau of Investigation. You must also pay for drug testing.

The paperwork and process will be explained to you when you meet with the L.P.N. Advanced Placement Facilitator, Ms. Katherine Howe. If you do not pass your Physical examination, Criminal Background Check, and Drug Test, you cannot take nursing courses, as you are ineligible to enter the clinical area. Clinical experience is required to successfully complete the nursing program.

Progression and GraduationThe nursing program is designed to keep pace with the times. It is subject to change without notice to comply with requirements of accrediting agencies, clinical facilities, or the College, to meet the changing health care needs of society, and to prepare students for nursing now and for the future. For current information, students should contact the Nursing Office.

Program Duration Limits/Updates/Changes

All educational experiences are under the direction and guidance of the nursing faculty. Student progress is evaluated in the clinical setting, classroom, and nursing laboratories. Progression in nursing courses is based on a student's:

1. Adherence to program requirements as outlined in the Nursing Student Handbook.
2. Achievement of the minimum grade of C (2.0) for nursing and other required support courses.
3. Competency in math dosage calculation.
4. Competency in pharmacology.
5. Satisfactory clinical performance.

Withdrawal and Readmission

Students who are not successful in a nursing course do not progress to the next nursing course (with the exception of NSG 150/NSG 155 both offered the same semester). Unsuccessful students withdraw from the program. Students who receive less than a C grade in theory, fail to maintain competency in math dosage calculation, or receive an unsatisfactory grade in clinical

practice for any nursing course are unsuccessful. Students not successful in passing a nursing course may be considered for readmission to the nursing program one time only.

All readmission applicants are considered only after first-time applicants are accepted into the course or program. Acceptance for readmission also depends on the following:

1. Applicant's overall performance.
2. Steps taken for remediation.
3. Availability of space.
4. Program duration limits.

Students who are not successful in first-semester nursing courses may reapply to restart the program through the Admissions Office. Readmission into the second, third, or fourth semester is done by petitioning the Associate Dean and nursing faculty after completing an exit interview. After the first semester, students may restart the program one time only.

Students not successful in nursing courses must have an exit interview with the Associate Dean and must indicate in writing their interest in being readmitted to a nursing course sixty days or more in advance of the first day of class and demonstrate that remediation is fulfilled. Students who readmit to a nursing course more than one time must re-enter through recommendation of the Admissions/Readmission Committee and positive faculty recommendation.

Program Duration Limits

All nursing courses taken at Henry Ford Community College or other colleges must be successfully completed within a total of three consecutive calendar years. BIO 233/234, Anatomy and Physiology, or transfer Anatomy and Physiology laboratory courses that were taken five or more years prior to enrollment in beginning nursing courses must be repeated. BIO 233/234 may be repeated one-time to achieve a passing grade.

Nursing Program Changes

The College reserves the right to change policies in effect at the time of catalog publication. The Nursing Program continuously updates its program of study to meet changing health needs. It is highly suggested that Biology 233 and 234, Anatomy and Physiology I and II, and Psychology 131, Introductory Psychology be completed before admission to the Nursing Program to assist a student's success. Further up-to-date information concerning curriculum and requirements for admission, progression, and graduation is available to applicants and other students upon request from the Nursing Office in the Health Careers Educational Center Building (H-122) or the Admissions Assistant for Health Careers/Nursing in the Learning Resource Center.

Registry/Certification/Licensure Exam Information

The nursing program prepares graduates for entry-level positions in the nursing profession. Successful completion of the program of study qualifies graduates to receive an Associate in Applied Science degree and apply to take the National Council Licensure Examination leading to state licensure as a registered nurse.

Applicants should be aware that the Michigan Board of Nursing might deny a license to an applicant who has been convicted of a criminal offense or is addicted to drugs or alcoholic beverages.

Accreditation

The program is approved by the Michigan State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (60 Broadway, New York, New York, 10016).

Student Complaints

Student complaints regarding the Nursing Program may be reported directly to the National League for Nursing Accrediting Commission

Continued on next page

(NLNAC), 61 Broadway, New York,
New York 10016. The telephone number
is 212-363-5555

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 65

Required Core Courses

Each nursing course may be repeated only once. If any nursing course is failed after two attempts, the student will no longer qualify for the HFCC nursing program.

	Credit Hours	Fall	Winter	Spring	Summer
NSG 120 - Nursing and Health Care Systems I	2	D	D		
NSG 123 - Intro. to Nursing Systems and Self-Care I Skills (for LPN Advanced Placement)	4.5				
NSG 124 - Intro. to Nursing Systems and Self Care I Theory (for LPN Advanced Placement)	2.5	E			
NSG 150 - Nursing and Self-Care II	5		D/E	D	D
NSG 155 - Nursing and Self-Care III	5		D/E	D	D
NSG 220 - Nursing and Self-Care IV	10	D/E			
NSG 250 - Nursing and Self-Care V	7		D/E		
NSG 255 - Nursing and Health Care Systems II	3		D/E		

Minimum Credit Hours: 9

Required Support Courses

	Credit Hours	Fall	Winter	Spring	Summer
AH 120 - Pharmacology for Allied Health	3	E	D/E		
BIO 233 - Anatomy and Physiology I	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
PSY 131 - Introductory Psychology	3				
PSY 253 - Life Span Development	3				

Minimum Credit Hours: 17

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
AH 125 - Computerized Medical Information Systems OR	3	3	D	D	
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
HCS 131 - Computers in Health Care	3	E/W	E/W	D	E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition AND	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II	3				

Minimum General Education Hours Required: 9

If the computer competency by testing CLT 100, one of the computer competency courses listed in Computer Literacy must be taken.

Required Course Sequence

Fall I		NSG 120	NSG 123	NSG 124	AH 120
Winter I	NSG 150	NSG 155			
Spring I	SOC 131				
Fall II		NSG 220			
Winter II	NSG 250	NSG 255			

ENG 131/132, PSY 131/253 and BIO 233/234 must be completed prior to entering the Nursing Program. It is recommended to complete all other required General Education courses prior to starting the nursing program or during the Spring/ Summer semesters. All support courses must be completed successfully in the required semester or before.

Office Administration

Certificate of Achievement - Business and Economics Division
Program Code: BAIMOFFADM.CMLT.2003

Ms. Elaine Saneske

313-845-9704

esaneske@hfcc.edu

Reuther Liberal Arts Building 304

This certificate program is intended to provide an individual with the skills to assume an administrative role in the modern office environment of today. The program combines instruction in the most commonly used computer software packages with training in critical communication and management skills. The program finishes with a capstone course where all aspects of the program are integrated to give the student a more

comprehensive understanding of how contemporary offices operate.

In working towards the certificate, students can earn a Certificate in Computer Software Applications. Students will receive training in Windows operating system software; the Internet; and word processing, spreadsheet, database management, presentation, and web pages application software. The certificate can also be

used as a building block towards the achievement of an Associate in Business degree in the Administrative and Information Management program. Individuals who are already employed may find that the certificate increases the opportunity for promotion.

The certificate requires a total of 30 credit hours.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 30

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
BCA 106 - Introduction to Windows	2	D/E	D/E	D/E	D/E
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
BCA 143 - Word Processing	3	D/E	D/E		
BCA 145 - Spreadsheet Applications	3	D/E	D/E	E	
BBA 110 - Business Language Skills	3	D/E	D/E		
BBA 133 - Business Behavior and Communication	3	D/E	D/E	E	
BBA 231 - Business Office Communications	3	D/E	D/E		
BBA 235 - Office Administration Practicum	4		D/E		
MGT 230 - Principles of Management	3	D/E	D/E	D/E	D/E
MGT 231 - Supervision and Teambuilding	3	D/E	D/E		
Minimum Credit Hours:	30				

Course Sequence Recommended

Recommended Course Sequence Option One

Fall I	BBA 110	BCA 106	BCA 140	BCA 143	MGT 230
Winter I	BBA 133	BBA 231	BBA 235	BCA 145	MGT 231

Recommended Course Sequence Option Two

Fall I	BBA 110	BCA 106	BCA 140	
Winter I	BBA 231	BCA 143	BCA 145	BBA 133
Fall II	BBA 235	MGT 230	MGT 231	
Winter II	BBA 235			

Course Sequence Option One is comprised of the first semester of 14 credit hours and the second semester of 16 credit hours.

Course Sequence Option Two is comprised of the first semester of 8 credit hours, second semester of 6 credit hours, third semester of 9 credit hours, and fourth semester of 7 credit hours.

Paramedic

Associate in Applied Science - Health Careers Division

Program Code: PAMED.AAS.2002

Shannon Bruley
Ronald Bodurka

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313-845-9877

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Health Careers Education Center 133L
Health Careers Education Center 132

Emergency Medical Technology offers an exciting and challenging health-care career for individuals interested in providing emergency care in the pre-hospital or hospital emergency department setting.

Due to health-care reform issues and the growing recognition of the Emergency Medical Technician as a professional member of the health-care team, career opportunities for Emergency Medical Technicians of all levels of licensure are developing and expanding.

Basic Emergency Medical Technicians are trained in basic life support procedures and the principles of care and transportation of the sick and injured. Basic EMT licensure qualifies the student for an entry-level position as an emergency care provider with municipal and private ambulance services as well as some hospital emergency departments. The basic EMT license is often a prerequisite for employment as a firefighter. (Progressive fire departments in our service area require a paramedic license. An EMT Basic license is the first step in meeting this criteria.)

Paramedics are highly trained members of the health-care community often responsible for bringing life-saving diagnostic and treatment skills to the patient at the scene of an emergency. Paramedics receive intense training in EKG interpretation, emergency pharmacology, and advanced life-support procedures. The scope of practice of the paramedic is rapidly expanding, creating a number of new employment opportunities.

The EMS Program at HFCC offers the options of certificates of achievement in Basic EMT and Paramedic, or the

option of an associate in applied science degree. The program is designed to meet the needs of students interested in entry-level training as well as those seeking career advancement.

The HFCC Paramedic Program has been awarded the highest level of approval through the Division of Emergency Medical Services, Michigan Department of Community Health.

Career Opportunities

Paramedics are in high demand. According to the U.S. Department of Labor, Bureau of Labor Statistics, "Employment of emergency medical technicians and paramedics is expected to grow faster than the average for all occupations through 2012" (Occupational Outlook Handbook, 2004-2005 Reprint). For additional information, view the following web sites:

- U.S. Department of Labor, Bureau of Labor Statistics, internet: <http://www.stats.bls.gov/oco/reprints/ocor009.pdf>
- National Association of Emergency Medical Technicians, internet: <http://www.naemt.org>
- National Registry of Emergency Medical Technicians, internet: <http://www.nremt.org>
- National Highway Transportation Safety Administration, EMS Division, internet: <http://www.nhtsa.dot.gov/people/injury/ems>

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC.

See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Eastern Michigan University
- Siena Heights University
- University of Michigan - Dearborn

Occupational Exposure/Risk

In emergency medical services, both in school and on the job, exposure to infectious diseases and latex may be minimal to moderate depending on the setting in which you are working. Exposure to illness and infectious disease is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines, can reduce the risk to a minimum. Persons who have latex sensitivity or allergies should consult with a physician prior to entering the program for guidance on the merits of continuing in a health care career.

Admission Requirements/Eligibility

The first year of studies for the Emergency Medical Services degree

Continued on next page

is open enrollment. Students should place into ENG 131 in order to be most successful. Students wishing to enter the second year of studies, which includes the paramedic core, must apply through the EMS office in Health Careers. This level of studies begins every FALL semester. Acceptance to the college is granted to most applicants and does not constitute nor guarantee admission to the paramedic core studies. Early advising for course sequencing is highly recommended. Students are accepted into the program based on a “first qualified, first accepted” basis. All potential placements must be registered on the wait list in the EMS office.

For EMS 200 level courses, students will need to satisfy the following prerequisites

1. EMT-Basic MI License (with a current National Registry Certificate preferred), BIO 233, BIO 234, AH 100, AH 120 & AH 105 (or equivalent)*
2. ASSET Math Score of 39 on the Numerical Skill Unit or COMPASS Pre-Algebra score of 39 or successful completion of Math 075.
3. ASSET Reading Score of 43 or COMPASS reading score of 84 or successful completion of ENG 081.

*A grade of C or better is required for successful completion of all courses (core and support) required in the EMS program. Students not receiving a C or better cannot continue in the program until they have successfully repeated the course(s) failed.

Students who do not successfully complete all co-requisite courses in the EMS Program cannot continue with that same class of students. Therefore, students who fail must repeat all coursework (200+ and up) from the beginning up to the point that they failed, and then progress in sequence with the new class of paramedic students. Students who need to repeat paramedic must request to be put on the waiting list for the following year. Re-admittance is subject to seat capacity and prior performance.

Health Appraisal

Each student is required to complete a Health Appraisal Form, copies of which are available in the Health Careers Office. This appraisal includes a physical, blood titers (to validate immunity to childhood immunizations), TB test, Hepatitis B and boosters if necessary. The cost for this appraisal is in addition to the basic tuition and fee schedule.

Students in the EMS program are expected to meet the same physical and mental requirements as emergency medical technicians. A representative job profile, also available in the Health Careers Office, lists the specific physical and mental requirements as well as the environmental conditions of the occupation.

Criminal Background Check and Drug Screen

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug Screen* is required for all students in EMS programs prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule.

*Students with a history of alcohol related driving offenses and or felony convictions will find it difficult if not impossible to gain employment in public safety careers.

For questions regarding this policy, contact the Health Careers Office.

Students who are not cleared for clinical through the Health Appraisal, Criminal Background Check and Drug Screen will not be able to complete the EMS education programs and will not be eligible to receive the subsequent EMS certifications/licenses.

Uniforms

Uniform shirts are provided through the program at the Basic EMT level. Pants, shoes, work belt, stethoscope, and National Registry exam fees are in addition to the basic tuition and fee schedule.

Job Placement

Information about career placement and job success is available through either the Health Careers Office or the College’s Job Placement Office.

Dual Paramedic/Nursing Candidates:

Paramedic candidates dually preparing for nursing will need to complete three additional courses as follows: PSY 131 and PSY 253 and SOC 131. Nursing candidates dually preparing for EMS studies will need to complete three additional courses as follows: AH 100, AH 120, AH 105.

Program Duration Limits/Updates/Changes

Once a student is admitted/enrolled into the paramedic portion of the EMS degree, that student must complete with that same group of students. If for any reason a student must stop attending after successfully completing any portion thereof, and wish to complete, the student must reapply through the EMS office for the desired year of return. Because of the rapid changes in healthcare, legislation, and resulting course content, successfully completed EMS classes must be repeated in order to assure competence. This applies to all second year students who start, stop, and then return for completion. Early advising through the EMS office is essential.

Certification

If an individual is a convicted felon, it could disqualify him/her from obtaining the necessary National Registry Certification. For the specific National Registry EMS Policy, go to http://www.nremt.org/about/policy_felony.asp

Licensing

After obtaining a National Registry Certificate, individuals can apply for a Michigan Licensure, which is necessary to practice EMS as a profession. If an individual is a convicted felon, questions regarding potential licensure should be directed to the Michigan Department of Community Health, Bureau of Health Professions, or go to

the following web site: <http://www.michigan.gov/mdch>.

Accreditation

The Emergency Medical Services program is accredited by the Michigan Department of Community Health,

Bureau of EMS. Graduates of the program are eligible to sit for the national registry exams for the designation of Nationally Registered Emergency Medical Technician-Basic or Nationally Registered Emergency Medical Technician-Advanced.

Courses

Required Core Courses are listed in the order in which the cores must be taken. Corequisites are tagged together with the word, "AND". Careful course sequencing is essential.

Minimum Number of Credits To Graduate (Including Options/Electives): 76

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
EMS 100 - EMT - Basic Fundamentals AND	9	D/E	D/E		
EMS 106 - EMT - Basic Procedures AND	2.5	D/E	D/E		
EMS 109 - EMT - Basic Clinical Externship	2	D/E/W	D/E/W		
EMS 200 - Paramedic I AND	3	E			
EMS 210 - Paramedic II AND	3	E			
EMS 205 - Paramedic Lab I AND	3	E			
EMS 290 - Advanced Clinical I	4	D/E/W			
EMS 220 - Paramedic III AND	4		E		
EMS 230 - Paramedic IV AND	4		E		
EMS 215 - Paramedic Lab II AND	4		E		
EMS 295 - Advanced Clinical II	4		D/E/W		
EMS 240 - Paramedic V AND	3			E	
EMS 225 - Paramedic Lab III AND	2			E	
EMS 299 - Advanced Clinical III	4			D/E/W	
Minimum Credit Hours:	51.5				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
AH 105 - Basic Life Support for Healthcare Providers Highly recommended before taking any course with an EMS prefix	0.5	E/W	W	E	E
AH 100 - Medical Terminology Highly recommended before taking any course with an EMS prefix	4	D/E/W	D/E/W	D/E	D
AH 120 - Pharmacology for Allied Health	3	E	D/E		
BIO 233 - Anatomy and Physiology I	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
Minimum Credit Hours:	15.5				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Continued on next page

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test	0	D/E/W	D/E/W	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				

Minimum General Education Hours Required: 9

CLT 100 is the recommended option in order to meet the Computer Literacy requirement since it does NOT ADD to the total number of required credit hours. Students may take one of the other course options which meet this requirement but it is not included in the 76 hours to graduate.

Although it is not required or included in the total hours for an AAS in EMS, the EMS program highly recommends that all EMS students take a Wellness course. HPEA 117 and HPE 155 are excellent options.

Recommended Course Sequence

Term 1	AH 105	AH 100	ENG 131	
Term 2	EMS 100	EMS 106	EMS 109	
Term 3	AH 120	BIO 233	ENG 132	
Term 4	BIO 234	POLS 131	CLT 100	
Fall II	EMS 200	EMS 210	EMS 205	EMS 290
Winter II	EMS 220	EMS 230	EMS 215	EMS 295
Spring II	EMS 240	EMS 225	EMS 299	

CLINICAL

Basic:

We require two rotations in the field, usually 8 am to 8 pm, with Monday through Sunday scheduling options and two rotations in the hospital emergency room, with scheduling options available 24/7. Clinical for EMT Basics will be explained, thoroughly, during the EMS 100 course in the first week of classes.

Paramedic:

EMS clinicals are made available at the discretion of our host EMS Departments and Hospitals. Students are encouraged to keep flexible schedules during school to accommodate the advanced clinical experience. At the paramedic level (EMS clinical 290, EMS 295 and EMS 299), many of the rotations outside of the ER, are daytimes and during the traditional work week. Examples of this are OR and Cardiac Cath labs. Clinical is explained, in depth, at the Paramedic orientation in August, before the FALL II start of paramedic courses.

Clinical courses, basic and advanced, show TBA in the Time/Day area of the schedule. We try very hard to individualize clinical rotations to each student's needs.

The Second year:

Sequencing for EMS 200+ level course-work is not optional. Paramedic (EMS 200+) courses begin in Fall and end in Spring without exception. Prior to that, courses can be taken in any course/ semester order as long as the EMS 100, EMS 106 and EMS 109 courses are taken as co-requisites.

Tech. Prep. Public Safety Pathway (PSP) completers from the Downriver Career Tech. Program:

In order to receive credits, you must complete (with a C or better) at least six credit hours of 100+ level course-work (at HFCC) for each year of HS PSP credit earned. Bring a student copy of your HFCC transcript along with a copy of your FINAL HS transcript to the EMS Program Manager. This is necessary to process a request for credits to be posted by the Office of the Registrar. Do not ask your Counselor, Health Career Advisor, or Instructor to post credits. This process must be initiated by the EMS Program Manager. Do not REPEAT courses in which you have earned credit through the PSP program. If you are not sure if you earned credit, contact the EMS Program Manager before you schedule courses. The courses in the PSP Program are as follows:

Year 1- CRJ 131 (3 credit hours), MFR (5 credit hours, no transfer equivalent)*

Year 2- CRJ 135 (3 credit hours), AH 100 (4 credit hours), and EMS (8 credit hours, no transfer equivalent)*

*Successful completion of MFR and EMS will transfer as 13 credit hours in EMS 100, EMS 106, and EMS 109.

Pharmacy Technician

Certificate of Achievement - Health Careers Division
Program Code: PHARM.CMLT.2004

T. Mozug	313-317-6548	tmozug@hfcc.edu	Health Careers Education Center 132
R. Bodurka	313-845-9877	rbodurka@hfcc.edu	Health Careers Education Center 132

The Pharmacy Technician Program is a Level II (Complex Skills Certificate) program. This one-year certificate program is designed to prepare professional multi-skilled individuals for employment as an entry-level pharmacy technician in hospital, retail, community or other institutional pharmacies. Clinical duties are emphasized in the classroom and laboratory with directed practical experience in selected hospital, out patient, home infusion, long-term care and compounding pharmacies.

Pharmacy technicians are skilled health specialists who, under the direction and supervision of a pharmacist, assist in the varied activities of a pharmacy department. The pharmacy technician may be responsible for:

- A. Preparing and dispensing medications in accordance with standard procedures and laws under the supervision of a registered pharmacist.
- B. Transcribing and processing physician orders.
- C. Preparing intravenous admixtures, including chemotherapy medications.
- D. Maintaining patient profiles and medication records electronically.
- E. Preparing bulk formulations and compounding.
- F. Maintaining inventories of pharmaceutical supplies.
- G. Communicating effectively with patients and members of the health care team.

The Pharmacy Technician Program requires approximately 37 credits to earn a certificate. Students in the program will have the opportunity to practice their skills using pharmacy specific equipment and supplies. The technical course sequence leading to the externship begins only once per year in the fall semester. Externships

may be taken in the spring, summer, or fall semester. The externship rotations are arranged and supervised by the program's technical coordinator. The program is affiliated with sixteen hospital pharmacies, twelve or more out patient (retail and community) pharmacies, and several home infusion and long term care pharmacies in this region.

HFCC offers its students two distinct pharmacy options. One option is the is a one-year Pharmacy Technician Program. The technician curriculum is designed to prepare the students for employment assisting pharmacists after completion of the program. The courses in the Pharmacy Technician Program are designed to prepare the students for employment immediately and not designed for transfer nor intended for those students primarily interested in applying to pharmacy schools.

If a student's primary intent is on becoming a pharmacist, then the second pharmacy option at HFCC which is the Associate in Science Pre-Pharmacy Program is the curriculum that should be followed. The Pre-Pharmacy Academic Transfer Program is designed for the transfer of course work for those students primarily interested in applying to pharmacy schools.

Career Opportunities

According to recent reports from the U.S. Bureau of Labor Statistics, employment opportunities for pharmacy technicians in this region are expected to remain strong through this decade. The shortage of pharmacists and pharmacy technicians is expected to continue as the health services industry expands because of technological advances in medicine

and an aging population. In addition, employment growth will be driven by the increase in the number of out patient pharmacies, home infusion pharmacies, compounding pharmacies and other pharmacy related facilities that need skilled support personnel, particularly pharmacy technicians.

There are many career opportunities available to pharmacy technicians within the pharmaceutical industry. Some of the career options for technicians include: sales representative technician, quality assurance technician, managed care technician, and computer information system technician. A pharmacy technician with sufficient training and experience may be advanced to a supervisor position (senior pharmacy technician). The responsibilities may include completing pharmacy technician schedules, training new pharmacy technicians, and assisting the pharmacist in training student technicians.

HFCC's Job Placement Office maintains a listing of available pharmacy technician positions registered with the College. It also assists PHT students in finding employment.

General information about career placement and job success is available through either the Health Careers Office or the College's Placement Office. In addition, salary expectations are discussed during the PHT program pre-acceptance interview.

Occupational Exposure/Risk

Applicants considering a career in pharmacy, should be aware that during their course of study and in subsequent employment in the field, they are likely to work in situations where exposure to infectious disease is possible. This is an occupational risk for all health

care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines, can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the program of study.

Admission Requirements/Eligibility

The Pharmacy Technician program begins each year with the fall semester. Early application is essential for counseling and admission into the program. In addition to the general college application, a separate specific application for the Pharmacy Technician program is required and processed through the Admissions Office. Acceptance into the College is generally granted to most applicants, but this does not constitute or guarantee admission to the program. Final approval to enroll in the program comes from the Health Careers division. An interview with the program's Technical Coordinator is required.

The Admission Requirements for the Pharmacy Technician Program are:

- A minimum high school academic grade point average of "C+" (2.25). This requirement may also be satisfied by completion of at least 12 college credit hours with an academic grade point average of 2.25 (non-skill courses) for both transfer students and Henry Ford Community College students.
- An ASSET/COMPASS Reading Score of 43/84 or successful completion of ENG 081.
- An ASSET/COMPASS test score sufficient to qualify for MATH 080 or higher.
- Typing proficiency of at least 25 words per minute. This requirement may be satisfied with successful completion ("C" or better) of a keyboarding course.

Students in the Pharmacy Technician program are expected to meet the same physical and mental requirements as an employed pharmacy technician. A representative Pharmacy Technician Job Profile is available upon request

from the Health Careers Office or during the interview with the program's Technical Coordinator. The job profile lists the specific physical and mental requirements as well as the environmental conditions of the occupation. Each student must have a physical examination and vaccination record on file before admission to externship rotations. The Health Appraisal Form addresses the issue of normal color perception, eye-hand coordination, and any history of substance abuse.

Criminal Background Check and Drug Screen

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug Screen is required for all students in PHT program prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule. For questions regarding this policy, contact the Health Careers Office.

Students who are not cleared for clinical through the Health Appraisal, Criminal Background Check and Drug Screen will not be able to complete the program.

Additional Program Requirements

NOTE: Required core courses can be taken only after formal admission to the PHT program through the Health Careers Division.

All educational experiences are under the guidance of the PHT program. Student progress is evaluated in the classroom, laboratory and clinical setting throughout the program. Progression in the program is based upon the student meeting the following requirements:

1. Adherence to the program requirements outlined in the PHT Student Handbook.
2. Achievement of a minimum grade of C or better in all PHT and required courses.
3. Maintenance of an overall cumulative grade-point average of 2.0 or better

The Program Application Process

STEP 1

Select your career program

- It is recommended that each applicant meet with a Health Careers Advisor (313) 845-9877 to discuss program options and then to create an academic plan to qualify for the selected program. It is suggested that you first select and apply to your program of choice before you begin any of the prerequisite course work.

STEP 2

Apply to the program

- First time applicants to HFCC will indicate the program selection on the application to the college. This process automatically applies you to your program of choice.
- Current HFCC students selecting to change their program of study to a health career program must complete a specific program application. Program applications are available in the Health Career/Nursing Admissions office located in the Counseling Office, room LRC 117 B and in the Health Careers Office in the Health Careers Education Center.

STEP 3

Deliver information and track application

- It is the student's responsibility to make certain that all transcripts, grades and/or necessary records are submitted to the Health Careers/Nursing Admissions office, room LRC 117 B.
- Program applicants transferring college credit from another institution must have an official transcript mailed to: Henry Ford Community College, Transfer Evaluation, 5101 Evergreen Road, Dearborn, MI 48128.
- Applicants must also submit a student copy of all of their transcripts to the Health Careers/Nursing Admissions office.
- It is strongly recommended that you personally track your specific program application through the Health Careers/Nursing Admissions office, room LRC 117 B, (313) 317-6525.
- Students are strongly encouraged to monitor their program admission status via the WebAdvisor Program Evaluation link.

Continued on next page

- It is imperative that all student contact information such as phone numbers and addresses is kept current through the Registration office. If we are unable to contact you, we then will move to the next qualified applicant.

STEP 4**Qualifying and admission**

- Students are qualified when all of the program's admission criteria have been satisfied.
- Applicants are then admitted on a first qualified, first accepted basis for available positions. A student's application date to the program either by indication on the HFCC application or the separate program application may be used to determine placement on the qualified list if necessary. The earlier you apply the better.

Program Duration Limits/Updates/Changes

Transfer of Pharmacy Technician courses from other institutions will be accepted only from programs accredited by the American Society of

Health-System Pharmacists and will be evaluated on an individual basis.

All PHT courses must be successfully completed within two (full-time) or three (part-time) consecutive calendar years.

HFCC continuously attempts to improve each program, and as a result courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration.

Registry/Certification/Licensure Exam Information

Upon completion of the accredited program, students will be eligible for the Pharmacy Technician Certification Board examination (PTCB) to earn the Certified Pharmacy Technician (CPhT) credential. This program is one of three college based programs in Michigan to maintain accreditation through ASHSP. Some local area hospital pharmacy employers require pharmacy technicians to be certified (CPhT).

In addition, out patient pharmacy employers prefer pharmacy technicians who are CPhTs or at least CPhT eligible. The CPhT credential is a national certification recognized by employers across the country.

Any questions regarding the national certification exam or qualifications regarding the national exam should be directed to the PTCB at **202- 429-7576**.

Accreditation

The Pharmacy Technician Program is accredited through the American Society of Health-System Pharmacists (ASHSP).

Accreditation Agency:
American Society of Health-Systems Pharmacists
7272 Wisconsin Avenue
Bethesda, Maryland 20814
301- 657-3000

Courses

The Pharmacy Technician Program may be completed in one year (full time) or two years (part-time). In either case, careful course sequencing is required and each student must satisfy the program's admission criteria.

There are specific admission criteria which must be satisfied in order to be admitted into this program; however, students are permitted to take the required support courses prior to being formally accepted and admitted into the program. AH 100, MATH 101, HCS 131, and BBA 232 or MOA 170 may be taken prior to formal acceptance into the program.

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
PHT 100 - Introduction to Pharmacy Technology	2	D			
PHT 124 - Pharmacology for Pharmacy Technicians I	3	D			
PHT 125 - Pharmacology for Pharmacy Technicians II	3		D		
PHT 130 - Pharmacy Software Applications	1	D			
PHT 150 - Pharmaceutical Calculations	3		D		
PHT 165 - Issues in Pharmacy	2		D		
PHT 175 - Applied Pharmacy Systems	4		D		
PHT 119 - Out Patient Pharmacy Externship	2		D/E		
PHT 193 - Pharmacy Externship	3	D		D	D

Minimum Credit Hours: 23

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
BBA 110 - Business Language Skills OR	3	D/E	D/E		
MOA 170 - Medical Correspondence	3		D		
HCS 131 - Computers in Health Care	3	E/W	E/W	D	E
MATH 101 - Mathematics for Health Careers	4	D	D		
AH 100 - Medical Terminology	4	D/E/W	D/E/W	D/E	D
Minimum Credit Hours:	14				

Recommended Course Sequence						
Fall I	AH 100	PHT 100	PHT 124	PHT 130	HCS 131	MATH 101
Winter I	PHT 119	PHT 125	PHT 150	PHT 165	PHT 175	BBA 110
Term 3	PHT 193					

The required core courses must be taken in the sequence listed. The required support courses must be taken in the sequence or taken earlier in order to lighten the student's course load. Students may complete this program in two years on a part-time basis; however, careful scheduling is required.

All educational experiences are under the guidance of the PHT program. Student progress is evaluated in the classroom, laboratory and clinical setting throughout the program. Progression in the program is based upon the student meeting the following requirements:

1. Adherence to the program requirements outlined in the PHT Student Handbook.
2. Achievement of a minimum grade of C or better in all PHT and required courses.
3. Maintenance of an overall cumulative grade-point average of 2.0 or better.

Physical Therapist Assistant

Associate in Applied Science - Health Careers Division

Program Code: PTAST.AAS.2005

Cynthia Scheuer, PT, MS 313-317-6575 cscheuer@hfcc.edu
Health Careers Office 313-845-9877

Health Careers Education Center 1331
Health Careers Education Center 132

The Physical Therapist Assistant (PTA) Program is designed to prepare individuals for employment as entry-level physical therapist assistants. It takes two years, including one summer of full-time study to complete the program. Students who meet all admission requirements are considered qualified and are admitted to the program once per year in the fall semester on a first qualified-first admitted basis. Students who are interested in this program should submit the separate PTA Program application as soon as possible. There is no cost for application and it can be obtained from the Health Careers Division Office by calling (313) 845-9877.

Physical therapist assistants (PTA's) are skilled health care providers who assist in providing planned patient care programs under the direction and supervision of a physical therapist. As members of the rehabilitation team, PTA's perform treatments designed to relieve pain, promote healing and improve functional ability. Once a treatment plan is designed by a physical therapist, the PTA may be responsible for carrying out this treatment plan.

Beginning with the start of the Fall 2003 semester, the PTA Program entered into a consortium agreement with Oakwood Healthcare System, Inc. Students who enter into the PTA Program here at HFCC will now be primarily utilizing sites within the Oakwood System for most if not all of their clinical education. Students will still have access to a variety of clinical experiences. This type of cooperative arrangement between educational institution and clinical community guarantees a continued supply of competent graduate PTA's.

Core courses in the program are only offered during the day and only in the

semester as indicated in the required course sequence. Support courses are usually offered day and evening in all semesters. The exception to this is PHYS 133-Principles of Physics, which is only offered Fall and Winter semesters. There may be partial online course options offered both in core courses and support courses. Students in this program will have learning experiences in the classroom, laboratory and in local physical therapy facilities. The entire final semester is spent in full-time clinical externships.

Career Opportunities

Opportunities for PTA's are excellent at this time and are projected to increase through at least the year 2012. PTA's may choose to practice in a variety of settings. These include hospitals, rehab centers, sports medicine clinics, public and private schools, outpatient physical therapy clinics, nursing homes, and home health settings. Information about career placement and job success is available through either the Health Careers Office (313) 845-9877 or the College's Placement Office (313) 845-9618.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution

consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Siena Heights University

Occupational Exposure/Risk

In physical therapy, both in school and on the job, exposure to infectious diseases and latex may be minimal to moderate depending on the setting in which you are working. Those with latex sensitivity or allergies should consult with a physician prior to entering the program for guidance on the merits of continuing in a health care career. During the course of the program students learn infection control guidelines and procedures and strict adherence to these guidelines will reduce the risk of exposure to infectious diseases.

Admission Requirements/Eligibility

1. Minimum GPA of 2.8- may be satisfied by one of the following
 - High school GPA of 2.8 OR
 - College GPA of 2.8 (if student has completed at least 12 credits excluding less than 100 level courses)
2. ASSET Reading Score of 43 or better OR COMPASS Reading Score of 84 or better.*
3. Assessment test scores sufficient to allow for placement into ENG 131*. This requirement may also be satisfied by successful completion of the required developmental courses.

4. Minimum math requirement is Algebra*- may be satisfied by one of the following
 - One year of high school algebra with a "B" or better for both semesters OR
 - Successful completion of MTH 080 Beginning Algebra, or equivalent, with a "C" or better.
5. Successful completion of BIO 233 Anatomy & Physiology I, or equivalent, with a "C" or better.*
6. Successful completion of AH 100 Medical Terminology, or equivalent, with a "C" or better.
7. Twenty hours or more of observation in a physical therapy setting observing a PTA at work with a letter of confirmation from the supervisory PT or PTA.

*There may be other pre-admission coursework the student needs to complete based on results of placement tests and/or high school coursework.

The Program Application Process

STEP 1

Select your career program

- It is recommended that each applicant meet with a Health Careers Advisor (313) 845-9877 to discuss program options and then to create an academic plan to qualify for the selected program. It is suggested that you first select and apply to your program of choice before you begin any of the prerequisite course work.

STEP 2

Apply to the program

- First time applicants to HFCC will indicate the program selection on the application to the college. This process automatically applies you to your program of choice.
- Current HFCC students selecting to change their program of study to a health career program must complete a specific program application. Program applications are available in the Health Career/Nursing

Admissions office located in the Counseling Office, room LRC 117 B and in the Health Careers Office in the Health Careers Education Center.

STEP 3

Deliver information and track application

- It is the student's responsibility to make certain that all transcripts, grades and/or necessary records are submitted to the Health Careers/Nursing Admissions office, room LRC 117 B.
- Program applicants transferring college credit from another institution must have an official transcript mailed to: Henry Ford Community College, Transfer Evaluation, 5101 Evergreen Road, Dearborn, MI 48128.
- Applicants must also submit a student copy of all of their transcripts to the Health Careers/Nursing Admissions office.
- It is strongly recommended that you personally track your specific program application through the Health Careers/Nursing Admissions office, room LRC 117 B, (313) 317-6525.
- Students are strongly encouraged to monitor their program admission status via the WebAdvisor Program Evaluation link.
- It is imperative that all student contact information such as phone numbers and addresses is kept current through the Registration office. If we are unable to contact you, we then will move to the next qualified applicant.

STEP 4

Qualifying and admission

- Students are qualified when all of the program's admission criteria have been satisfied.
- Applicants are then admitted on a first qualified, first accepted basis for available positions. A student's application date to the program either by indication on the HFCC application or the separate program application may be used to determine placement on the qualified list if necessary. The earlier you apply the better.

Additional Program Requirements

Health appraisal

Potential students must have an interest in working with the ill and disabled. Good physical strength, observation

skills and communication skills are just some of the abilities required for this job. A more detailed sample job profile is available through the Health Careers Office (313) 845-9877. Each student must pass a basic physical examination prior to entering the program and a more detailed examination (including checking blood titers for immunity) prior to the start of clinical externships. Any students requesting special accommodations for program admission and progression should contact the Assisted Learning Office at (313) 845-9617.

Criminal Background Check and Drug Screen

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug Screen is required for all students in PTA program prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule. For questions regarding this policy, contact the Health Careers Office.

Students who are not cleared for clinical through the Health Appraisal, Criminal Background Check and Drug Screen will not be able to complete the PTA program.

Program Deposit

At the time of formal admission to the program, each applicant is required to pay a \$100 fee to secure a position. One month after classes start in the fall, the \$100 fee is refunded to the student if the student is still active in the program.

Program Duration Limits/Updates/Changes

All PTA courses taken at HFCC must be successfully completed within three consecutive calendar years.

Continued on next page

Registry/Certification/Licensure Exam Information

Successful passage of the PTA Licensure Exam is currently not required to practice in the State of Michigan; however, it is highly recommended. Students who are graduates of this program do qualify to sit for the licensure exam. Further details regarding this exam will be given as the student nears graduation.

Accreditation

Commission on Accreditation in Physical Therapy Education (CAPTE)
1111 N. Fairfax St.
Alexandria, VA 22314, (703) 838-8910

Courses

Due to the number of credit hours required for program completion and the intensity of the program, students are encouraged to complete as many of the support classes as possible prior to entering the program. The first courses that a student should complete are those required for program admission followed by the other required support courses. Required support courses not taken prior to program admission must be taken as listed in the course sequence.

Minimum Number of Credits To Graduate (Including Options/Electives): 72

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
PTA 102 - Introduction to Physical Therapy Practice	2	D			
PTA 108 - Therapeutic Techniques I	3		D		
PTA 118 - Exercise Techniques I	2		D		
PTA 119 - Exercise Techniques II	4		D		
PTA 128 - Therapeutic Techniques II	2			D	
PTA 132 - Kinesiology for PTAs	3	D			
PTA 142 - Therapeutic Modalities	3		D		
PTA 165 - Life Span Development	2	D			
PTA 220 - Pathologic Conditions	3		D		
PTA 250 - Extremity Orthopedics	4	D			
PTA 254 - Spinal Orthopedics	3	D			
PTA 262 - Rehabilitation of Neurological Conditions I	2	D			
PTA 264 - Rehabilitation of Neurological Conditions II	4	D			
PTA 270 - Physical Therapist Assistant Seminar	1		D		
PTA 291 - Clinical Externship I	2	D			
PTA 295 - Clinical Externship II	9		D		
Minimum Credit Hours:	49				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
Students are encouraged to take the computer competency exam (CLT 100). However, if there is failure to pass this exam, the student will be required to successfully pass an approved course that also satisfies this requirement.					
Anatomy and Physiology courses that were taken five or more years prior to enrollment in the PTA program must be repeated.					
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
HPE 142 - Advanced First Aid	3				
SPC 131 - Fundamentals of Speaking	3	D/E/W	D/E/W	D/E	D/E
Minimum Credit Hours:	14				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
AH 125 - Computerized Medical Information Systems OR	3	D	D		
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing	2				

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Course Sequence Required

Fall I	BIO 234	ENG 131	PHYS 133	PTA 102	PTA 132	PTA 165
Winter I	PTA 108	PTA 118	PTA 119	PTA 142	PTA 220	SSC 131
Spring/Summer I	ENG 132	HPE 142	PTA 128	SPC 131		
Fall II	PTA 250	PTA 254	PTA 262	PTA 264	PTA 291	
Winter II	PTA 270	PTA 295				

Required support courses not taken prior to program admission must be taken as listed in the course sequence. All PTA courses taken at HFCC must be successfully completed within three consecutive years.

Plant Maintenance Trades

Associate in Applied Science - Trade & Apprenticeship Division

Program Code: PLMTT.AAS.2002

 Robert Morrish
 Gail Conte

 313-845-6436
 313-845-6360

 rmorrish@hfcc.edu
 gconte@hfcc.edu

 Technology Building 115A
 Technology Building 115B

The Associate in Applied Science for Plant Maintenance Trades is designed for industrial apprentices or other skilled trades persons who have completed or are in the last semester of related instruction requirements for journeyman certification or the equivalent. Students may apply the credits earned in their trade programs toward the 60 credit hours required for the degree.

Career Opportunities

- Group Leader
- Production Foreman
- Skilled Trade Foreman
- Tool Engineer
- Service Technician
- Product Design
- Quality Control Technician
- Tool Designer

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend. Articulation agreements and transfer guides are available in the University Transfer, Advising and

Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Eastern Michigan University
- Ferris State University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn
- Wayne State University

Admission Requirements/Eligibility

Some of the trades eligible for this degree are: Automotive/Truck Mechanic, Commercial and Residential Electrician, Industrial Electrician, Industrial Hydraulics, Industrial Truck Repair, Instrumentation, Machine Repair, Maintenance, Millwright, Plumber, Pipefitter, Power House Mechanic, Refrigeration and Air Conditioning, Sheet Metal Worker, Stationary Steam Engineer, Welder.

Courses

Apprenticeship programs vary in the number of credit hours required. The minimum number is 38. All program requirements must be met in order for an apprentice to qualify for a certificate. The credits acquired apply towards the associate in applied science degree.

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses

Minimum Credit Hours:	38
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General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
TAFD 115 - Computer Applications for Skilled Trades	2	D/E	D/E		D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Power/Building Engineer

Certificate of Achievement - Trade & Apprentices Division

Program Code: PWBLD.CERT.1990

Gregory Laskowsky 313-317-1550 glaskowsky@hfcc.edu Technology Building 164D
 Robert Morrish 313-845-6436 rmorrish@hfcc.edu Technology Building 115A

The Power/Building Engineer certificate provides the opportunity for students to gain knowledge and skills in the area of commercial and industrial building maintenance. Completion of the certificate will help prepare the student to qualify for licensing exams.

Career Opportunities

See Associate in Applied Science in Energy Technology.

Additional Program Requirements

Power plant, process plant, and heating plant visits are mandatory requirements

for courses qualifying students to take license exams. Students must attend 4-6 plant visits as part of their class attendance to qualify for waivers of education for experience as required by license agencies.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ENT 100 - Basic Workplace Skills (PO)	1	D/E	D/E		
ENT 101 - Introduction to Energy Technology	2	D/E	D/E	D/E	
ENT 105 - Introduction to RACH (PO)	2	D/E	D/E	D/E	
ENT 107 - Applied Instrumentation - Electrical (PO)	2	D/E			
ENT 141 - Power Engineering I- Energy Conversion Fundamental (PO)	2				
ENT 145 - Power Engineering II - Boilers and Auxiliaries (PO)	4				
ENT 256 - Power Engineering III - Steam Plant Operation Lab (PO)	4	E	E		
ENT 259 - Power Engineering IV- Plant/Building Operations & Maintenance (PO)	2	E	E		
Minimum Credit Hours:	19				

Advanced Commercial/Industrial Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
ENT 212 - Light Commercial Heating Systems (PO)	3	E	E		
MFMT 241 - Power Engineering/Refrigeration License Review (OL)	5				
ENT 216 - Light Commercial Refrigeration Systems	3				
ENT 219 - RACH Light Commercial Systems	3		E		
ENT 248 - Power Engineering First Class License Review (PO)	3	E	E		
MFMT 248 - Power Engineering-Steam License Review Course (OL)	5				
Minimum Credit Hours:	12				

Students must meet the prerequisites or have permission to enroll in some of the Advanced Elective Courses. No more than 4 credit hours of prerequisite courses (ENT 104, ENT 113, or ENT 119) may be applied towards the Advanced requirements.

Pre-Elementary Education

Associate in Arts - Other Academic Division

Program Code: PELED.AA.1995

Janice Gilliland
Diane Green

313-845-9740
313-845-9748

JGilliland@hfcc.edu
DGreen@hfcc.edu

Reuther Liberal Arts Building 235
Learning Resources Center 117

The Pre-Education program was chosen in 2001 as one of the six best community college teacher education programs in America by Recruiting New Teachers, Inc., an affiliate of the Carnegie Foundation of New York.

The Associate in Arts in Pre-Elementary Education requires 62 credit hours of coursework, all of which can be transferred to most four-year teacher preparation programs without loss of credit. These 62 credit hours include 23 credit hours of required core courses, 16 credit hours of general education courses, and 23 credit hours of electives. The elective component of this program allows students to select courses that apply toward the bachelor's degree at their intended transfer institution. Students are encouraged to consult the university guide sheets in the University Transfer, Advising, and Career Counseling Center located in Learning Resources Center.

Career Opportunities

Pre-Elementary Education Program graduates may seek employment

in child development centers. For those wishing to teach in K-8 schools, completion of a four-year teacher preparation program with teacher certification is necessary.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Central Michigan University
- Eastern Michigan University
- Ferris State University
- Madonna University
- Marygrove College
- Michigan State University
- Oakland University
- Siena Heights University
- Spring Arbor College
- University of Detroit Mercy
- University of Michigan - Ann Arbor
- University of Michigan - Dearborn
- Wayne State University
- Western Michigan University

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ENG 246 - Introduction to Children's Literature	3				
MATH 121 - Mathematics for Elementary Teachers I	3	D/E	D/E	D/E	
MATH 221 - Mathematics for Elementary Teachers II	3	D/E	D/E	D/E	E
PSY 131 - Introductory Psychology	3				
PSY 256 - Educational Psychology	3				
PSY 294 - Educational Psychology Practicum Science (100 level or higher)	1				
Minimum Credit Hours:	20				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
Humanities at 100 level or higher					
Minimum Credit Hours:	5				

Continued on next page

Elective Courses**Credit Hours****Fall****Winter****Spring****Summer**

Select other elective courses from the transfer guide for the university to which you choose to transfer.

HPE 260 - Health, Nutrition, and PE	3	D/E	D/E		
Minimum Credit Hours:	21				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers	3				

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
HPE 140 - Lifetime Wellness	2	D/E	D/E		
HPE 142 - Advanced First Aid	3				

Minimum General Education Hours Required: 11

HPE 260 transfers to the University of Michigan-Dearborn and is a recommended course for students transferring to UM-D. HPE 140 transfers to Eastern Michigan University and is a recommended course for students transferring to EMU. HPE 142 transfers to Wayne State University and is a recommended course for students transferring to WSU. HPE 260 may count toward the Wellness General Education requirement as soon as the 2005-06 year. Please consult with an advisor for details. Consult the transfer guide for the university to which you wish to transfer to determine the HPE course that will apply to your bachelor's degree.

Pre-Pharmacy

Associate in Science - Health Careers Division

Program Code: PHARM.AS.2002

T. Mozug	313-317-7654	tmozug@hfcc.edu	Health Careers Education Center 132
R. Bodurka	313-845-9877	rbodurka@hfcc.edu	Health Careers Education Center 132

This Associate in Science degree in Pre-Pharmacy is designed as an academic transfer program for those students interested in becoming pharmacists. The courses outlined in the program of study have been carefully selected using the basic admission requirements for a number of pharmacy programs as a guide.

This program is designed to prepare students with a solid foundation using a set of carefully selected courses which will maximize the transfer of course work. These courses were selected considering the general admission criteria used by pharmacy schools and the formal transfer agreements HFCC maintains with many of the universities throughout Michigan. Pre-Pharmacy students are strongly encouraged to work closely with the Pharmacy Coordinator before they select their courses in order to be certain that these courses are covered by the transfer agreements.

Students with a strong academic background who are able to start with the advanced courses required in this program may complete it in two years. Those students needing additional support or prerequisite courses may require more than two years to complete the program.

Career Opportunities

In addition to dispensing medications prescribed by physicians, pharmacists provide information to patients regarding their prescriptions and their use. A license is required to practice pharmacy. To obtain a license, a pharmacist must serve an internship, graduate from an accredited college of pharmacy, and pass a state exam.

Nearly all the pharmacy schools now grant the degree of Doctor of Pharmacy (Pharm. D.) which requires at least six years or more of post-secondary study.

The HFCC Pre-Pharmacy Program is designed to cover the first steps in that process. The very nature of the profession requires a strong math and science foundation. Also, the admissions test that a number of programs use in their selection process requires a solid reading comprehension ability.

Admission Requirements/Eligibility

Admission to pharmacy schools is highly competitive and very selective. Typically, pharmacy programs will use some variation of grades and admission test scores in their selection process. The specific admission criteria for schools of pharmacy vary between each individual program. For a list of the three programs in Michigan as well as the 17 pharmacy programs in the general Midwest region, please contact the Health Careers Office. Because admission to pharmacy schools is so competitive, students interested in becoming a pharmacist should explore all of their options and need to review current admission requirements for not just one but several pharmacy schools.

HFCC maintains close contact with a number of pharmacy programs in an effort to keep the Program of Study and course transfer agreements up-to-date. Annually, admission representatives from a number of pharmacy programs are on campus to visit with and discuss their programs with HFCC students.

Additional Program Requirements

Courses in the formal Program of Study were selected based upon HFCC's formal transfer agreements. Because prerequisite courses not included in the formal Program of Study may vary widely between students, those courses may or may not be covered by the transfer agreements. To identify those select transfer courses that meet

your educational goals, it is essential for you to maintain close contact with our pharmacy coordinator. Students also need to maintain close contact with the coordinator since pharmacy schools frequently change their specific admission criteria as well as upgrade the transfer agreements. For further information, contact the Health Careers Office at 313- 845-9877.

Under HFCC's Transfer Credit Guarantee, HFCC will refund tuition for any approved transfer course passed at HFCC with at least a "C" grade if that course work does not transfer to a college or university. Such classes must be listed as transferable on the transfer institution's official guide sheets on file in the HFCC Counseling Division. To identify those select transfer courses, it is essential for students to maintain close contact with the pharmacy coordinator.

Program Duration Limits/Updates/Changes

HFCC offers its students two distinct program options. The first option is the Pre-Pharmacy Academic Transfer Program which is designed for the transfer of course work for those students primarily interested in applying to pharmacy schools. The second program option at HFCC is a one-year Pharmacy Technician Program. The technician curriculum is designed to prepare the students for employment assisting pharmacists after completion of the program. Unlike the Pre-Pharmacy Program, the courses in the Pharmacy Technician Program are designed to prepare the students for employment immediately and not designed for transfer nor intended for those students primarily interested in applying to pharmacy schools. (See the Pharmacy Technician section in

Continued on next page

the catalog for more information). If a student's primary intent is on becoming a pharmacist, then the Associate in Science Pre-Pharmacy Program is the curriculum which should be followed.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
PHT 144 - Pharmacy College Admission Testing (PCAT) and Current Issues in Pre-Pharmacy	2	E	E		
BIO 152 - Biology: Cells and Molecular Biology	4	E	D		
BIO 251 - Microbiology OR	5	D/E	D/E		
AH 100 - Medical Terminology	4	D/E/W	D/E/W	D/E	D
For some pharmacy programs, AH 100 may not be transferable.					
CHEM 141 - Principles of General and Inorganic Chemistry I	5	D/E	D/E	D	
CHEM 142 - Principles of General and Inorganic Chemistry II	5	D/E	D/E		
CHEM 241 - Organic Chemistry I	4	D/E	D/E	D	
CHEM 242 - Organic Chemistry II	4	D/E	D/E		
CHEM 243 - Organic Chemistry Laboratory	2	D/E	D/E		
PHYS 131 - Liberal Arts Physics	4	D/E/W/O	D/E/W/O	D/O	
MATH 180 - Calculus I	5	D/E	D/E	D/E	E
Minimum Credit Hours:	39				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
Contact the Health Careers Division to determine your course options based upon your education goals					
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E
Contact the Health Careers Division to determine your course options based upon your education goals					
PHIL 131 - Introduction to Logic	3	D/E	D/E	D/E	D/E
SPC 131 - Fundamentals of Speaking	3	D/E/W	D/E/W	D/E	D/E
BEC 133 - Basic Economics OR	3	D/E	D/E		
BEC 151 - Principles of Macro Economics OR	3	D/E/W/O	D/E/W/O	D/E/O	D/E
BEC 152 - Principles of Micro Economics	3	D/E/W/O	D/E/W/O	D/E/O	D/E
Minimum Credit Hours:	12				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				

Minimum General Education Hours Required: 9

Recommended Course Sequence

Fall I	BEC 152	CHEM 141	CIS 100	BCA 140	ENG 131	
Winter I	PHT 144	CHEM 142	SPC 131	PHYS 131	ENG 132	
Spring/Summer I	CHEM 241					
Fall II	CHEM 242	PHIL 131	MATH 180	POLS 131		
Winter II	BEC 133	BEC 151	BEC 152	CHEM 243	BIO 251	AH 100

Pre-Pharmacy students are strongly encouraged to work closely with the Pharmacy Coordinator before they select their courses in order to be certain that these courses are covered by the transfer agreements.

Pre-Secondary Education

Associate in Arts - Other Academic Division

Program Code: PSCED.AA.1997

Janice Gilliland	313-845-9740	JGilliland@hfcc.edu	Reuther Liberal Arts Building 235 Learning Resources Center 117
Diane Green	313-845-9748	DGreen@hfcc.edu	

The Pre-Education program was chosen in 2001 as one of the six exemplary community college teacher education programs in America by Recruiting New Teachers, Inc., an affiliate of the Carnegie Foundation of New York.

The Associate in Arts Degree in Pre-Secondary Education requires 60 credit hours of course work, enabling students to complete general education requirements and begin coursework in their teaching majors and minors. Because the university teacher preparation programs vary, students are advised to consult the transfer guides for the school to which they intend to transfer when selecting courses.

Career Opportunities

Pre-Secondary Education Program graduates who complete a bachelors degree with teacher certification may

teach in middle, junior, or high schools.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses

they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Central Michigan University
- Eastern Michigan University
- Ferris State University
- Madonna University
- Marygrove College
- Michigan State University
- Oakland University
- Siena Heights University
- Spring Arbor College
- University of Detroit Mercy
- University of Michigan - Ann Arbor
- University of Michigan - Dearborn

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 62

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
PSY 131 - Introductory Psychology 131 AND History - 3 credits AND Math/Science 8 credits. One course must be a lab science.	3				
Minimum Credit Hours:	14				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
Students should select electives that will apply toward the General Education requirements or teaching majors and minors of the four-year teacher education program to which they wish to transfer. Consult the transfer guides located in the University Transfer, Advising, and Career Counseling Center.					
Minimum Credit Hours:	29				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 223 - Instructional Technology for Secondary Teachers OR	3				

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
COUN 114 - Stress Management - A Personal Approach	2	D			
HPEA 117 - Weight Train & Phys Conditioning	2	D/E	D/E	D/E	D/E
HPEA 217 - Weight Training and Physical Conditioning II	2	D/E	D/E	D/E	D/E
HPE 140 - Lifetime Wellness	2	D/E	D/E		
HPE 142 - Advanced First Aid	3				
HPE 153 - Nutrition	2	D/E	D/E	D/E	D/E
HPE 155 - Relax Tech for Stress Management	2				

Minimum General Education Hours Required: 11

HPE 260 transfers to the University of Michigan-Dearborn and is a recommended course for students transferring to UM-D. HPE 140 transfers to Eastern Michigan University and is a recommended course for students transferring to EMU. HPE 142 transfers to Wayne State University and is a recommended course for students transferring to WSU. HPE 260 may count toward the Wellness General Education requirement as soon as the 2005-06 year. Please consult with an advisor for details. Consult the transfer guide for the university to which you wish to transfer to determine the HPE course that will apply to your bachelor's degree.

Pre-Special Education

Associate in Arts - Other Academic Division

Program Code: PSPED.AA.1985

Janice Gilliland	313-845-9740	JGilliland@hfcc.edu	Reuther Liberal Arts Building 235 Learning Resources Center 117
Diane Green	313-845-9748	DGreen@hfcc.edu	

The Pre-Education program was chosen in 2001 as one of the six best community college teacher education programs in America by Recruiting New Teachers, Inc., an affiliate of the Carnegie Foundation of New York.

The Associate in Arts Degree in Pre-Special Education requires 60 credit hours of coursework, all of which can be transferred to most teacher training institutions without loss of credit. Because university programs vary, students should consult the transfer guides to determine the transferability of HFCC courses to their chosen transfer institutions. These guides can be found in the University Transfer, Advising, and Career Counseling Center located in the Learning Resources Center.

Career Opportunities

Pre-Special Education Program graduates who complete a bachelors degree with teacher certification may

teach special education classes in many disability areas such as mentally impaired, visually impaired, learning disabled, emotionally impaired, physically impaired, hearing impaired, speech impaired, and autistic.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution

consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Central Michigan University
- Eastern Michigan University
- Madonna University
- Marygrove College
- Michigan State University
- University of Detroit Mercy
- University of Michigan - Ann Arbor
- University of Michigan - Dearborn
- Wayne State University

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
ENG 246 - Introduction to Children's Literature Humanities: 5 credits Math/Science 8 credits.	3				
PSY 131 - Introductory Psychology Social Science 3 credits.	3				
Minimum Credit Hours:	22				

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
Students wishing to transfer to a four-year teacher preparation program should consult the transfer guides on file in the University Transfer, Advising, and Career Counseling Office to determine transferability of HFCC coursework toward those degrees.					
Minimum Credit Hours:	26				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers	3				

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
HPE 140 - Lifetime Wellness	2	D/E	D/E		
HPE 142 - Advanced First Aid	3				

Minimum General Education Hours Required: 11

HPE 260 transfers to the University of Michigan-Dearborn and is a recommended course for students transferring to UM-D. HPE 140 transfers to Eastern Michigan University and is a recommended course for students transferring to EMU. HPE 142 transfers to Wayne State University and is a recommended course for students transferring to WSU. HPE 260 may count toward the Wellness General Education requirement as soon as the 2005-06 year. Please consult with an advisor for details. Consult the transfer guide for the university to which you wish to transfer to determine the HPE course that will apply to your bachelor's degree.

Print Design

Certificate of Achievement - Fine Arts and Fitness Division
Program Code: PRINTDSN.CMLT.2004

Kirk McLendon

313-845-6487

mclendon@hfcc.edu

MacKenzie Fine Arts Center 149

Print Design is one of the five new Certificate Programs offered at HFCC. Earn a Print Design Certificate by completing the 36-38 credit hours of core courses. Students may complete an additional 22-24 credit hours of General Education courses to earn an Associate of Arts Degree. Classes are offered throughout the year during the day, evening and weekend.

The demise of the printed page at the hands of the Internet has been greatly exaggerated. The majority of graphic designers design for print. A good eye for type, strong layout skills, and a technical understanding of the printing process are important in this field. Proficiency with Photoshop, Illustrator and either QuarkXPress or InDesign is a must.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
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An additional 22-24 credit hours of General Education courses may be taken with any of the five Graphic Design certificates to obtain an Associate of Arts Degree.

ART 101 - Two-Dimensional Design AND	3	D/E	D/E	D	D
ART 102 - Drawing 1 AND	3	D/E	D/E	D	D
ART 107 - Photoshop/ImageReady AND	3				
ART 109 - QuarkXpress OR	3				
ART 110 - InDesign AND	3				
ART 112 - Drawing II AND	3	D/E	D/E	D	
ART 121 - Art History Survey I AND	3	D/E/W	D/E/W	D/E	D/E
ART 113 - Life Drawing I OR	3	D/E	D/E		
ART 115 - Intermediate Perspective AND	3	E	D	D	
ART 130 - History of Graphic Design AND	3	D	D	O	
ART 165 - Graphic Design 1 AND	3	E	E		
ART 172 - Color Theory AND	3	D	D		
ART 265 - Illustration AND	3				
ART 275 - Advanced Projects	3	D/E/W	D/E/W	D/E/W	D/E/W

Minimum Credit Hours: 36

Radiographer

Associate in Applied Science - Health Careers Division

Program Code: RADTC.AAS.2002

Sharon W. Wu, BA, R.T. 313-317-6595 swu@hfcc.edu
Health Careers Office 313-845-9877

Health Careers Education Center 133C
Health Careers Education Center 132

Radiologic Technology is that segment of medicine devoted to patient diagnosis through the use of ionizing radiation. Specifically, radiation is used to create images of tissues, organs, bones, and vessels that comprise the human body. When requested by a physician, it is the radiographer who is responsible for creating these images in a safe and precise manner. The radiologist, a physician who is specifically trained in the interpretation of these images, performs diagnosis of the final image.

A major responsibility of the radiographer lies in the proper use of radiation. When not properly utilized, ionizing radiation has the potential to be damaging to both patient and user. Therefore, the radiographer is trained to understand radiation and be aware of its potential hazards. This knowledge serves to protect the patient and the radiographer, creating a safe work environment.

The radiographer is able to:

- Accurately demonstrate anatomical structures on a radiograph or other imaging receptor.
- Determine exposure factors to achieve optimum radiographic techniques with minimum radiation exposure to the patient.
- Evaluate radiographic images for appropriate positioning and image quality.
- Apply the principles of radiation protection to the patient, self, and others.
- Provide patient care and comfort.
- Recognize emergency patient conditions and initiate lifesaving first aid and basic life-support procedures.

- Detect equipment malfunctions, report it to the proper authority, and know the safe limits of equipment operation.
- Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
- Participate in radiologic quality assurance programs.
- Provide patient and public education related to radiologic procedures and radiation protection and safety.

Career Opportunities

Demand for radiographers is excellent and should remain strong due to the rising population of older persons, the segment of the population with the greater frequency of health care needs. Information regarding employment trends for radiographers in Michigan is available through the HFCC Placement Office (313) 845-9618.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to

ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Eastern Michigan University
- Siena Heights University
- University of Michigan - Dearborn

Occupational Exposure/Risk

In Radiologic Technology, both in school and on the job, frequent exposure to radiation, sharps, patient secretions, bodily wastes, infectious patients, electricity, equipment noise and latex is possible. Exposure to latex may be moderate depending on the setting in which you are working. Those with latex sensitivity or allergies should consult with a physician prior to entering the program for guidance on the merits of continuing in a health care career.

During the course of the program students learn radiation safety practices; following these practices keeps radiation exposure to a minimum. Infection control guidelines and procedures are also taught; strict adherence to these guidelines will reduce the risk of exposure to infectious diseases to a minimum.

Admission Requirements/Eligibility

The formal radiographer curriculum begins once a year in the fall semester. Early application is essential for counseling and admission into the

Continued on next page

program. It is suggested that an applicant meet with a Health Careers Advisor (313) 845-9877 to create an academic plan to qualify for the program. Either indication on the HFCC application or if already an HFCC student, a separate application to the program is required. A student's application date to the Radiographer Program either by indication on the HFCC application or by the separate program application determines placement on the qualified list once the applicant has completed all prerequisites.

The earlier you apply the better. A student is qualified when every prerequisite is met. Then it is first qualified, first accepted based on a student's date of application to the program.

Acceptance into the College is generally granted to most applicants, but this does not constitute nor guarantee admission to the program. The final approval to enroll in the clinical courses is granted by the Health Careers Division. Prerequisites have been established in order to enhance the likelihood of successful program completion. Reasonable modification of the qualifying prerequisites may be made by the program director.

- High school grade-point average of 2.50 (on a 4.0 scale) or a college grade-point average of at least 2.50 for the last 12 academic credits.
- ASSET Reading Score of 43 or better OR COMPASS Reading Score of 84 or better.
- ASSET or COMPASS Writing Test score sufficient for placement in English 131. This requirement may also be fulfilled by successful completion of required developmental English courses.
- One year of high school algebra with at least a B grade for both semesters or completion of either Math 080 or Math 100 with at least a C grade.
- Successful completion of BIO 223, Anatomy and Physiology I, with at least a C grade.
- Successful completion of AH 100,

Medical Terminology, with at least a C grade.

- Basic occupational experience. This requirement may be fulfilled with one of the following:
 - (1) Completion of MOA 160 with a C grade. Note: It is highly recommended that students take this course.
 - (2) Twenty hours of observation in a radiology department at a hospital or clinic with a letter of support from the supervising radiographer. A signed waiver form from HFCC is required to do the observation. Contact the Health Careers Office (313) 845-9877.
 - (3) Successful completion of a high school health careers course.
- Current CPR certification: Must be American Heart Association, Basic Life Support, Healthcare Provider or successful completion of AH 105 (Basic Life Support) during the summer semester before starting the program.
- Attend the RAD program orientation.

Each applicant is required to complete a Health Appraisal Form, copies of which are available in the Health Careers Division. Criminal Background Check and Drug Screen Clearances will be required prior to participating in any clinical rotations.

Students in the Radiographer program are expected to meet the same physical and mental requirements as a staff radiographer. A representative job profile, available in the Health Careers Office, lists the specific physical and mental requirements as well as the environmental conditions of the occupation.

Requirements for admission, progression, and graduation are continually being evaluated and may be modified. Students in the program are notified of changes as they occur. Applicants not yet in the program are responsible for contacting the Health Careers Office for updates and revisions.

Additional Program Requirements

Clinical Assignments

Radiology students begin a continuous twenty-four-month clinical rotation during the first semester of the program. Clinical time is 8:00 a.m. to 4:30 p.m. with specific days of assignment changing from semester to semester. Beginning in the third semester of training, students are assigned clinical rotations on the afternoon shift.

Listed below is a tentative breakdown of assigned clinical days for each semester.

First Semester: Fall
Monday/Wednesday/Friday

Second Semester: Winter
Monday/Wednesday/Friday

Third Semester: Spring
Monday/Wednesday/Friday

Fourth Semester: Summer
Monday - Friday

Fifth Semester: Fall
Tuesday/Thursday/Friday

Sixth Semester: Winter
Tuesday/Thursday/Friday

Seventh Semester: Spring
Monday - Friday

Eighth Semester: Summer
Monday/Friday

The Program Application Process

STEP 1

Select your career program

- It is recommended that each applicant meet with a Health Careers Advisor (313) 845-9877 to discuss program options and then to create an academic plan to qualify for the selected program. It is suggested that you first select and apply to your program of choice before you begin any of the prerequisite course work.

STEP 2

Apply to the program

- First time applicants to HFCC will indicate the program selection on the application to the college. This process automatically applies you to your program of choice.
- Current HFCC students selecting to change their program of study to a health career program must complete a specific program application. Program applications are available in the Health Career/Nursing Admissions office located in the Counseling Office, room LRC 117 B and in the Health Careers Office in the Health Careers Education Center.

STEP 3

Deliver information and track application

- It is the student's responsibility to make certain that all transcripts, grades and/or necessary records are submitted to the Health Careers/Nursing Admissions office, room LRC 117 B.
- Program applicants transferring college credit from another institution must have an official transcript mailed to: Henry Ford Community College, Transfer Evaluation, 5101 Evergreen Road, Dearborn, MI 48128.
- Applicants must also submit a student copy of all of their transcripts to the Health Careers/Nursing Admissions office.
- It is strongly recommended that you personally track your specific program application through the Health Careers/Nursing Admissions office, room LRC 117 B, (313) 317-6525.

- Students are strongly encouraged to monitor their program admission status via the WebAdvisor Program Evaluation link.
- It is imperative that all student contact information such as phone numbers and addresses is kept current through the Registration office. If we are unable to contact you, we then will move to the next qualified applicant.

STEP 4

Qualifying and admission

- Students are qualified when all of the program's admission criteria have been satisfied.
- Applicants are then admitted on a first qualified, first accepted basis for available positions. A student's application date to the program either by indication on the HFCC application or the separate program application may be used to determine placement on the qualified list if necessary. The earlier you apply the better.

Program Duration Limits/Updates/Changes

Support courses for the RAD program may be taken earlier than indicated in the program of study, but not later. Students must receive at least a C in all RAD courses, including the last course, RAD 286 Registry Review, to graduate from the program.

It is recommended that students take support courses prior to formal admission to the RAD program to lighten the class load while in the program.

Students must attend classes year round.

Because students may be in clinical 40 hours per week, those needing outside employment should plan accordingly.

Once a student is formally admitted to the radiographer program, all RAD courses taken at HFCC or other colleges must be successfully completed within a total of three consecutive calendar years.

The College continuously attempts to improve each program and as a result, courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration. Contact the Health Careers Office for any current program updates or visit www.hfcc.edu.

Registry/Certification/Licensure Exam Information

Students who intend to take the National Registry Certification Examination are required to meet all general and ethical qualifications of the American Registry of Radiologic Technologists. A list of qualifications is included in the student handbook. Conviction of a crime may prevent a student from taking this examination. This material is also available upon request available by calling the ARRT at 651-687-0048 or on line at www.rrt.org.

Accreditation

The HFCC Radiographer Program is accredited through the Joint Review Committee on Education in Radiologic Technology (312) 704-5304, on line at www.jrcert.org.

Continued on next page

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 78.5

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
RAD 101 - Introduction to Radiography	1	D			
RAD 108 - Patient Care Techniques	3	D			
RAD 109 - Clinical Education I	3	D			
RAD 111 - Principles of Radiation Protection	2	D			
RAD 118 - Radiographic Positioning I	3	D			
RAD 158 - Radiographic Positioning II	3		D		
RAD 161 - Imaging Equipment	1		D		
RAD 166 - Radiographic Film Processing	2		D		
RAD 171 - Principles of Exposure and Film Evaluation	3		D		
RAD 188 - Radiographic Positioning III	2.5			D	
RAD 190 - Clinical Education II	3		D		
RAD 194 - Clinical Education III	1		D		
RAD 197 - Clinical Education IV	3		D		
RAD 206 - Pathology/Film Evaluation	2	D			
RAD 209 - Clinical Education V	3	D			
RAD 212 - Introduction to Quality Assurance	1	D			
RAD 227 - Radiographic Positioning IV	3	D			
RAD 257 - Radiographic Positioning V	2		D		
RAD 267 - Radiation Physics	4		D		
RAD 274 - Radiation Biology	2				
RAD 286 - Registry Review	2				D
RAD 290 - Clinical Education VI	3		D		
RAD 294 - Clinical Education VII	3			D	
RAD 298 - Clinical Education VIII	1				D

Minimum Credit Hours: 57.5

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
HCS 106 - Introduction to Phlebotomy (Identical to MOA 106)	1	D	D/E		E
HYS 133 - Principles of Physics	4	D/E	D/E		

Minimum Credit Hours: 9

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
HCS 131 - Computers in Health Care	3	E/W	E/W	D	E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Recommended Course Sequence

Fall I	RAD 101	RAD 108	RAD 109	RAD 111	RAD 118	
Winter I	BIO 234	RAD 158	RAD 161	RAD 171	RAD 190	RAD 257
Spring I	HCS 131	RAD 188	RAD 194			
Summer I	RAD 197					
Fall II	PHYS 133	RAD 206	RAD 209	RAD 212	RAD 227	
Winter II	ENG 131	POLS 131	RAD 166	RAD 267	RAD 274	RAD 290
Spring II	RAD 294					
Summer II	ENG 132	RAD 286	RAD 298	HCS 106		

The required core courses must be taken in sequence. The required support courses can be taken in sequence or taken earlier in order to lighten the student's course load. Support courses for the RAD program may be taken earlier than indicated in the program of study, but not later.

Students must receive at least a C in all RAD courses, including the last course, RAD 286 Registry Review, to graduate from the program.

It is highly recommended that students take support courses prior to formal admission to the RAD program to lighten the class load while in the program.

Students must attend classes year round.

Because students may be in clinical 40 hours per week, those needing outside employment should plan accordingly.

Registered Radiologic Technologist

Associate in Applied Science - Health Careers Division

Program Code: RRADTC.AAS.2002

 Sharon W. Wu, BA, R.T.(R) 313-317-6595 swu@hfcc.edu
 Health Careers Office 313-845-9877

 Health Careers Education Center 133C
 Health Careers Education Center 132

The Center for Health Career Education at Henry Ford Community College has created an associate degree program for hospital trained registered radiologic technologists. The program provides an excellent opportunity for registered radiographers to prepare themselves for career advancement. The career ladder in radiology includes such area as management, sales, information technology, and education.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Eastern Michigan University
- Siena Heights University
- University of Michigan - Dearborn

Program Requirements/Eligibility

Applicants must have graduated from an accredited hospital-based radiography program, and must be radiography certified (in good standing) with the American Registry of Radiologic Technologists (ARRT). Upon verification of credentialing through the ARRT, the applicant will be awarded 32 credit hours toward an Associate in Applied Science degree at HFCC. Applicants should contact the Registrar's Office or the Radiographer program director to initiate verification of certification.

Program Duration Limits/Updated/Changes

Upon verification of credentialing through the ARRT, the applicant will be awarded 32 credit hours toward an Associate in Applied Science degree at HFCC. Applicants should contact the Registrar's Office or the Radiographer program director to initiate verification of certification.

Transfer credits may be used to meet graduation requirements. A minimum of 20 hours of credit must be earned at HFCC.

The Final Outcome

Possible Awarded Credits	32 Hours
General Education	9-14 Hours
Directed Elective Courses	20 Hours
Total degree:	61-66 Hours

Degree-seeking students must complete the General Education requirements.

HFCC Registered Radiographer Requirements

20 Cr. Hrs. Required Total credits for registered radiographers: 20 hours

The educational requirements allow the student to choose from a wide variety of options based on his/her individual

career goals. It is recommended that the student meet with a Health Careers Advisor or an HFCC Counselor to plan a specific program. For advising/counseling appointments, contact the Health Careers Division at (313) 845-9877.

The College continuously attempts to improve each program and as a result, courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration. Contact the Health Careers Office for any current program updates or visit www.hfcc.edu.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
The educational requirements allow the student to choose from a wide variety of options based on their individual career goals. It is recommended that the student meet with the Health Careers Advisor or HFCC Counselor to plan a specific program of study.					
AH 116 - Interpreting Medical Lab Reports OR	3	E	E		
AH 120 - Pharmacology for Allied Health OR	3	E	D/E		
BBA 131 - Introduction to Business OR	4	D/E/W/O	D/E/W/O	D/E	D/E
BBA 133 - Business Behavior and Communication OR	3	D/E	D/E	E	
BBA 252 - Principles of Marketing OR	3	D/E	D/E	D/E	
AH 150 - Pathophysiology OR	4				
BFN 253 - Principles of Finance OR	3				
BIO 233 - Anatomy and Physiology I OR	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II OR	4	D/E/W	D/E/W	D/E	D/E
MGT 232 - Human Resources Management OR	3	D/E	D/E		
PSY 131 - Introductory Psychology OR	3				
HCS 106 - Introduction to Phlebotomy (Identical to MOA 106)	1	D	D/E		E
Minimum Credit Hours:	20				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
HCS 131 - Computers in Health Care	3	E/W	E/W	D	E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Respiratory Therapist

Associate in Applied Science - Health Careers Division
Program Code: RESTH.AAS.2004

Debra Szymanski 313-317-6580 dszyman@hfcc.edu
 Health Careers Office 313-845-9877

Health Careers Education Center 133F
 Health Careers Education Center 132

The Profession

Respiratory therapists are health care professionals, dedicated to providing life-supporting, life-enhancing care to newborns, children, adults and the elderly. Respiratory therapists work under qualified medical direction to assess, treat, manage, provide diagnostic evaluation, educate and care for patients with deficiencies and abnormalities associated with the cardiopulmonary system. Therapists work throughout hospitals, most often in intensive care units and emergency settings. RTs are a special blend of “patient-centered” caregivers and technically sharp, analytical thinkers. Some therapists concentrate on pulmonary rehabilitation and continuing care in patient homes or extended care facilities while others specialize in pediatric/neonatal care. The respiratory therapist may also work in areas such as cardiopulmonary diagnostics, medical equipment sales, management and education.

The Program

The respiratory therapist program provides a blend of classroom and clinical experiences. Program faculty work closely with clinical affiliates and employers to prepare graduates for today’s rapidly changing health care environment. The first year of the program involves completion of technical and support courses. Beginning with the spring semester and throughout the second year of the program, students are required to complete advanced technical courses and a wide variety of clinical rotations. The technical and clinical courses will be conducted during the day. Support courses such as ENG 131 generally are available during both days and evenings.

For a dedicated man or woman who finds a service field rewarding, respiratory therapy offers career opportunities that are both personally and financially rewarding. The goal of the Respiratory Therapist Program is to provide a quality education that is relevant and professionally sound to meet the respiratory therapy needs of the health-care community.

Career Opportunities

Respiratory therapists are in high demand. Respiratory Care is expected to grow not just faster than average over the next ten years, but at a rate of twice the average growth of all occupations as measured by the U.S. Bureau of Labor Statistics. The outlook for RTs has never been better. According to the Bureau of Labor Statistics, employment is expected to increase faster than average through the year 2012, because of the substantial growth in numbers of middle-aged and elderly individuals with cardiopulmonary disease. The American Association for Respiratory Care (AARC) offers a wide variety of information on a career in Respiratory Therapy at www.aarc.org.

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor’s degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who

intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Siena Heights University

Occupational Exposure/Risk

Applicants considering a career in Respiratory Therapy, should be aware that during their course of study and in subsequent employment in the field, they are likely to work in situations where exposure to infectious disease is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines, can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the respiratory therapist program of study.

Latex Allergies

Since 1989, health care providers and their patients have experienced a rise in allergic responses to latex. In respiratory therapy, both in school and on the job, exposure to latex consistently occurs. If a student is or becomes sensitized to latex, it is suggested that another career choice be considered. Non-latex gloves or those without powder can be purchased, but it is impossible at this time to

get totally away from the problem. The program strongly advises those students sensitized or allergic to latex to consult a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue in the program do so at their own risk. Neither the college nor the Health Careers Division can be responsible for the problems resulting from such a decision.

Admission Requirements/Eligibility

The Respiratory Therapist (RTH) core program begins each year in the fall semester. Acceptance to the college is granted to most applicants and does not constitute nor guarantee admission to the Respiratory Therapist program. Final approval to enroll in the program is granted by the Health Careers Division. Early application is advisable for counseling and admission to the program. Students are accepted into the program on a “first qualified, first accepted” basis.

RTH Program Admission Requirements

1. Minimum GPA of 2.50 (4.00 scale) - may be satisfied by:
 - College GPA of 2.50 (if student has completed at least 12 credit hours excluding < 100 level courses)
 - OR
 - High school grade-point average of 2.50 (4.0 scale), if no college GPA has been established.
2. ASSET Reading Score of 43 or better OR COMPASS Reading Score of 84 or better
3. ASSET or COMPASS Writing Test score sufficient for placement in English 131. This requirement may also be fulfilled by successful completion of required developmental English courses or completion of ENG 131, or its equivalent with a grade of C or better.
4. MATH proficiency as demonstrated by successful completion of MATH 074 or higher MATH course with a C or

higher grade OR sufficient score on ASSET or COMPASS assessment test for placement into MATH 080 or MATH 100.

5. Completion of BIO 131, Introductory Biology or its equivalent with at least a C grade. This may also be satisfied by completion of one year of High School Biology with at least a “B” grade for both semesters or successful completion of BIO 233 with a grade of C or better.

At the time of formal admission to the program, each applicant is required to pay a \$100 fee to secure a place in the program. One month after classes start in the fall, the fee is refunded if the student is still active in the program.

Additional Program Requirements

Health Appraisal

Students in the RTH program are expected to meet the same physical and mental health requirements as a respiratory therapist. A representative RTH Job Profile which lists the specific physical and mental health requirements as well as the environmental conditions of this occupation is available through the Health Careers Office. Students requiring accommodation should directly contact the HFCC Assisted Learning Services.

All students enrolled in the RTH program must be in good physical and mental health as determined by a physician and validated on the Health Careers Health Appraisal Form. Each student must have a physical examination before admission to clinical rotations. Additionally, students must demonstrate evidence of current immunizations and provide titers to show immunity to illnesses specified on the Health Appraisal form.

Students are required to have basic health insurance coverage during the clinical rotations. Students are responsible for their own transportation to clinical sites and any expenses incurred. Student placement

at the clinical sites is determined by the Program Director and Director of Clinical Education.

Criminal Background Check and Drug Screen

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug Screen is required for all students in RTH program prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule. For questions regarding this policy, contact the Health Careers Office.

Students who are not cleared for clinical through the Health Appraisal, Criminal Background Check and Drug Screen will not be able to complete the program.

Students must receive at least a C grade in all RTH courses, including the last one, in order to graduate from the program.

Program Updates

Once a student is formally admitted to the respiratory therapist program, all RTH courses taken at HFCC or other colleges must be successfully completed within a total of three consecutive calendar years.

The College continuously attempts to improve each program and as a result, courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration. Contact the Health Careers Office for any current program updates or visit www.hfcc.edu.

Continued on next page

The Program Application Process

STEP 1

Select your career program

- It is recommended that each applicant meet with a Health Careers Advisor (313) 845-9877 to discuss program options and then to create an academic plan to qualify for the selected program. It is suggested that you first select and apply to your program of choice before you begin any of the prerequisite course work.

STEP 2

Apply to the program

- First time applicants to HFCC will indicate the program selection on the application to the college. This process automatically applies you to your program of choice.
- Current HFCC students selecting to change their program of study to a health career program must complete a specific program application. Program applications are available in the Health Career/Nursing Admissions office located in the Counseling Office, room LRC 117 B and in the Health Careers Office in the Health Careers Education Center.

STEP 3

Deliver information and track application

- It is the student's responsibility to make certain that all transcripts, grades and/or necessary records are submitted to the Health Careers/Nursing Admissions office, room LRC 117 B.
- Program applicants transferring college credit from another institution must have an official transcript mailed to: Henry Ford Community College, Transfer Evaluation, 5101 Evergreen Road, Dearborn, MI 48128.
- Applicants must also submit a student copy of all of their transcripts to the Health Careers/Nursing Admissions office.
- It is strongly recommended that you personally track your specific program application through the Health Careers/Nursing Admissions office, room LRC 117 B, (313) 317-6525.
- Students are strongly encouraged to monitor their program admission status via the WebAdvisor Program Evaluation link.

- It is imperative that all student contact information such as phone numbers and addresses is kept current through the Registration office. If we are unable to contact you, we then will move to the next qualified applicant.

STEP 4

Qualifying and admission

- Students are qualified when all of the program's admission criteria have been satisfied.
- Applicants are then admitted on a first qualified, first accepted basis for available positions. A student's application date to the program either by indication on the HFCC application or the separate program application may be used to determine placement on the qualified list if necessary. The earlier you apply the better.

Registry/Certification/Licensure Exam Information

Successful completion of the program of study qualifies graduates to receive an Associate of Applied Science Degree and to apply to take both the Entry-Level Certification Exam and the Advanced Practitioner Examinations offered by the National Board for Respiratory Care (NBRC). The successful graduate of the program is eligible to take the national exam and to apply for state licensure as a respiratory therapist.

Accreditation

Professional Credentials

The Respiratory Therapist program is fully accredited by The Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the Committee on Accreditation for Respiratory Care (CoARC). CAAHEP can be reached at www.caahep.org. CoARC can be reached at (817) 283-2825 or www.coarc.com. Graduates of the program are eligible to sit for the national accreditation exams for the designation of Registered Respiratory Therapist (RRT).

Courses

Due to the number of credit hours required for program completion and the intensity of the program, students are encouraged to complete as many of the support and general education courses as possible prior to entering the program. The first courses that a student should complete are those required for program admission followed by the remaining required support and general education courses. Required support and general education courses not taken prior to program admission must be taken as listed in the course sequence.

Minimum Number of Credits To Graduate (Including Options/Electives): 66

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
RTH 100 - Principles of Respiratory Care	3	D			
RTH 119 - Introduction to Clinical Therapy	2	D			
RTH 160 - Respiratory Therapy Pharmacology	2		D		
RTH 175 - Respiratory Care Procedures II	5		D		
RTH 180 - RT Clinical Sciences	3		D		
RTH 194 - Clinical Therapeutics	2		D		
RTH 210 - Ventilator Management I	4			D	
RTH 216 - Cardiopulmonary Testing	2	D			
RTH 235 - Neonatal and Pediatric Respiratory Care	3	D			
RTH 245 - Applied Respiratory Care	2	D			
RTH 275 - Therapeutic Management	1		D		
RTH 285 - Advanced Respiratory Concepts	3		D		
RTH 291 - Advanced Clinical Therapeutics	4			D	
RTH 292 - Clinical Practicum	5	D			
RTH 294 - Advanced Clinical Practicum	8		D		
Minimum Credit Hours:	49				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
BIO 233 - Anatomy and Physiology I	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
Minimum Credit Hours:	8				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR AH 125 - Computerized Medical Information Systems OR	0	D/E/W	D/E/W	D/E	D/E
BCA 140 - Software Applications OR	3	D	D		
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E

Continued on next page

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Course Sequence Required

Fall I	RTH 100	RTH 119	BIO 233	POLS 131	
Winter I	RTH 160	RTH 175	RTH 180	RTH 194	BIO 234
Spring I	RTH 210	RTH 291			
Summer I	ENG 131				
Fall II	RTH 216	RTH 235	RTH 245	RTH 292	ENG 132
Winter II	RTH 275	RTH 285	RTH 294		

The Computer Literacy General Education Requirement is to be completed no later than Fall Term 1. Students may complete this requirement by satisfactory completion of CLT 100 Computer Literacy Test or satisfactory completion of one of the Computer Literacy Courses identified in the catalog.

The Spring Term 1 semester includes the first major clinical rotation. RTH 291 is a 10 week clinical rotation extending beyond the spring term schedule. Students must make arrangements to be free during the day for these ten weeks due to clinical hours.

Small Business Management & Entrepreneurship

Certificate of Achievement - Business and Economics Division Program Code: SMBUSMGMT.CMULT.2004

Ms. Corinne Asher	313-845-9867	casher@hfcc.edu	Reuther Liberal Arts Building 319B
Elaine Saneske	313-845-9645	esaneske@hfcc.edu	Reuther Liberal Arts Building 328

This certificate program prepares a student to start and/or operate a small business. Coursework covers topics such as accounting, finance, customer service and sales, marketing, computer software applications, and management principles. The QuickBooks computerized software package is utilized in the program. Students are also trained in the use of the Microsoft Office Suite software package. Students will prepare a business plan for a business of their choosing.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
BAC 110 - Practical Accounting OR	4	D/E	D/E	D/E	D/E
BAC 131 - Principles of Accounting	4	D/E	D/E	D/E	D/E
BAC 141 - Computerized Accounting Aps-Quickbooks	2	D/E	D/E		
BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
BBA 155 - Customer Service & Salesmanship	3	D/E	D/E		
BCA 140 - Software Applications	3	D/E/W/O	D/E/W/O	D/E	D/E
BFN 141 - Personal Finance	3	D/E	D/E		
MGT 230 - Principles of Management	3	D/E	D/E	D/E	D/E
MGT 231 - Supervision and Teambuilding	3	D/E	D/E		
MGT 241 - Small Business Management & Entrepreneurship	3	D/E	D/E		
Minimum Credit Hours:	28				

Recommended Course Sequence

Term 1	BAC 110	BBA 131	BCA 140	MGT 230
Term 2	BAC 141	BBA 155	BFN 141	MGT 231 MGT 241

Supervision

Certificate of Achievement - Business and Economics Division

Program Code: BADMSUPERV.CMLT.2003

 Ms. Corinne Asher
 Elaine Saneske

 313-845-9867
 313-845-9645

 casher@hfcc.edu
 esaneske@hfcc.edu

 Reuther Liberal Arts Building 319B
 Reuther Liberal Arts Building 328

This certificate program is designed to improve and develop supervisory skills. Students who are currently employed and are seeking to improve their supervisory skills to increase their opportunity for promotion often utilize it. Skills attained from a certificate in supervision are useful in many different arenas. An understanding of basic supervisory principles is necessary to guide and direct employees in many different types of organizations.

Combining a certificate in supervision with courses or a degree in other areas is a sensible way to increase an individual's employability after graduation. Students can also combine this certificate with other certificate programs in the Business Division to improve their employability. The certificate requires a total of 16 credit hours.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 16

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
MGT 230 - Principles of Management	3	D/E	D/E	D/E	D/E
MGT 231 - Supervision and Teambuilding	3	D/E	D/E		
MGT 240 - Creative Problem Solving	3	D/E	D/E		
BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
BBA 133 - Business Behavior and Communication	3	D/E	D/E	E	
Minimum Credit Hours:	16				

Surgical Technologist

Associate in Applied Science - Health Careers Division

Program Code: SURTC.AAS.2002

Dorothy C. Rothgery, MA, CST/CFA 313-317-6598 drothger@hfcc.edu Health Careers Education Center 313K
Health Careers Office 313-845-9877 Health Careers Education Center 132

The Surgical Technologist Program is an associate degree program designed to prepare individuals for employment as entry-level surgical technologists.

In the first year of the program, students complete the basic technical and academic support courses. The second year focuses on advanced technical courses and the clinical component of the program. There are two major clinical courses in the second year of the program. Students will spend approximately 600 hours in a variety of diverse, quality clinical settings. Surgical technologists are allied health professionals who are an integral part of the team of medical practitioners providing surgical care to patients in a variety of settings.

The surgical technologist works under medical supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual works under the supervision of a surgeon to ensure that the operating room environment is safe, that equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety.

A surgical technologist possesses expertise in the theory and application of sterile and aseptic technique and combines the knowledge of human anatomy, surgical procedures, and implementation tools and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures.

Career Opportunities

Surgical technologists work in operating and delivery rooms, emergency room facilities, and the ambulatory care areas of hospitals and other medical institutions. They may

also work in clinics and physicians' offices. Many surgical technologists are employed directly by surgeons and specialize in fields such as orthopedics, etc.

Demand for surgical technologists should remain strong due to the rising population of older persons, the segment of the population with the greater frequency of health care needs.

Information regarding career placement and job success is available through either the Health Careers Office or the HFCC Placement Office. A representative job profile for a surgical technologist can be obtained through the Health Careers Office. Students requiring accommodation should directly contact the HFCC Assisted Learning Services.

Helpful qualities for surgical technologists include:

- a strong sense of responsibility
- an ability to work well with others
- emotional stability
- an ability to respond quickly
- an ability to be orderly and work quickly
- an ability to work well under stress

Occupational Exposure/Risk

Applicants considering a career in surgical technology, should be aware that during their course of study and in subsequent employment in the field, they are likely to work in situations where exposure to infectious disease is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines, can reduce the risk to a minimum. Thorough education in infection control procedures is

an important part of the surgical technology program of study.

The Surgical Technology (SRG) core program begins in the fall semester. In addition to the HFCC college application, a separate SRG application is required and processed through the Admissions Office. Early application is advised for counseling and admission to the program. Students are accepted into the program on a "first qualified, first accepted" basis. Acceptance into the college does not constitute nor guarantee admission to the program. Final approval to enroll in the program comes from the Health Careers Division.

SRG Program Admission Criteria

1. Minimum high school grade-point average of 2.5 (4.0 scale), or if student has taken college courses, a minimum of 12 academic credits, excluding less than 100 level courses, HPE activity, studio and performance classes (if applicable).
2. ASSET Reading Score 43 or better OR COMPASS Reading Score 84 or better
3. BIO 131 or college equivalent with "C" or higher
4. Asset or COMPASS Writing Test score sufficient for placement in English 131. This requirement may also be fulfilled by successful completion of required developmental English courses.

Students in the SRG program are expected to meet the same physical and mental requirements as a surgical technologist. A representative SRG Job Profile lists the specific physical and mental requirements as well as the environmental conditions of this occupation.

All students enrolled in the SRG program must be in good physical and mental health as determined

Continued on next page

by a physician and validated on the Health Careers Health Appraisal form. Each student must have a physical examination before admission to clinical classes. Additionally, students must demonstrate evidence of current immunizations or provide titres to show immunity to illnesses specified on the Health Careers Health Appraisal form. Students are required to have basic health insurance coverage during their clinical courses.

Students are responsible for their own transportation to clinical sites and any expenses incurred.

Criminal Background Check and Drug Screen:

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug Screen is required for all students in SRG program prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule. For questions regarding this policy, contact the Health Careers Office.

Students who are not cleared for clinical through the Health Appraisal, Criminal Background Check and Drug Screen will not be able to complete the program.

Required core courses can be taken only after acceptance into the SRG Program through the Health Careers Division.

Required support courses may be taken prior to admission to the program.

A minimum grade of C is required in all courses.

The Program Application Process

STEP 1

Select your career program

- It is recommended that each applicant meet with a Health Careers Advisor (313) 845-9877 to discuss program options and then to create an academic plan to qualify for the selected program. It is suggested that you first select and apply to your program of choice before you begin any of the prerequisite course work.

STEP 2

Apply to the program

- First time applicants to HFCC will indicate the program selection on the application to the college. This process automatically applies you to your program of choice.
- Current HFCC students selecting to change their program of study to a health career program must complete a specific program application. Program applications are available in the Health Career/Nursing Admissions office located in the Counseling Office, room LRC 117 B and in the Health Careers Office in the Health Careers Education Center.

STEP 3

Deliver information and track application

- It is the student's responsibility to make certain that all transcripts, grades and/or necessary records are submitted to the Health Careers/Nursing Admissions office, room LRC 117 B.
- Program applicants transferring college credit from another institution must have an official transcript mailed to: Henry Ford Community College, Transfer Evaluation, 5101 Evergreen Road, Dearborn, MI 48128.
- Applicants must also submit a student copy of all of their transcripts to the Health Careers/Nursing Admissions office.
- It is strongly recommended that you personally track your specific program application through the Health Careers/Nursing Admissions office, room LRC 117 B, (313) 317-6525.
- Students are strongly encouraged to monitor their program admission status via the WebAdvisor Program Evaluation link.
- It is imperative that all student contact information such as phone numbers and addresses is kept current through the Registration office. If we are unable to contact you, we then will move to the next qualified applicant.

STEP 4

Qualifying and admission

- Students are qualified when all of the program's admission criteria have been satisfied.

- Applicants are then admitted on a first qualified, first accepted basis for available positions. A student's application date to the program either by indication on the HFCC application or the separate program application may be used to determine placement on the qualified list if necessary. The earlier you apply the better.

Program Duration Limits/Updates/Changes

Program is twenty-one months in length. Students must complete all SRG courses within three years of beginning the formal program.

The College continuously attempts to improve each program and as a result, courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration. Contact the Health Careers Office at (313) 845-9877 for any current program updates or visit www.hfcc.edu.

Registry/Certification/Licensure Exam Information

Graduates of the program are eligible to sit for the national certification exam offered by the Liaison Council on Certification for Surgical Technologists for the designation of Certified Surgical Technologist (CST).

Accreditation

The Surgical Technology Program is accredited through the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon recommendation of the Accreditation Review Committee on Education in Surgical Technology (303) 694-9262. CAAHEP can be reached at www.caahep.org.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 62.5

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
SRG 101 - Introduction to Surgical Technology	4	E			
SRG 120 - Surgical Procedures I	4		D		
SRG 160 - Surgical Pharmacology	3		E		
SRG 209 - Clinical Externship I	5	D			
SRG 220 - Surgical Procedures II	4		D		
SRG 240 - Issues in Surgical Technology	4		D		
SRG 290 - Clinical Externship II	8		D		
Minimum Credit Hours:	32				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
AH 100 - Medical Terminology	4	D/E/W	D/E/W	D/E	D
BIO 135 - Microbiology for Allied Health Sciences	4				
BIO 233 - Anatomy and Physiology I	4	D/E/W	D/E/W	D/E	D/E
BIO 234 - Anatomy and Physiology II	4	D/E/W	D/E/W	D/E	D/E
HCS 103 - Employment Skills for Health Careers	1	D/E	D/E		
HCS 124 - Basic Health Assessment	1	D	D/E		
AH 105 - Basic Life Support for Healthcare Providers	0.5	E/W	W	E	E
HCS 131 - Computers in Health Care	3	E/W	E/W	D	E
Minimum Credit Hours:	20				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science OR	3				
SOC 131 - Introduction to Sociology	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
HCS 131 - Computers in Health Care	3	E/W	E/W	D	E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

HCS 131 is a SRG Program requirement. The HCS 131 course also meets the HFCC general education requirement for Computer Literacy

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Course Sequence Required

Fall I		AH 100	BIO 135	BIO 233	SRG 101		
Winter I		BIO 234	ENG 131	HCS 103	HCS 124	SRG 120	SRG 160
Spring I	AH 105	HCS 131	ENG 132				
Fall II		SOC 131	SRG 209	SRG 220			
Winter II	SRG 240	SRG 290					

ENG 132 OR ENG 135 may be taken.

SOC 131 OR POLS 131 may be taken.

AH 105 should be taken between May and August just prior to beginning the second year of the program.

If the student has not already completed the required courses listed upon entering the program, they MUST follow the sequence listed. A minimum grade of "C" is required in all courses.

Telecommunication

Associate in Arts - Fine Arts and Fitness Division

Program Code: TELEC.AA.2004

Jay Korinek

313-845-6477

jkorinek@hfcc.net

MacKenzie Fine Arts Center 140

The Associate in Arts degree in Telecommunication is designed for the student interested in the career areas of advertising, public relations, journalism, and program production for radio, television, film, and multimedia. Both classroom academic knowledge and creative skills are combined with real-world assignments and experience so as to provide a solid foundation for the completion of a four-year mass communication degree at a transfer institution.

Career Opportunities

Management: Producer, Director, or Promotions Coordinator

Production: Writer, Director, Camera Operator, or Video Editor

Talent: Announcer, Broadcast Journalist, or Performer

Transfer Options/Requirements

The College has articulation agreements and/or transfer guides to help students who want to transfer to other institutions once they have completed their studies at HFCC. Articulation agreements ensure that graduates from HFCC can transfer to another institution and work towards a bachelor's degree without a loss of coursework completed at HFCC. See Appendix A for a complete list of articulation agreements. Transfer guides denote the transferability of HFCC coursework toward specific degree programs at other institutions. It is important that students who intend to transfer to another institution consult the appropriate articulation agreements and/or transfer guides to

ensure the transferability of the courses they take to the institution they plan to attend.

Articulation agreements and transfer guides are available in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resource Center). Some of the institutions students enrolled in this program frequently transfer to include:

- Davenport University
- Lawrence Technological University
- Siena Heights University
- University of Michigan - Dearborn

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
TCM 131 - Introduction to Telecommunication AND	3	D	D		
TCM 132 - Film History and Criticism AND	3	D	D		
TCM 151 - Digital Audio Editing AND	1	D	D		
TCM 157 - Digital Video Editing AND	1	D	D		
TCM 241 - Media Writing AND	3	D	D		
TCM 243 - Media Performance AND	3	D	D		
TCM 251 - Audio Production AND	3	D	D		
TCM 257 - Video Production AND	3	D	D		
TCM 261 - Broadcast Journalism	3	D	D		
Minimum Credit Hours:	23				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
SPC 131 - Fundamentals of Speaking AND	3	D/E/W	D/E/W	D/E	D/E
SPC 145 - Interpersonal Communication 145 AND	3	D/E	D/E		
Minimum Credit Hours:	9				

Continued on next page

Elective Courses	Credit Hours	Fall	Winter	Spring	Summer
BBA 131 - Introduction to Business	4	D/E/W/O	D/E/W/O	D/E	D/E
BLW 253 - Business Law and the Legal Environment	4	D/E	D/E	E	
BBA 252 - Principles of Marketing	3	D/E	D/E	D/E	
Also:					
5 credits of Social Science					
8 credits of Math/Science					
2 credits of Health and/or Physical Education					
Minimum Credit Hours:	31				

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science AND	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
HPEA 117 - Weight Train & Phys Conditioning OR	2	D/E	D/E	D/E	D/E
HPEA 217 - Weight Training and Physical Conditioning II OR	2	D/E	D/E	D/E	D/E
HPEA 126 - Aerobic Dance OR	2	D	D	D	D
HPE 140 - Lifetime Wellness OR	2	D/E	D/E		
HPE 142 - Advanced First Aid OR	3				
HPE 153 - Nutrition OR	2	D/E	D/E	D/E	D/E
HPE 155 - Relax Tech for Stress Management	2				

Minimum General Education Hours Required: 11

Theatre

Associate in Arts - Fine Arts and Fitness Division

Program Code: DRTHE.AA.1986

George Popovich

313-845-6478

popovich@hfcc.net

MacKenzie Fine Arts Center 127

The Associates in Arts degree in the Theatrical Arts with an area of concentration in Theatre is available to those students who wish to specialize in the Theatrical Arts. This degree program is designed to provide a sound basis for understanding the theory

and practice of the theatrical arts and opportunities for experience through a curriculum of pre-professional training in theory, performance, and production.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 60

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
STH 131 - Theatre Appreciation AND	3	D/E	D/E	D	D
STH 132 - Acting I AND	3	D/E	D/E		
STH 142 - Theatrical Production AND	3	D/E	D/E		
STH 150 - Stagecraft AND	3				
STH 238 - Theatre History AND	3				
STH 256 - Directing AND	3				
STH 281 - Theatre Capstone AND	1				
STH 133 - Technical Theatre OR	3	D/E	D/E	D/E	D/E
STH 140 - One Act Play Production OR	3				
STH 149 - Children's Theatre Production OR	3				
STH 242 - Advanced Theatrical Production OR	3				
STH 259 - Experimental Theatre Production	3				
Minimum Credit Hours:	22				

Required Support Courses	Credit Hours	Fall	Winter	Spring	Summer
5 credit hours of Social Sciences* AND					
8 credit hours of Math/Science (100+over)** AND					
2 credit hours of HPE or HPEA***					
*Social Science courses includes: Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, Social Science, Sociology.					
** Math/Science includes: Astronomy, Biology, Chemistry, Geology, Physical Science, Physics, Mathematics, Science, Atmospheric Studies.					
***Any course starting with HPE or HPEA					
Minimum Credit Hours:	24				

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General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. Students must follow the directions for each General Education section, listed in parentheses below.

Your program recommends the courses listed here to fulfill General Education requirements, primarily based on transfer requirements of four-year colleges. A complete list of requirements, with all options, is in the General Education section.

American Society Events, Institutions and Cultures

(Complete one of the following courses below)

	Credit Hours	Fall	Winter	Spring	Summer
POLS 131 - Introduction to American Government and Political Science	3				

Computer Literacy

(Complete one of the following courses below or pass CLT 100 - the Computer Literacy Test)

	Credit Hours	Fall	Winter	Spring	Summer
CLT 100 - Computer Literacy Test OR	0	D/E/W	D/E/W	D/E	D/E
ACT 112 - Computers in Architecture OR	1	W	W		
AH 125 - Computerized Medical Information Systems OR	3	3	D	D	
ART 275 - Advanced Projects OR	3	D/E/W	D/E/W	D/E/W	D/E/W
BCA 140 - Software Applications OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 100 - Introduction to Information Technology OR	3	D/E/W/O	D/E/W/O	D/E	D/E
CIS 221 - Instructional Technology for Elementary Teachers OR	3				
CIS 223 - Instructional Technology for Secondary Teachers OR	3				
HCS 131 - Computers in Health Care OR	3	E/W	E/W	D	E
HIT 161 - Health Information Processing OR	2				
TAFD 115 - Computer Applications for Skilled Trades OR	2	D/E	D/E		D/E
MFMT 103 - Industrial Computer Exploration (PO)	2	D/E	D/E	D/E	

Information Literacy & Written Communication

(Successful completion of ENG 131 and ENG 132 or ENG 135 meets both graduation requirements of Information Literacy and Written Communication)

	Credit Hours	Fall	Winter	Spring	Summer
ENG 131 - Composition	3	D/E/W/O	D/E/W/O	D/E/O	D/E/O
ENG 132 - Composition II OR	3				
ENG 135 - Business and Technical Writing	3				

Minimum General Education Hours Required: 9

Wellness

(Complete one of the following courses below. Applies only to Associate of Arts and Associate of General Studies degrees)

	Credit Hours	Fall	Winter	Spring	Summer
HPEA 117 - Weight Train & Phys Conditioning OR	2	D/E	D/E	D/E	D/E
HPEA 217 - Weight Training and Physical Conditioning II OR	2	D/E	D/E	D/E	D/E
HPEA 126 - Aerobic Dance OR	2	D	D	D	D
HPE 140 - Lifetime Wellness OR	2	D/E	D/E		
HPE 142 - Advanced First Aid OR	3				
HPE 153 - Nutrition OR	2	D/E	D/E	D/E	D/E
HPE 155 - Relax Tech for Stress Management	2				

Minimum General Education Hours Required: 11

Web Design

Certificate of Achievement - Fine Arts and Fitness Division

Program Code: ARTSGPHWEB.CMLT.2004

Kirk McLendon

313-845-6487

mclendon@hfcc.edu

MacKenzie Fine Arts Center 149

Web Design is one of the five new Certificate Programs offered at HFCC. Earn a Web Design Certificate by completing the 36-38 credit hours of core courses. Students may complete an additional 22-24 credit hours of General education courses to earn an Associate of Arts Degree. Classes are offered throughout the year during the day, evening and weekend.

Interactive design presents new challenges. Designers must understand how users interact with the sites they design in order to create new and effective ways to present and communicate ideas in a non-linear format. Photoshop, Flash, ImageReady and Dreamweaver are among the programs web designers need to know.

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
An additional 22-24 credit hours of General Education courses may be taken with any of the five Graphic Design certificates to obtain an Associate of Arts Degree.					
ART 101 - Two-Dimensional Design	3	D/E	D/E	D	D
ART 102 - Drawing I	3	D/E	D/E	D	D
ART 107 - Photoshop/ImageReady	3				
ART 108 - Flash	3				
ART 112 - Drawing II	3	D/E	D/E	D	
ART 165 - Graphic Design I	3	E	E		
ART 130 - History of Graphic Design	3	D	D	O	
CIS 126 - Advanced HTML	4				
ART 245 - Interactive Design	3				
ART 172 - Color Theory	3	D	D		
ART 255 - Animation Basics	3				
ART 275 - Advanced Projects	3	D/E/W	D/E/W	D/E/W	D/E/W
Minimum Credit Hours:	37				

Web Technologies & Design

Certificate of Achievement - Technology Division

Program Code: CISPWEBDSN.CMLT.2003

David Maier	313-845-9890	djmaier@hfcc.edu	Technology Building 162I
David Wiltshire	313-845-9816	djwiltshire@hfcc.edu	Technology Building 115D

The Web Technologies and Design Certificate program is designed to prepare the student to complete the CIW Foundations Exam, CIW Site Designer Exam, and the CIW E-Commerce Designer Exam. For more information on the CIW exams, please visit the CIW Web site at <http://www.ciwcertified.com>. All courses can also be applied to an Associate in Applied Science Degree in Computer Information systems.

- Web programmer
- Web designer
- Web support

Registry/Certification/Licensure Exam Information

CIW Foundations
 CIW Site Designer
 CIW E-Commerce Designer
 For more information, visit <http://www.ciwcertified.com>

Courses

Minimum Number of Credits To Graduate (Including Options/Electives): 0

Required Core Courses	Credit Hours	Fall	Winter	Spring	Summer
CIS 122 - Web/Internet Technologies	3				
CIS 126 - Advanced HTML	4				
CIS 112 - Introduction to Networking	3				
ART 107 - Photoshop/ImageReady	3				
CIS 227 - Web Authoring Design Tools	4				
CIS 224 - Web Multimedia	4				
CIS 222 - Advanced Web/Internet Technologies	4				
Minimum Credit Hours:	25				

Areas of Study

Anthropology

Area of Study - Social Science Division

Henry Bowers 313-845-9706 hbowers@hfcc.edu Reuther Liberal Arts Building 103

Anthropology is the study of humankind - its origins, evolution, and diverse cultures. Introduction to Anthropology (ANTH 131) serves as the basic introduction to the world of anthropology.

Although it is recommended that students take this course before those at a higher level, it is not required. Many

students, especially science majors, prefer to take Peoples and Cultures of the Middle East (ANTH 152) directly, thereby fulfilling an important foreign culture requirement at many four-year institutions. All anthropology courses are transferable.

Anthropology courses at the 100-level or above fulfill the graduation requirement for Associate of Arts degrees, in Group III - Social Sciences.

Take a look at our new course, ANTH 153-Introduction to Archaeology, in the course descriptions section.

Astronomy

Area of Study - Science Division

Mr. Michael LoPresto 313-845-9722 lopresto@hfcc.edu Science Building 16

HFCC offers two courses in astronomy: Descriptive Astronomy (ASTR 131) and Introductory Astronomy Laboratory (ASTR 133). They are ideal for the student with little or no prior scientific or mathematical experience who wishes to explore astronomy or science in general, as well as for students preparing to be secondary school

science teachers. They also provide a good introductory survey for students planning advanced study of astronomy.

Students interested in majoring in astronomy at a four-year school should take these courses, plus advanced mathematics and physics courses.

Dance

Area of Study - Fine Arts and Fitness Division

Diane Mancinelli 313-845-6314 dmancin@hfcc.edu Athletic Memorial Building 9

HFCC has a vibrant and lively Dance program. Areas of teaching include Tap, Modern Dance, and Jazz. Students benefit from high-quality courses and participation in the Full Circle Dance Company.

High-quality courses are taught by HFCC instructors. Many guest dance artists and choreographers have worked at HFCC in a huge variety of genres including Flamenco, Jazz, Ballet, Modern, Classical Indian, Ballroom and Folk. The artists teach master classes and compose dances for the Full Circle Dance Company.

The Full Circle Dance Company is open to HFCC students and provides intensive training and performance opportunities. Among these is the American College Dance Festival, which HFCC students have attended for the past 10 years at a different host college. At the Festival, students have dances adjudicated, take master classes, attend dance concerts, perform, and HFCC instructors teach.

Economics, Finance & Investing

Area of Study - Business and Economics Division

Mr. Jared Boyd 313-845-9697 jboyd@hfcc.edu Reuther Liberal Arts Building 319B
 Elaine Saneske 313-845-9645 esaneske@hfcc.edu Reuther Liberal Arts Building 328

Economics is the study of how human beings produce, consume, and trade the products that they desire. It involves studying how societies decide to allocate their scarce resources among the many products that could be produced. Many problems that confront society today have important economic aspects. An understanding of economics also has a practical value in business. Many students majoring in business, engineering, science, or liberal arts may be required to take an economics course. For specific

economic course descriptions, see BEC 133, BEC 151, and BEC 152. Finance and investing are areas related to economics. As our society changes and companies eliminate traditional pension plans, individuals will be increasingly required to manage their retirement funds. Understanding basic investing and financial principles will be a requirement for many people. BFN 130, Beginning Investment, and BFN 141, Personal Finance, are courses designed to meet those needs.

Additionally, BFN 253, Principles of Finance, is available for individuals interested in learning how businesses make financial decisions. Students planning to transfer to other colleges or universities should consult the transfer guides on file in the University Transfer, Advising and Career Counseling Center (313-845-9612, counseling@hfcc.edu, Learning Resources Center) to determine the transferability of HFCC coursework to those institutions.

English

Area of Study - English Division

Reg Gerlica

313-845-9673

rgerlica@hfcc.edu

Reuther Liberal Arts Building 208

The English Division offers a wide selection of courses for students with varying interests, from improving basic reading, writing, and study skills to appreciating and understanding great works of American and world literature.

The literature classes offer students both introductory surveys and more advanced and specialized studies of the literature of specific genres and historical periods. Students who are seeking an initial acquaintance can take Introduction to Literature: Poetry and Drama (English 231) and Introduction to the Novel (English 233). Those interested in more specialized courses are offered two American literature surveys, Shakespeare, Children's literature, and African American literature among others. A course in Creative Writing (English 139) is offered in the fall and winter semesters.

Business and Technical Writing (English 135) trains students to write effectively in the workplace, and it is also available to people already working in local business and industry who desire to improve their professional writing skills. Sections of this course are among those taught in computer-equipped classrooms, thus emphasizing computer technology as a critical tool in workplace communication.

Courses in developmental writing (English 088 and 093) and reading (English 079 and 081) are offered every semester to provide students the opportunity to improve their basic skills and ensure their success at Henry Ford Community College. These courses are among those closely tied to the Learning Laboratory, where students can get instruction on an individual basis.

If, based on their placement scores, students do not need to take any of the developmental courses, they should enroll in English 131, a freshman-level composition course which stresses critical reading, critical thinking, and critical writing. Either English 132 or English 135 follows successful completion of English 131.

Some students for whom English has not been the primary language need specialized courses to prepare them for academic success. The English Division offers two developmental writing courses for such students (English 091 and 092), one developmental reading course (English 078), and one pronunciation course (English 077). Enrollment is restricted to fifteen per class in the writing courses in order to ensure that these students receive individual attention.

Foreign Languages

Area of Study - English Division

Reg Gerlica 313-845-9673 rgerlica@hfcc.edu Reuther Liberal Arts Building 208

The College offers four-semester sequences in three European languages, French, German, and Spanish, as well as a two-semester sequence in Modern Standard Arabic and Italian. Beginning classes are designed for students with no previous experience. All courses develop not only the students' abilities with oral and written language but also their understanding of a foreign culture. Textbook-based written assignments and exercises are supplemented by in-class oral practice. Students planning to transfer to a four-year institution that requires a foreign language for graduation can fulfill that requirement at HFCC before

transferring. Employees of companies that do business abroad also take these courses to enhance their professional credentials by improving their knowledge of language and culture.

In addition, single-semester enrichment courses (French 141 and German 141) emphasize improved oral facility, increased vocabulary, and introduction to the culture.

Students who have taken courses in high school or at another college should interview with an instructor in order to determine proper placement. For further information they should call 313-845-6418.

Geography

Area of Study - Social Science Division

Henry Bowers 313-845-9706 hbowers@hfcc.edu Reuther Liberal Arts Building 103

Geography emphasizes spatial relationships, locations, and distributions. Geographers address the questions of "where" and "why" by examining the location of people and activities across the earth's surface, and the reasons for their distribution. Geographers study spatial variations in the way people interact with one another and their environments. In short, geography is an exciting discipline that has great relevance and application to our everyday lives.

Geography courses encourage student participation and address topics such as population patterns, the spatial distribution of culture, resource use,

pollution, urbanization, perception of place, the environment, and human alteration of the physical landscape. Discussion of current events from a geographic perspective enhances students' understanding of complex local, national, and global issues.

Principles of Physical Geography (GEOG 131) is an overview of the spatial variations within the physical environment with emphasis on the ways people use and change the earth's surface.

World Regional Geography (GEOG 132) is an overview of people and places around the world with emphasis on spatial variation of culture.

Geography of Michigan (GEOG 133) is an overview of the spatial variation in the human and environmental landscapes of Michigan with emphasis on human settlement patterns.

Introduction to Geographic Information Systems (GEOG 231) is an overview of concepts, techniques, and applications of GIS.

Geography courses at the 100 level or above fulfill the graduation requirement for Associate of Arts degrees, in Group III - Social Sciences.

Geography courses may be taken in any order, fulfill social science credit, and are fully transferable to four-year institutions.

Geology

Area of Study - Science Division

Mr. Michael LoPresto 313-845-9722 lopresto@hfcc.edu

Science Building 16

HFCC offers one course in Geology (GEOL 131: Physical Geology). It is ideal for the student with little or no prior scientific or mathematical experience who wishes to explore geology or science in general, as well as for students preparing to be secondary school science teachers. It also provides

a good introductory survey for students planning advanced study of geology.

Students interested in majoring in geology at a four-year school should consult the catalog of the school to which they wish to transfer for assistance in planning a course of study.

History

Area of Study - Social Science Division

Henry Bowers 313-845-9706 hbowers@hfcc.edu

Reuther Liberal Arts Building 103

History is what happened, what historical writings and people represent to have happened, and the study of the application of this knowledge to us and to our time. In addition to adding zest to life, history courses meet graduation requirements. History offerings cover the fields of world civilization; American history; and specialized

topics such as African-American, English, labor, and women's history.

History courses at the 100-level or above fulfill the graduation requirement for Associate of Arts degrees, in Group III - Social Sciences.

Take a look at our new course, HIST 260, in the course descriptions section.

Liberal Arts

Area of Study - Other Academic Division

University Transfer Center

313-845-9612

counseling@hfcc.edu

Learning Resources Center 117

The “liberal arts” program signifies that the student is broadly educated in the major divisions of higher learning: humanities, natural sciences, mathematics, social sciences, fine arts. The student has acquired methods of study and habits of thought which are demonstrated by an ability to analyze

problems, make appropriate value judgments, and express conclusions in cogent style. The student devotes a major portion of study to in-depth concentration of one subject. The student is encouraged to devote some time to electives chosen because of their inherent interest.

A full-time program in “liberal arts” with modification dependent on requirements of the transfer institution, elected major, educational experience, ability, and interest might be as follows:

First Year

First Semester	Credit Hours
English Composition 131	3
Science *	4
Social Science **	3 or 4
Elective *****	3 or 4
Physical Education	1

Second Semester	Credit Hours
English Composition 132 or English 135	3
Science*	4
Social Science**	3 or 4
Elective *****	3 or 4
Physical Education	1

Second Year

First Semester	Credit Hours
Foreign Language *** or elective	3 or 4
Elective*****	3 or 4
Humanities **** or Social Science	3 or 4
Major and/or Electives	3 or 4

Second Semester	Credit Hours
Foreign Language *** or elective	3 or 4
Elective*****	3 or 4
Humanities **** or Social Science	3 or 4
Major and/or Electives	3 or 4

Additional electives may be needed to reach the minimum 60-62 hours required for graduation.

- * Select from Astronomy, Botany, Chemistry, Geology, Introductory Biology, Physical Science, Physics, or Zoology.
- ** Select from Anthropology, Geography, History, Political Science, Psychology, or Sociology.
- *** Four semesters of French, German, or Spanish may be elected; two semesters of Arabic or Italian are offered.
- **** Humanities classes usually include Art, Music, Literature, Philosophy, Drama, World Religion, and World Civilization.
- ***** Electives include the above courses plus Math and Business.

Students are encouraged to consult transfer guide sheets located in the University Transfer, Advising, and Career Counseling Center.

Mathematics

Area of Study - Mathematics Division

Larry Smyrski	313-845-6388	Lsmyrski@hfcc.edu	Reuther Liberal Arts Building 244
Nancy Leach	313-845-9631	nleach@hfcc.edu	Reuther Liberal Arts Building 246

The Mathematics Division offers a wide range of courses, from developmental to advanced, that enable students to fulfill program requirements at Henry Ford Community College, to transfer with advanced standing into four-year degree programs, or to complete admission requirements for graduate degrees where the student's undergraduate mathematical background is deficient.

For students who come to Henry Ford without the adequate preparation and skills in high school mathematics, the Mathematics Division has a series of developmental offerings that prepare them for success in more advanced courses. In addition, the Learning Laboratory provides individualized remediation for students who are lacking in specific skills.

If a student's career objective is a technical degree or certificate, there is a structured two-course sequence in Technical Mathematics (MATH 100

and 103) that is designed to meet the mathematical needs of these specific programs. Related problem-solving activities are integrated throughout this sequence. For students who plan eventually to transfer to a four-year program that has a strong mathematics component, the entire range of the traditional first two years of undergraduate mathematics courses is offered. Included is a three-course calculus sequence (MATH 180, 183, 280), in addition to specialty courses such as Differential Equations, Linear Algebra, and Finite Mathematics.

Future elementary education majors can satisfy their three-course mathematics requirement at most institutions by completing MATH 121, MATH 221, and MATH 225. Students should consult the transfer guides to the four-year institutions of their choice for the appropriate courses.

Students preparing for an undergraduate degree in business or for entry into an MBA program can elect MATH 153, Essentials of Calculus for Business and Economics, and MATH 140, Introduction to Statistics.

The Mathematics Division emphasizes problem-solving techniques and the appropriate use of technology, both computer and graphing calculator-based, throughout its wide range of course offerings.

Whether in science, engineering, statistics, business, health careers, education, or any other field that requires quantitative literacy, the mathematics offerings are designed to prepare students to become creative problem solvers.

Philosophy

Area of Study - Fine Arts and Fitness Division

Thomas Wallenmaier 313-845-6439 twallen@hfcc.edu

MacKenzie Fine Arts Center 142

Every HFCC student has the opportunity to reach beyond training to achieve a comprehensive quality education. Philosophy is the love of wisdom. Wisdom is based on knowledge and insight, not on preferences or subjective beliefs. HFCC's sequence of courses in philosophy is academically designed to develop critical and creative thinking skills, and to encourage intellectual integrity in the pursuit of

objective methods of confirmation or disconfirmation of beliefs. HFCC's philosophy courses challenge serious students to engage in focused inquiry, to expose fallacious reasoning, and to develop sensitive approaches to understanding, evaluating, deciding, or acting in any area of significant human concern. There are no prerequisites for any philosophy course. The intellectual life begins and ends with philosophy.

Courses

Recommended Courses	Credit Hours	Fall	Winter	Spring	Summer
PHIL 131 - Introduction to Logic	3	D/E	D/E	D/E	D/E
PHIL 133 - History of Philosophy to the 18th Century	3	D/E			
PHIL 135 - History of Modern Philosophy	3	D			
PHIL 137 - Topics in Philosophy	3	D			
PHIL 139 - Ethics	3	D/E	D/E	D/E	

Minimum Credit Hours:

Physics

Area of Study - Science Division

Michael LoPresto 313-845-9722 lopresto@hfcc.edu

Science Building 16

The Physics Department offers a variety of laboratory-based courses for students interested in studying physics, engineering, and other sciences, as well as support courses for students studying health careers, teaching, and other topics.

Students planning to pursue a professional career in physics, chemistry, or engineering will start with PHYS 231 and 232. Both of these require some calculus as a prerequisite.

Students in other scientific disciplines will typically take the algebra-based courses PHYS 131 and 132.

D=Day E=Evening W=Weekend O=Online

Students taking Technical Physics (PHYS 120 and 121) will apply the laws of physics to solve everyday technical problems in the workplace.

Principles of Physics (PHYS 133) introduces various branches of physics to students who have limited mathematical skills. It is appropriate for students needing to fill a one-semester laboratory science requirement and for those in certain programs in Health Careers and teaching.

Additional Program Requirements

Potential physics majors: Physics is a rigorous academic program that requires strong math and science skills. Students in physics programs at 4-year colleges and universities typically take 16-18 credit hours each semester. The majority of these courses are in physics and mathematics. Students planning to major in physics should take a rigorous high school background including four years of college prep math and science.

Political Science

Area of Study - Social Science Division

Henry Bowers

313-845-9706

hbowers@hfcc.edu

Reuther Liberal Arts Building 103

Politics is the study of who gets what, when, and how through government or other instruments of power. Power can be exercised by individuals, interest groups, parties, nation-states, or international organizations.

Political science examines the theory and practice of politics by focusing on political behavior and values. Subfields include American government, public policy and administration, judicial politics, comparative politics, international relations, and political theory.

Introduction to American Government and Political Science (POLS 131) fulfills Henry Ford Community College's political science requirement for graduation, and fulfills general education outcome number one, American Society, Events, Institutions and Cultures.

Political Science courses at the 100 level or above fulfill the graduation requirement for Associate of Arts degrees, in Group III - Social Sciences.

Pre-Professional

Area of Study - Other Academic Division

University Transfer Center

313-845-9612

counseling@hfcc.edu

Learning Resources Center 117

Students who wish to enter the professional schools of universities may be required to spend some time in a liberal arts college.

Students interested in medicine, dentistry, law, forestry, journalism, agriculture, architecture, home economics, public health, library science, veterinary medicine, and other fields will find it possible to take the first one or

two years of their college work in the community college without loss of time or credit hours in the transfer, provided a high standard of work is maintained.

The community college schedule of classes is constructed with the needs of the professional school in mind and in most cases a full two years of work is possible.

Psychology

Area of Study - Social Science Division

Henry Bowers

313-845-9706

hbowers@hfcc.edu

Reuther Liberal Arts Building 103

Psychology approaches the study of human behavior systematically by using the techniques of science. Child Psychology (PSY 152), Life Span Development (PSY 153), Aging Psychology (PSY 255), and Human Sexuality (PSY 161) are available for students with interest in the field. Social Psychology (PSY 254/SOC 254) requires that PSY 131 and SOC 131 be taken before enrollment. Educational

Psychology with Practicum (PSY 256 and PSY 294) is available for those planning to enter the teaching profession.

Psychology courses at the 100 level or above fulfill the the graduation requirement for Associate of Arts degrees, in Group III - Social Sciences.

Religion

Area of Study - Social Science Division

Henry Bowers

313-845-9706

hbowers@hfcc.edu

Reuther Liberal Arts Building 103

World Religious Studies explores the spiritual side of human nature as it has been expressed through cultural traditions and social situations. To further our understanding of religion, these courses present the views and experiences of people of diverse faiths. Insights culled from history, anthropology, and philosophy are applied to help us make sense of the often confusing and conflicting phenomena that constitute religious experience and its communication.

Religious Studies courses may be taken in any order and are fully transferable. They generally fulfill humanities requirements at four-year institutions.

Religious Studies courses at the 100 level or above fulfill the graduation requirement for Associate of Arts degrees, in Group I - Humanities.

Take a look at our new course, WR 233 Eastern Religions, in the course description section.

Science

Area of Study - Science Division

Associate Dean of Science 313-845-9632 science@hfcc.edu Science Building 107

Courses in this area are interdisciplinary. SCI 131: Revolutions in Science is a non-lab science course that takes you behind the scenes of great scientific discoveries. SCI 210 through SCI 213 are inquiry-based courses intended for students planning to major in education.

Sociology

Area of Study - Social Science Division

Henry Bowers 313-845-9706 hbowers@hfcc.edu Reuther Liberal Arts Building 103

Sociology examines human societies, behavior, and culture. The field focuses on major areas of social life and institutions such as the economy, family, mass media, and religion. Sociology places an emphasis on the influence of economic class, race/ethnicity, and gender in understanding how people see the world and in how people have different levels of power within a society.

Introduction to Sociology (SOC 131) provides an overview of the field. Students learn to analyze how societies and groups shape the ways that people act and think. For students wishing more in-depth exploration of sociology,

the College offers Marriage and the Family (SOC 132), Contemporary Social Problems (SOC 151), Women and Men in Society (SOC 152), Ethnic and Racial Diversity (SOC 251) and Social Psychology (SOC 254/PSY 254).

Sociology courses at the 100 level or above fulfill the graduation requirements for Associate of Arts and Associate of Science degrees, in Group III - Social Sciences. SOC 131-Introduction to Sociology also fulfills the General Education Outcome on American Society, Events, Institutions and Cultures.

ACCOUNTING

BCA 101 Computer Keyboarding 3 Credit Hours

Designed to teach students keyboarding skills on the personal computer. Terminology, basic formatting, the alpha keyboard, symbols, and the ten-key numeric pad are introduced. As the semester progresses, accuracy and speed building are emphasized.

Fall	Winter	Spring	Summer
D/E/W	D/E/W	D/E	D/E

BAC 110 Practical Accounting 4 Credit Hours

A college-level course offering practical knowledge of bookkeeping principles for students who either plan to take BAC 131 or desire only one course to familiarize themselves with small-business accounting. They are introduced to various journals, learn the complete accounting cycle, complete a one-month practice set, and solve a variety of accounting problems.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

BAC 112 Bookkeeping 4 Credit Hours

Provides training in basic accounting and financial record keeping with an emphasis on small business. Topics covered include adjusting entries, correcting entries, payroll, depreciation, and inventory. An emphasis of the course will be to prepare students for Certified Bookkeeper exams offered by the American Institute of Professional Bookkeepers. Materials developed by AIPB will be used in the course. To receive certification from AIPB, candidates must complete five preparatory learning modules and pass three examinations during the semester. The examinations are prepared by AIPB and are currently administered by PrometricTest Centers.

Prerequisites: BAC 110

Fall	Winter	Spring	Summer
D/E	D/E		

BAC 131 Principles of Accounting 4 Credit Hours

Introduces basic financial accounting principles, including the accounting cycle, merchandise accounting, income, and asset and liability measurement.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

BAC 132 Principles of Accounting 4 Credit Hours

A continuation of BAC 131 covering corporate and manufacturing accounting. This course emphasizes the liability and equity sections of corporations. The student is introduced to cash flow and financial statement analysis.

Prerequisites: BAC 131

Fall	Winter	Spring	Summer
D/E	D/E	D/E	E

BAC 141 Computerized Accounting Applications-Quickbooks 2 Credit Hours

Introduces students to the Quickbooks computerized accounting software package. Students will learn to set up a company's books and to enter data for the general journal, for special journals, for accounts receivable, for accounts payable, and for payroll. Preparation of financial statements will also be covered.

Prerequisites: BCA 140, BAC 110 or BAC 131

Fall	Winter	Spring	Summer
D/E	D/E		

BAC 146 Computerized Accounting Applications-Peachtree 3 Credit Hours

Introduces students to the Peachtree computerized accounting software package. Students will learn to set up a company's books and to enter data for the general journal, for special journals, for accounts receivable, for accounts payable, for payroll, and for inventory. Preparation of financial statements will also be covered.

Prerequisites: BCA 140, BAC 131

Fall	Winter	Spring	Summer
D/E	D/E		

BAC 231 Asset Accounting 4 Credit Hours

A detailed study of specialized phases of asset accounting such as the treatment of cash and temporary investments, receivables, inventories, investments, plant and equipment, intangibles, deferred charges, liabilities, and financial statements. The emphasis is on theory.

Prerequisites: BAC 132

Fall	Winter	Spring	Summer
E			

BAC 232 Equity Accounting 3 Credit Hours

A detailed study of specialized phases of equity accounting such as the treatment of debts, revenues, pensions, earnings, dividends, leases, changes in financial position, disclosure, and analysis. Emphasis is on theory.

Prerequisites: BAC 231 or concurrent enrollment in BAC 231

Fall	Winter	Spring	Summer
	E		

BAC 235 Tax Accounting 3 Credit Hours

Acquaints the student with the basic application and rationale of the federal income tax. This course provides training through specific problem assignments in a variety of situations. Emphasis is on individual taxpayers. An individual computerized tax preparation program is often used.

Prerequisites: BAC 132

Fall	Winter	Spring	Summer
E			

BAC 262 Cost Accounting 3 Credit Hours

Introduces financial accounting principles followed by manufacturing firms and the planning, decision making, and cost procedures of managerial accounting.

Prerequisites: BAC 132

Fall	Winter	Spring	Summer
	E		

ALLIED HEALTH/ HEALTH CARE SKILLS

AH 100 Medical Terminology 4 Credit Hours

In-depth presentation of medical languages, which then will serve as a solid foundation for students interested in health care, medicine, nursing, pharmacy, physical therapy, or related careers. Medical terminology for both health and disease is presented in relation to human structure and function. Builds a framework by introducing the key elements in the formation as well as the modification of medical terms, which then is applied to the specific body systems.

Fall D/E/W	Winter D/E/W	Spring D/E	Summer D
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AH 105 Basic Life Support for Healthcare Providers 0.5 Credit Hours

This lecture/lab course is structured to teach the theory and skills of CPR for victims of all ages so that individuals can recognize and respond to basic life threatening emergencies due to cardiac or respiratory arrest. Course features ventilation with a barrier device, a bag-mask device, supplemental oxygen, use of automated external defibrillator (AED), and relief of foreign-body airway obstruction. This course is designed for either individuals working in healthcare or for health career and nursing students preparing for their clinical assignments. Upon successful completion of the course including both written and skills testing, the student will receive a Healthcare Provider Card valid for two years through the American Heart Association. This is a pass/fail course with demonstrated competency in all key skill areas required.

Fall E/W	Winter W	Spring E	Summer E
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AH 116 Interpreting Medical Lab Reports 3 Credit Hours

This is a general survey course designed to serve the needs of a variety of health careers students who need to recognize normal and abnormal values of the commonly used diagnostic tests. This course presents the values of the commonly used medical laboratory diagnostic tests and relates those tests to the common disorders or diseases noting the significance of the relationships between tests and diagnosis.

Fall E	Winter E	Spring	Summer
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AH 120 Pharmacology for Allied Health 3 Credit Hours

Designed for students in the health care programs who need to develop a basic and general understanding of pharmacology. This survey course presents a rationale for understanding current drug therapy involving the common disorders of the major body systems. Administration and dosage calculations are not components of this course.

Fall E	Winter D/E	Spring	Summer
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AH 125 Computerized Medical Information Systems 3 Credit Hours

This course provides study of patient information systems that includes the major subsystems and conversion to the electronic health record. Methods of document transmission, access, distribution and storage are reviewed. Electronic patient record design, structure and content, standards, data dictionaries and vocabularies are studied in their use in patient information applications. Examination of the legal implications of computerized data and its use are explored. Clinical decision support, regional and enterprise-wide systems are addressed. Vendor support and contract negotiations are reviewed.

Note: This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

Fall D	Winter D	Spring	Summer
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AH 145 Culture-Sensitive Healthcare 3 Credit Hours

This lecture course assists healthcare providers to understand the needs, expectations, behaviors, and barriers to effective patient care of multi-cultural patient populations. The course will focus upon health care practices directly related to African-American, American Indian, Asian, Hispanic, Middle Eastern, and Eastern European patients.

Fall E	Winter E	Spring	Summer
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AH 150 Pathophysiology 4 Credit Hours

Designed for allied health personnel who have an understanding of human anatomy and physiology and the language of medicine. This course surveys, in depth, several diseases and relates them to causes, signs, symptoms, physiological imbalances, laboratory findings, treatments, and prognoses.

Prerequisites: BIO 134 or BIO 233 and BIO 234

Suggested Prerequisites: AH 100

Fall	Winter D	Spring	Summer
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AH 250 Advanced Cardiac Life Support (ACLS) 2 Credit Hours

This lecture/lab course presents a systematic approach to the management of patients experiencing a severe cardiopulmonary emergency or sudden death. Course follows the American Heart Association format providing the knowledge and skills necessary to manage the first minutes of an adult arrest. Providers will manage ten different core ACLS situations. Upon successful completion of this course, the student will receive an ACLS Provider Card through the American Heart Association.

Prerequisites: Course restricted to emergency medical providers such as physicians, nurses, respiratory therapists, paramedics and other health care professionals who respond to cardiovascular emergencies. Nursing, paramedic and respiratory therapy students in their final semester of training are eligible to take this course.

This course is an advanced level course and is not intended for those individuals with no or minimal health care experience.

Note: The credit version of AH 250 is only offered as needed or as requested through the Health Careers Division. The CEU version of this ACLS course is offered through HFCC's Center for Lifelong Learning.

HCS 103 Employment Skills for Health Careers 1 Credit Hour

A lecture course designed to guide the students toward a greater understanding of the healthcare industry as well as the organizational behavior work within that industry. Networking, communication skills, conflict management, organization systems, management/employee issues are explored. Students will also develop marketing strategies for health care positions as well as develop strategies for improving their career options.

Fall D/E	Winter D/E	Spring	Summer
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HCS 106 Introduction to Phlebotomy (Identical to MOA 106) 1 Credit Hour

This lecture/laboratory course introduces the basic theory and techniques of blood specimen collection. This course focuses upon proper aseptic technique, specialized equipment, adult/pediatric specimen collection procedures including difficult draws, specialized collection procedures, specimen handling, as well as safety issues. Quality issues, communication skills, and legal issues are also discussed. Students are expected to perform several venipunctures and skin punctures on their lab partners during this course. This course is specifically designed as either an optional or required support course for students in one of the health career/nursing programs. This course does not include a clinical component and is not designed to satisfy the national requirements for a certification in phlebotomy.

Prerequisites: Currently enrolled student in one of the health career/nursing programs or permission of department. Good manual dexterity skills required. Documented completion of the first inoculation in the Hepatitis B vaccine series or a signed waiver. Documents to be presented by the student at the first class session.

Fall D	Winter D/E	Spring	Summer E
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HCS 124 Basic Health Assessment 1 Credit Hour

This is a lecture/laboratory course which focuses upon the theory and techniques involved with basic patient assessment through vital signs. Course also addresses the issues of medical asepsis, universal precautions, and patient transportation/movement.

Fall D	Winter D/E	Spring	Summer
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HCS 131 Computers in Health Care 3 Credit Hours

Computerized equipment and systems have become vital components within the health care industry. This lecture/lab course is designed to guide health care and nursing students in the fundamentals of computer terminology while stressing applications that are important to the delivery of health care. Students will also review legal and ethical considerations in the processing of confidential patient and medical information.

Suggested Prerequisites: Basic keyboarding skills recommended.

Note: This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

Fall E/W	Winter E/W	Spring D	Summer E
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ANTHROPOLOGY

ANTH 131 Introduction to Anthropology 3 Credit Hours

An introduction to physical and cultural anthropology, archeology, and linguistics. Human origins and evolution are discussed in detail. Issues like cannibalism, hunger, race, and human intelligence are also explored. Various customs, myths, and beliefs, especially pertaining to women, are examined cross-culturally.

ANTH 151 Cultures of North America 3 Credit Hours

Traces present-day American culture from the arrival of Christopher Columbus in the New World and the devastating impact that event had on the native peoples of the hemisphere. Several cultures from various regions of North America will be studied in depth using ethnographies, biographies, fiction, and film.

ANTH 152 Middle Eastern Peoples and Cultures 3 Credit Hours

An introduction to the richness and variety of Middle Eastern cultures, with an emphasis on Arab culture and the role of Islam in shaping the history and culture of the region. Arabs in the United States and in Dearborn are also examined, as well as American cultural perceptions of the Arabs, Islam, and the Middle East.

ANTH 153 Introduction to Archaeology 3 Credit Hours

This course provides an introductory look at the field of archaeology answering the question: what do archaeologists do? Students will explore the methods of excavation, dating sites, artifact analysis, and cultural interpretation. Students will also explore some of the major archaeological sites from around the world.

**ARCHITECTURE/
CONSTRUCTION TECHNOLOGY**

ACT 104 Wood Deck/Patio Construction 4 Credit Hours

A course in which the student studies the design and construction of residential wood decks and related structures. Along with functional, aesthetic, climatic, and cost considerations, the influence and structural characteristics of various materials are evaluated. Each student also experiences the actual construction of a typical wood deck/patio at a predetermined residential site.

Fall	Winter	Spring E	Summer
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ACT 110 Basic Architectural Drafting 3 Credit Hours

A basic course focusing on architectural drafting techniques. Emphasis is on line quality, dimensioning, lettering, material symbols and sheet organization. Students are introduced to floor plans, foundation plans, sections, exterior elevations and the relationship of these views to each other.

Prerequisites: Concurrent enrollment in ACT 116 is recommended, but not required.

Fall D/E	Winter D/E	Spring	Summer
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ACT 112 Computers in Architecture 1 Credit Hour

An introductory course designed to acquaint ACT students with an understanding of the basic components of a CAD workstation. Students are exposed to the use of network access, the Windows operating system, drive and directory structures, output, file management techniques in Windows and AutoCAD, internet access, e-mail, flatbed scanners and digital cameras. All information relates to the CAD workstation utilizing AutoCAD. This course meets on Saturdays during the first four weeks of the semester.

Note: This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

Fall	Winter	Spring	Summer
W	W		

ACT 116 Basic Architectural CAD 4 Credit Hours

A basic course in computer-aided drafting with an emphasis on architectural applications. Topics include drawing setup, draw and edit commands, hatching, dimensioning, creating and editing blocks, model space, paper space and plotting. The efficient use of CAD in the architectural industry is also covered as it relates to each assignment.

Suggested Prerequisites: Concurrent enrollment in ACT 110 is recommended, but not required.

Fall	Winter	Spring	Summer
D/E	D/E		

ACT 121 Residential Construction Materials 3 Credit Hours

A basic course in which the student studies residential construction materials with reference to geographical location, cost and material selection. Concrete, masonry, wood, wood windows, doors, insulation, gypsum board and roofing materials are discussed and evaluated. This course focuses on the methods of material selection in relation to acceptable industry standards.

Fall	Winter	Spring	Summer
D/E	D/E		

ACT 130 Architectural Graphics 3 Credit Hours

A basic course in architectural drawing in which the student studies architectural freehand sketching, elevation rendering techniques, shade and shadow and perspective drawing methods used in architectural renderings. The student also becomes acquainted with the use of various drawing media and color.

Fall	Winter	Spring	Summer
D	D/E		

ACT 136 Intermediate Architectural CAD 4 Credit Hours

An intermediate level course continuing the study of computer-aided drafting with an emphasis on architectural applications. Topics covered include using external reference drawings, creating, editing and extracting block attributes, model and paper space layout, three-dimensional coordinate systems, three-dimensional viewing, creating and editing 3D solid and surface models.

Prerequisites: ACT 116

Fall	Winter	Spring	Summer
D	D/E		

ACT 141 Residential Construction 3 Credit Hours

Introduces residential construction methods and procedures. The focus is on reading and working from blueprints and working with traditional hand and power tools. Students learn building layout procedures using the level and transit, as well as floor, wall, ceiling and roof framing systems. Lab work includes the rough frame construction of a wood frame house in a controlled environment.

Prerequisites: Completion of or concurrent enrollment in ACT 121

Fall	Winter	Spring	Summer
D/E			

ACT 150 Residential Detailing 3 Credit Hours

An intermediate level course continuing the study and drawing of residential details. Emphasis is on accepted architectural practice and building codes as they relate to site plans, stairway details, interior elevations, kitchen and bath layout, door and window details, building sections and other typical residential details.

Prerequisites: ACT 110 and ACT 116

Fall	Winter	Spring	Summer
D/E	D		

ACT 190 Architecture/Construction Technology Co-op 1 Credit Hour

An advanced-level course offering practical work experience within the Architecture/Construction Technology field through participation in a supervised cooperative education program. This course integrates work experience with classroom instruction.

Prerequisites: ACT 150 and permission of the Cooperative Education Specialist.

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings or weekends depending on employer needs.

ACT 205 Advanced Architectural CAD 4 Credit Hours

An advanced-level course utilizing specific architectural programming including third-party software. Emphasis is on using CAD efficiently to complete and present architectural concepts. Topics include creating and editing wall styles, manipulating door and window styles, drawing three-dimensional roof systems, extracting schedule data, generating elevation and section views and three-dimensional presentation techniques.

Prerequisites: ACT 136

Fall	Winter	Spring	Summer
		E	

ACT 211 Commercial Construction Systems 3 Credit Hours

An intermediate-level course designed to acquaint students with small and large commercial building construction systems, techniques, materials and methods, including soils, foundations, structural systems, wall/cladding assemblies, roofs and interior building systems. The investigation of building uses and the consideration of materials, equipment and services are integral parts of this course.

Prerequisites: ACT 121

Fall	Winter	Spring	Summer
D			

ACT 220 Residential Design 3 Credit Hours

An advanced course in which the student develops a residential design for an assigned site and client. Included are site planning, building design and a partial set of construction documents. A presentation drawing of the proposed design is also required.

Prerequisites: ACT 130 and ACT 150

Fall D	Winter E	Spring	Summer
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ACT 233 Commercial Detailing 3 Credit Hours

An advanced course in which the student becomes acquainted with methods used in developing and drawing details for a commercial building. Details include site, foundation, structural, wall and roof conditions. Also studied are window and door details, commercial stairs and other typical commercial details.

Prerequisites: ACT 150

Suggested Prerequisites: Completion of/or concurrent enrollment in ACT 211 is recommended.

Fall D/E	Winter	Spring	Summer
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ACT 241 Advanced Residential Construction 4 Credit Hours

An advanced-level course continuing the study of residential construction. It focuses on residential carpentry construction techniques in the areas of roofing, siding, brick veneer, window and door installation, insulation, interior wall and ceiling finishing, finish flooring and wood trim. Lab work includes completion of a wood frame house in a controlled environment.

Prerequisites: ACT 141 or permission of instructor

Fall	Winter E	Spring	Summer
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ACT 246 Construction Estimating 4 Credit Hours

An advanced course in which the student studies the estimation of residential construction costs using the quantity survey method. Construction documents are used to take off building material and labor costs for accurate construction cost estimating. The preparation of cost estimating forms for material, labor and other costs is also a part of assigned estimating problems.

Prerequisites: ACT 110

Suggested Prerequisites: Construction experience or ACT 141 and MATH 100 are recommended.

Fall	Winter D/E	Spring	Summer
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ACT 256 Advanced Architectural Graphics 4 Credit Hours

An advanced course in which the student continues studying current architectural graphic and presentation methods. Included are study-model construction as well as further development in freehand sketching, perspective drawing development, and various freehand/hardline rendering techniques. The student will also be able to develop further an understanding of shade and shadow/texture/tones/color/composition and contrast.

Prerequisites: ACT 130

Fall E	Winter D	Spring	Summer
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ACT 258 Computerized Architectural Rendering 4 Credit Hours

An advanced course in which the student becomes acquainted with the techniques in computerized architectural rendering and animation. Topics include familiarity with VIZ Render, basic modeling concepts, basic scene creation, integration of AutoCAD and VIZ Render object manipulation, applying materials, lighting, rendering, backgrounds and animation.

Prerequisites: ACT 130 and ACT 136

Fall D	Winter	Spring	Summer E
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ACT 260 Commercial Design Development 3 Credit Hours

An advanced course in which the student develops a commercial building for an assigned building site and use. Included are site planning, design development and a partial set of construction documents with plans, elevations, sections and details. Emphasis is placed on the transition from design to construction documents.

Prerequisites: ACT 136, ACT 220, and ACT 233

Fall	Winter D/E	Spring	Summer
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ACT 290 Architecture/Construction Technology Co-op 2 Credit Hours

An advanced level course offering practical work experience within the Architecture/Construction Technology field through participation in a supervised cooperative education program. This course integrates work experience with classroom instruction.

Prerequisites: ACT 150 and permission of the Cooperative Education Specialist.

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings or weekends depending on employer needs.

Fall	Winter	Spring D	Summer D/E
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ART

ART 101 Two-Dimensional Design 3 Credit Hours

A studio course that explores the fundamentals of design and the principles of composition utilizing a variety of media and applications. Computers may be utilized in designated sections that are listed in the class schedule.

Fall D/E	Winter D/E	Spring D	Summer D
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ART 102 Drawing 1 3 Credit Hours

The introductory course in drawing. The focus is on the fundamental concepts and skills involved in drawing a range of subject matter from direct observation. Line, value, and linear perspective studies in a variety of drawing media are explored. This is a foundation course which is a prerequisite for other art courses.

Fall D/E	Winter D/E	Spring D	Summer D
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ART 105 Three-Dimensional Design 3 Credit Hours

This class explores design fundamentals and the principles of organization as they apply to three-dimensional forms. Assigned projects introduce the student to materials and techniques used in three-dimensional art.

Fall D/E	Winter D/E	Spring	Summer
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ART 107 Photoshop/ImageReady 3 Credit Hours

PHOTOSHOP: Students learn to work with bitmap images, various file formats, selection and painting tools, image adjustments such as Levels and Curves, Layers, Channels, color.
IMAGEREADY: Basic setup of a web site, working with slices, rollovers, assigning url's, optimizing and saving graphics and html.

ART 108 Flash 3 Credit Hours

Students learn how to setup the timeline and layers for animation and interactive sites; how to work with the drawing tools, symbols, sounds, library and actions. In addition, students learn how to save and use flash projects for the web.

Suggested Prerequisites: ART 107

ART 109 QuarkXpress 3 Credit Hours

Students learn to create print documents using one of these programs. Tools, typesetting features, Master Pages and Style sheets are covered. Design considerations specific to print are covered. QuarkXpress and InDesign will be offered in alternate semesters.

Suggested Prerequisites: ART 101 and ART 107

ART 110 InDesign 3 Credit Hours

Students learn to create print documents using one of these programs. Tools, typesetting features, Master Pages and Style Sheets are covered. Design considerations specific to print are covered. InDesign and QuarkXpress will be offered in alternate semesters.

Suggested Prerequisites: ART 101 and ART 107

ART 112 Drawing II 3 Credit Hours

A continuation of ART 102 (Drawing I). Drawing fundamentals are stressed through working with a variety of subject matter observed first hand. A variety of drawing media are covered.

Prerequisites: ART 102

Fall D/E	Winter D/E	Spring D	Summer
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ART 113 Life Drawing I 3 Credit Hours

An introductory course in drawing the human figure. Studies develop a basic understanding of proportion and anatomy through direct observation. A variety of media is explored.

Prerequisites: ART 102 or consent of the instructor

Fall D/E	Winter D/E	Spring	Summer
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ART 115 Intermediate Perspective 3 Credit Hours

Emphasizes the application of the theories of linear perspective touched upon in the prerequisite course, Drawing I. Expands the student's understanding of the theories used to create three dimensional illusion through the use of the system of linear perspective.

Prerequisites: ART 102

Fall E	Winter D	Spring D	Summer
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ART 116 Painting I 3 Credit Hours

An introduction to painting. A broad range of traditional and contemporary approaches to painting are explored.

Prerequisites: ART 101 and ART 102 or permission of the instructor.

Fall	Winter D	Spring	Summer
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ART 119 Art Education for the Elementary Teacher 3 Credit Hours

A course for classroom teachers. Emphasis is placed on the integration of art into the general classroom procedures to enhance learning. This course develops understanding of the child's mental and creative growth through art and an awareness of art in its various contemporary and cultural contexts.

Fall E	Winter	Spring	Summer
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ART 121 Art History Survey I 3 Credit Hours

A survey of the development of the visual arts from prehistoric to the medieval period.

Fall D/E/W	Winter D/E/W	Spring D/E	Summer D/E
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ART 122 Art History Survey II 3 Credit Hours

A continuation of Art 121 (Art History Survey I) from the Renaissance through modern times.

Fall D/E/W	Winter D/E/W	Spring D/E	Summer D/E
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ART 123 History of Modern Art 3 Credit Hours

A survey of the major movements and personalities of nineteenth, twentieth and twenty-first century sculpture, painting and architecture.

ART 130 History of Graphic Design 3 Credit Hours

A study of history and evolution of letterforms, type, illustration and graphic design to the present. Students learn about important type designers, illustrators and graphic designers, as well as, about relationships between the graphic arts and fine arts through history.

Suggested Prerequisites: ENG 131

Fall D	Winter D	Spring O	Summer
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ART 135 Art Appreciation 3 Credit Hours

A lecture course open to all students interested in developing a broader understanding of the visual arts. One field trip may be required.

ART 138 Jewelry I 3 Credit Hours

An introduction to all aspects of the metalsmithing process in nonferrous materials. The student will be required to deal with contemporary design concepts and production methods will be provided.

Fall E	Winter E	Spring	Summer
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ART 141 Ceramics I 3 Credit Hours

A beginning course in understanding ceramic materials and form. Various hand-building techniques are explored, and wheel throwing is introduced. Basic glazing and kiln firing are covered.

Fall D/E	Winter D/E	Spring	Summer
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ART 142 Ceramics II 3 Credit Hours

This course emphasizes functional pots and the wheel as the primary technique of construction. The student is given an introduction to the history of functional ceramics as an idea source for his or her functional designs. Instruction in kiln stacking and firing is included.

Prerequisites: ART 141 or permission of the instructor

Fall D/E	Winter D/E	Spring	Summer
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ART 151 Introduction to Printmaking 3 Credit Hours

A course designed to give technical and procedural understanding necessary to accomplish some of the basic printmaking processes.

Prerequisites: Art 101 and Art 102

ART 161 Photography 1 3 Credit Hours

Designed to teach the use of an adjustable 35 mm camera, development of black & white negatives and the making of black and white prints in the darkroom for the beginning student. If the student has not purchased a camera prior to taking this class, he/she may wait until the first class meeting to do so. Creativity is emphasized. Weekly lectures and lab time are included.

Fall D/E	Winter D/E	Spring	Summer
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ART 165 Graphic Design I 3 Credit Hours

Covers typography (the classification of type, use of type in design, typesetting) and basic layout design. This class teaches the basic tools, as well as the typesetting features of Adobe Illustrator. This course is common to all tracks except Animation.

Suggested Prerequisites: ART 101 and ART 102 and ART 107

Fall E	Winter E	Spring	Summer
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ART 172 Color Theory 3 Credit Hours

Students learn how to work with color in both paint and digital media. Various models for representing color are covered as well as design considerations for working with color. Subtractive and primary color systems are covered.

Suggested Prerequisites: ART 101 and ART 107

Fall D	Winter D	Spring	Summer
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ART 180 Design and User Needs 3 Credit Hours

Introduction to human factors as they affect the design of interior environment to include the physiological, sociological, and psychological needs of users. Emphasis on the human factors of ergonomics, anthropometric, and special populations related to design standards, functionality, and accessible design.

An overview of social-psychological factors also included.

Fall D/E	Winter	Spring	Summer
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ART 181 Interior Design - Studio I 3 Credit Hours

Introduction to the basic concepts of interior design and the development of the fundamental components needed in the practice of interior design. Emphasis is on functional space planning as it relates to human factors in residential settings, analysis of user needs, and interior standards and codes. Basic two and three-dimensional graphic communication and presentation skills for interior design will be introduced and developed.

Prerequisites: ART 180 or concurrent enrollment in ART 180 or permission of the program director.

Fall D/E	Winter	Spring	Summer
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ART 182 Interior Design Materials and Construction Components 3 Credit Hours

An investigation of traditional and contemporary materials, components, and construction methods as specified by the interior designer. Emphasis is on performance and uses of materials and finishes, workroom practices, and source resource development.

Prerequisites: ART 181 or permission of the program director.

Fall	Winter D/E	Spring	Summer
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ART 183 Interior Design Studio II 3 Credit Hours

Introduction to interior design process, design philosophy, and exploration of design problem solving. Expansion of graphic communication skills, rendering, and presentation skills. Emphasis on programming, design concept, analysis and development creativity, space planning, and communication skills for residential and non-residential projects.

Prerequisites: ART 181 and ART 182 or concurrent enrollment in ART 182 or permission of the program director.

Fall	Winter	Spring D/E	Summer
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ART 184 Textiles for Interiors 3 Credit Hours

A study of the properties of fibers and their fabrications with an emphasis on textile performance and applications for interior environments. An overview of the history of textiles, study of aesthetic qualities of textiles, and hands on design exploration will also be included. Field trips included.

Prerequisites: ART 183 or permission of the program director.

Fall	Winter	Spring	Summer D/E
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ART 208 Lightwave 3 Credit Hours

Students learn the basics of 3D modeling and animation with Lightwave. Modeling, surfacing and animation are covered. Lightwave and Maya will be offered in alternate semesters.

Suggested Prerequisites: ART 102 and ART 107

ART 209 Maya 3 Credit Hours

An indepth study of 3D graphics using Maya. Modeling, surfacing, dynamics, animation and rendering will be covered.

Prerequisites: ART 106 or ART 107.

ART 211 Director 3 Credit Hours

Students learn to work with drawing tools, timeline and layers. Students also learn how to work with sound, video clips and animation. Scripting with Lingo is covered.

Suggested Prerequisites: ART 107 and TCM 151

ART 213 Life Drawing II 3 Credit Hours

A continuation of ART 113 (Life Drawing 1) in drawing the human figure. Studies develop a basic understanding of proportion and anatomy through direct observation. A variety of media is explored.

Prerequisites: ART 102 and ART 113.

ART 216 Painting 2 3 Credit Hours

A continuation of Art 116 (Painting 1) in painting. A broad range of traditional and contemporary approaches to painting is explored.

Prerequisites: ART 116

Fall	Winter D	Spring	Summer
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ART 224 Art of Islam 3 Credit Hours

A comprehensive study of the history and development of Islamic Art from its birth in the seventh century to the present time. The course is designed to explain basic characteristics of Islamic Art through major architectural monuments, painting, calligraphy and other forms of art. Emphasis will be placed on the relationship between the theology of Islam as a faith and its arts.

Fall D	Winter D	Spring	Summer
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ART 238 Jewelry 2 3 Credit Hours

Designed to allow the student to become more deeply involved in refinement of basic skills, and development of the final finished product. Most studio tools and some materials will be provided.

Prerequisites: ART 138

Fall E	Winter E	Spring	Summer
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ART 242 Ceramics 3 3 Credit Hours

This course is an advanced-level course stressing refinement of ceramic construction techniques and design. Individual projects in the study of ceramic glaze and surface possibilities are explored by each student, according to their own stylistic interests. Instruction in kiln stacking and firing is continued.

Prerequisites: ART 142 or permission of the instructor.

Fall D/E	Winter D/E	Spring	Summer
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ART 245 Interactive Design 3 Credit Hours

Students learn to design and construct interactive web sites using Dreamweaver, Flash, Photoshop and ImageReady. Dreamweaver is taught in this class. Students are expected to know the other programs before enrolling in this class. Design considerations important to interactive design are covered.

Suggested Prerequisites: ART 107 and ART 108 and ART 165.

ART 255 Animation Basics 3 Credit Hours

Students learn drawing techniques for 2D animation. Students learn to plan animations by drawing storyboards. Student work with After Affects or Final Cut Pro or Flash to compile animations.

Suggested Prerequisites: ART 102 and ART 107 and ART 108.

Fall	Winter D	Spring	Summer
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ART 261 Black and White Photography 2 3 Credit Hours

Designed as an extension of the student's basic foundation from ART 161. Emphasis is placed on refining darkroom technique and expanding the student's knowledge of aesthetics of the creative photographic experience.

Prerequisites: ART 161

Fall D/E	Winter D/E	Spring	Summer
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ART 265 Illustration 3 Credit Hours

Students learn to create illustrations for photographic references and from imagination using traditional and digital media. Adobe Illustrator is covered in this class.

Suggested Prerequisites: ART 107 and ART 112.

ART 275 Advanced Projects 3 Credit Hours

Students are assigned advanced projects related to their concentration. Emphasis is placed on developing projects for the student's portfolio.

Prerequisites: Permission from the instructor. Students must complete specific courses and a minimum of 27 credit hours of core courses.

Note: Request permission by sending an e-mail to graphicdesign@hfcc.edu and provide your student ID number.

This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

Fall D/E/W	Winter D/E/W	Spring D/E/W	Summer D/E/W
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ART 280 History of Styles: Architecture, Interiors, and Furnishings 3 Credit Hours

Surveys the history of architecture, furniture, and interiors from the Egyptian period to the present. Emphasis is on styles and trends in the North America as they are related to past and present cultures and societies. The course presents and overview of styles with an interior design perspective.

Prerequisites: ART 183 or permission of the program director.

Fall D/E	Winter	Spring	Summer
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ART 281 Interior Design Studio III 3 Credit Hours

Explores how interior design theories affect design planning and problem solving. This course continues the development of design problem solving, space planning, conceptual skills, and graphic communication and rendering skills. Emphasis is on ADA, behavioral design theory, and integrating functionality and creativity into design solutions for multiple use and special population environments.

Prerequisites: ART 183 or permission of the program director

Suggested Prerequisites: ART 280

ART 282 Interior Design Environmental Systems 3 Credit Hours

Exploration of building codes and support systems as they affect the practice of interior design and the design problem solving process. Emphasis is on developing basic understanding of the principles of these systems, to include acoustics and noise control, understanding the environmental impact of these systems, and exploring current and future alternatives to traditional systems particularly as they affect environmental and economic issues.

Prerequisites: ART 281 or permission of the program director.

Fall	Winter	Spring	Summer
	D/E		

ART 283 Lighting for Interior Design - Studio IV 3 Credit Hours

Introduction to lighting fundamentals and lighting design for interior environments. Emphasis is on the various means and types of lighting, application and integration of lighting knowledge into design projects and the design process, and the physiological and psychological effects on human perception of task and space. Field trips required.

Prerequisites: ART 281 or permission of the program director.

Suggested Prerequisites: ART 282

Fall	Winter	Spring	Summer
	D/E		

ART 285 Professional Practice for Interior Design - Studio V 3 Credit Hours

Introduction to the professional issues related to the practice of interior design in contemporary times. Course will focus on the business, workroom, and legal concerns of the practice. Emphasis is on developing skills and knowledge which designers need in order to offer design services, operate design studios, and/or provide design related activities.

Prerequisites: ART 283 or permission of the program director.

Fall	Winter	Spring	Summer
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ART 287 Interior Design Synthesis - Studio VI 3 Credit Hours

A synthesis studio course with a focus on the use of the design process to solve design problems in residential and non-residential settings. Solutions that are both creative and functional and meet the physical, social, and psychological interior environmental needs of user will be explored. Emphasis is on design problem solving, synthesis, design development, creativity, and presentation. Field trips, portfolio review, student show participation, and comprehensive program exam required.

Prerequisites: ART 283 or permission of program director.

Suggested Prerequisites: ART 285

Fall	Winter	Spring	Summer
D/E			

ART 291 Graphic Design Internship 3 Credit Hours

Work Experience in the field of Graphic Design.

Prerequisites: ART 267, completion of 27 credit hours within one of the five areas of concentration AND permission of the instructor.

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

Call the Co-op Office at 313-845-6359.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

ART 2901 Directed Study - Art History 1 Credit Hour

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

ART 2902 Directed Study - Art History 2 Credit Hours

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2903 Directed Study - Art History 3 Credit Hours

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2931 Directed Study - Drawing 1 Credit Hour

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2932 Directed Study - Drawing 2 Credit Hours

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2933 Directed Study - Drawing 3 Credit Hours

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2951 Directed Study - Ceramics 1 Credit Hour

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2952 Directed Study - Ceramics 2 Credit Hours

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2953 Directed Study - Ceramics 3 Credit Hours

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2971 Directed Study - B & W Photography 1 Credit Hour

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2972 Directed Study - B & W Photography 2 Credit Hours

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2973 Directed Study - B & W Photography 3 Credit Hours

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ART 2991 Directed Study - Interior Design**Special Projects****1 Credit Hour**

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E	D	

**ART 2993 Directed Study - Interior Design
Special Projects 3 Credit Hours**

A course allowing additional advanced study under direction in any of the media offered by the department. It is assumed that the student requesting directed study will have completed the sequence of courses offered in a given medium before requesting additional directed study in that medium.

Prerequisites: All courses in the required sequence for the area chosen, and permission of the instructor.

Fall	Winter	Spring	Summer
D/E	D/E		

ASTRONOMY**ASTR 131 Descriptive Astronomy 3 Credit Hours**

Designed for general education, consists of a non-mathematical introduction to elements of the astronomical universe by means of lectures and planetarium demonstrations. Organized to interest the individual who is without scientific background but who desires to understand the major units of the universe and their interrelation. Three hours of lecture per week.

Fall	Winter	Spring	Summer
D/E/O	D/E/O	O	

ASTR 133 Introductory Astronomy Laboratory 1 Credit Hour

Emphasizes experimental work with the scientific concepts important in astronomy, including planetarium observation and computer simulation of astronomical events. This course combined with ASTR 131 provides the student with a four-hour laboratory science credit. Two hours of laboratory per week.

Prerequisites: Completion of or concurrent enrollment in ASTR 131

Fall	Winter	Spring	Summer
D/E/O	D/E/O	O	

ATMOSPHERIC SCIENCE**ATMS 131 Weather and Climate 3 Credit Hours**

A non-mathematical introduction to the behavior of the atmosphere and its causes. Topics include atmospheric structure, earth-sun relationships, heat, humidity, clouds, wind, storms, forecasting, pollution, and climate. This course is organized to interest students without scientific background who wish to understand the atmosphere and weather that surround them. Three hours of lecture per week.

Note: Offered approximately once every two years.

AUTOMOTIVE**AUTO 100 Internal Combustion Engines 3 Credit Hours**

A beginning automotive course designed to acquaint the student with four-stroke engines. Principles of operation, compression ratio, piston displacement, operating tolerances, valve timing, horsepower and torque development along with adjustments, inspection, and trouble shooting procedures will be studied. A substantial portion of the class is devoted to laboratory exercises on laboratory engines.

Fall	Winter	Spring	Summer
D/E	D/E		

AUTO 108 Basic Electrical 3 Credit Hours

A study of basic automotive electricity theory and principles. Voltage, amperage and Ohm's law will be covered as well as series and parallel circuits. An introduction to the various meters that are used in the service of automobiles will also be discussed. Circuit diagnosis and troubleshooting will be an integral part of this course. Accessories and lighting will also be covered.

Note: AUTO 108 will only be offered Fall 2006.

AUTO 110 Automotive Electricity 3 Credit Hours

A basic automotive electricity and electronics course, including the study of the fundamentals of and operation and service required for batteries, cranking motors, alternators, regulators, and certain accessories used on current-production automobiles. A combination of classroom and laboratory experiences provides the student with competence leading to A.S.E. certification as well as a State of Michigan license in automotive electrical systems.

Fall	Winter	Spring	Summer
D/E	D/E		

AUTO 120 Fuel Management Systems 2 Credit Hours

A course designed to acquaint the student with the types of fuels and air/fuel ratios used in automotive engines, along with the construction and operation of fuel delivery systems are included as well as electronic fuel injection systems. Use of scan tools and ASE performance tests are utilized to enhance understanding of on board diagnostics.

Fall	Winter	Spring	Summer
D/E	D/E		

AUT 130 Automotive Ignition Systems 2 Credit Hours

A basic course in which the student studies the operating principles, construction, troubleshooting and maintenance of units of the automotive ignition system, including: distributors, coils, electronic controls, and advance mechanisms. Ignition timing, wiring and ignition malfunctions are studied. Electronic ignition systems are included and ignition-related emission controls are presented.

Note: Department recommends that student take AUTO 110 as soon as possible after completing this course.

Fall	Winter	Spring	Summer
E	E	E	E

AUTO 131 Automotive Ignition Systems 2 Credit Hours

An intermediate-level course covering the operating principles, construction, trouble shooting, and maintenance of units of the automotive ignition system, including distributors, coils, electronic controls, and advance mechanisms. Ignition timing, wiring, and ignition malfunctions are studied, as well as electronic ignition systems and ignition-related emission controls.

Note: AUTO 131 will only be offered Winter 2007.

AUTO 132 Computerized Ignition Systems 2 Credit Hours

An intermediate-level course for the automotive student designed to provide information and laboratory experiences on computer-controlled ignition systems. Systems in use as well as newer systems becoming available are studied.

Prerequisites: AUTO 131

Note: AUTO 132 will only be offered Summer 2007.

AUSV 135 Shop Mathematics 2 Credit Hours

Review of basic arithmetic including fractions, decimals, percentages, ratio, and proportions as applied to vehicle repair in the automotive service field.

Note: AUSV 135 will only be offered Fall 2006.

AUTO 140 Automotive Transmissions 3 Credit Hours

Designed to acquaint the student with both automatic and manually shifted transmissions and transaxles. Emphasis is on the operating principles, construction, adjustments, trouble shooting, and maintenance of both types of transmissions. A study of clutches, drive lines, rear axles, and differential units is also included.

Fall E	Winter E	Spring E	Summer
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AUTO 142 Electronically Controlled - Transmissions/Transaxles 2 Credit Hours

This course is designed to expand on the skills developed by the student in AUTO 140 (Automotive Transmissions) with additional experiences in the service and repair operations related to the current electronically controlled transaxle units. The emphasis of this course will be on the electronic control systems.

Prerequisites: AUTO 140

Fall	Winter	Spring E	Summer
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AUTO 145 Manual Transmissions and Transaxles 4 Credit Hours

This course includes the theory of operation, construction diagnosis maintenance and service of automobile manual transmissions, transaxles, and clutches. Various transmissions will be disassembled, inspected, and measured. Knowledge gained from this experience will help the technician become familiar with operation constructions, diagnosis, and service of auto manual transmissions and transaxles.

Note: AUTO 145 will only be offered Winter 2008.

AUTO 150 Diagnosing and Engine Evaluation 2 Credit Hours

An advanced course in which the student studies the application of the principles of diagnosing, locating, and correcting trouble encountered in automotive service, using various types of testing equipment. Problems that occur in the servicing of the modern automobile are presented.

Prerequisites: AUT 130

Fall E	Winter E	Spring	Summer
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AUTO 160 Automotive Chassis Units 2 Credit Hours

A study of the construction, operation, and maintenance of the various chassis units. Steering, suspension systems, and alignment are included as well as disc and drum braking systems.

Fall E	Winter E	Spring	Summer
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AUTO 162 ABS Brakes 3 Credit Hours

Covers the theory and operation of ABS brake and traction control systems. The design construction and types of ABS braking systems will be included. Diagnostic techniques, troubleshooting, and repair of ABS systems, along with service techniques and hands-on experiences will be an integral component of this class.

Note: AUTO 162 will only be offered Winter 2007.

AUTO 165 Electronic Steering and Suspension 4 Credit Hours

This course covers the theory and operation of electronic steering and electronic or active suspension systems. Theory and operation of steering and suspension multiplexing will also be included in this course. Diagnosis and repair procedures along with alignment concepts and hands-on experiences will be an integral component of this course.

Note: AUTO 165 will only be offered Fall 2007.

AUTO 167 Brake Clinic 2 Credit Hours

Provides a review of braking systems, including an introduction to anti-lock braking systems, as well as diagnosis and trouble-shooting experiences.

Fall	Winter	Spring	Summer E
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AUT 170 Related Technical Automotive 4 Credit Hours

A survey course for all students designed to provide basic knowledge of the major automotive systems that are covered in detail in the automotive technology classes. Course provides degree credit and is the ONLY course allowed for TECH PREP transfer credit (4 hours) from approved high school programs.

Fall E	Winter E	Spring	Summer
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AUT 180 Technical Automotive Welding 4 Credit Hours

A basic welding course that provides instruction and practice with gas and electric welding processes. Gas cutting, MIG welding, TIG welding techniques are taught with required welding projects that are tested and graded.

Fall E	Winter E	Spring	Summer
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AUTO 187 Automotive Engine Tune-Up 2 Credit Hours

Provides instruction needed for performing engine tune-up and maintenance. Ignition system operation is explained along with an introduction to basic computer engine control. Time in the laboratory is devoted to actual on-car procedures using appropriate test equipment.

Fall	Winter	Spring E	Summer E
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AUTO 210 Automotive Engine Dynamometer 2 Credit Hours

An advanced course designed to acquaint the automotive student with the purpose, construction, and operation of the engine dynamometer. Tests are made in the engine dynamometer lab.

Prerequisites: AUTO 100, AUTO 120, and AUT 130

Fall E	Winter	Spring E	Summer
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AUTO 217 Automobile Alignment Clinic 2 Credit Hours

Designed to cover the types of front and rear suspension systems used on today's vehicles. In addition, there is in-depth coverage of alignment factors. The majority of the class is devoted to inspection, repair, and alignment of a variety of suspension systems.

Fall	Winter	Spring E	Summer
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AUTO 220 Automotive Air Conditioning 2 Credit Hours

A beginning course covering basic refrigeration and automotive heating, ventilation, and air conditioning systems.

Fall E	Winter E	Spring E	Summer
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AUTO 224 Automotive Air Conditioning 2 Credit Hours

This course is a study of automotive air conditioning systems using a laboratory and practical presentation technique.

Note: AUTO 224 will only be offered summer 2007.

AUTO 227 Automotive Air Conditioning 2 Credit Hours

A study of automotive air conditioning systems using a laboratory and practical presentation technique. Covers more controls and AUTO TEMP than AUTO 220.

Fall	Winter	Spring	Summer E
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AUTO 230 Automotive Diesel Principles 2 Credit Hours

An explanation of the operating principles of the four-stroke diesel engine used in the automobile, including the construction, service, and diagnosis of various engine systems. Laboratory experiences are provided to enhance classroom activities.

Prerequisites: Students selecting this class must have completed AUTO 100 or receive the instructor's permission for past experience.

Fall E	Winter E	Spring	Summer
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AUTO 237 Computerized Engine/Vehicle

Emission Control Systems

2 Credit Hours

Explains the operating principles, diagnosis, and laboratory testing of computer controlled fuel management systems. Topics include sensor, actuator, and computer functions in maintaining catalyst stoichiometry. Diagnosis and testing with hand-held scanners and on-board digital fault systems are emphasized. State test procedures and four-gas analysis as related to computer control are covered in the laboratory sessions.

Fall	Winter	Spring E	Summer
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AUTO 247 Automotive Emission Control 2 Credit Hours

Explains the operating principles, diagnosis, and laboratory testing of traditional emission control systems. Topics include positive crankcase ventilation, timing control systems, exhaust gas recirculation, air injection, and two- and three-way catalysts. Tune-up, four-gas analysis, and oscilloscope diagnosis are covered on appropriate vehicle systems.

AUTO 267 Small Engines

1 Credit Hour

Provides a basic understanding of the four-stroke and two-stroke cycle engine. In addition, necessary maintenance, diagnosing, testing, and repair of a small engine's ignition, fuel, governor, and mechanical systems are covered.

Note: Only offered once every two years

Fall	Winter	Spring	Summer D
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AUTO 287 Advanced Automotive Tune-Up 1 Credit Hour

Covers operating principles of electronic ignition systems. Topics include high energy systems, control modules, waste spark ignition, and all related ignition components. Diagnosis and testing utilize oscilloscope patterns and hand-held scanners. Performance tuning, special problems, and low-emission tune-ups are covered in the laboratory sessions.

Fall	Winter	Spring	Summer E
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BIOLOGY

BIO 130 Evolution and Behavior

4 Credit Hours

Introduces principles of animal behavior (including human) as developed in ethology and sociobiology. Genetic, physiological, and evolutionary explanations of behaviors are considered. Topics include evolution and natural selection, genetic inheritance, instinct, learning, motivation, communication, aggression, sexual behavior, territoriality, play, vestigial behaviors, selfishness, and altruism. This course is for students in all fields of study who wish to learn about the revolutionary contributions of behavioral and evolutionary biology. Four hours of lecture per week; no laboratory.

Fall D/E	Winter D/E	Spring E	Summer
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BIO 131 Introductory Biology 4 Credit Hours

A study of living organisms including: cell biology, genetics, plant structure and function (emphasizing flowering plants), ecology, and animal structure and function (emphasizing human digestion, respiration, circulation, excretion, and reproduction). Lectures and laboratory work are coordinated. Three hours of lecture and three hours of lab per week.

Prerequisites: Satisfactory completion of ENG 081 or equivalent score on English placement test.

Fall	Winter	Spring	Summer
D/E	D/E	D	D

BIO 134 Essentials of Anatomy and Physiology 5 Credit Hours

BIO 134 is a one semester study of the human organism from the perspective of component systems. Beginning with the cell and continuing through the organs of various systems, emphasis is on how structure follows specific functioning. The course does not substitute for BIO 233 and/or BIO 234 required by the Nursing, Respiratory Therapist, Surgical Technologist, Radiographer and Physical Therapist Assistant programs. Four hours of lecture and two hours of lab per week.

BIO 135 Microbiology for Allied Health Sciences 4 Credit Hours

A general microbiology course designed for health service personnel not needing the extensive laboratory experience involved in BIO 251. Emphasis is on the biology of microbes, epidemiology and disease transmission, sterile techniques, basics of immunity, the microbiology of wounds, and current regulations regarding blood-borne pathogens and biohazardous wastes. Three hours of lecture and two hours of lab per week.

Prerequisites: Admission to the Surgical Technologist Program, or a B in high school biology, or permission of the instructor.

BIO 138 Environmental Science 3 Credit Hours

Environmental Science is an interdisciplinary study, combining ideas and information from the natural sciences (such as biology, chemistry, and geology) and the social sciences (such as economics, politics, and ethics) to present a general idea of how nature works and how everything in nature is interconnected. Current environmental concerns are discussed. Human modification of natural systems and strategies for promoting environmental health are emphasized. Three hours of lecture per week.

Fall	Winter	Spring	Summer
	D		

BIO 139 Environmental Science 4 Credit Hours

Environmental Science is an interdisciplinary study, combining ideas and information from the natural sciences (such as biology, chemistry, and geology) and the social sciences (such as economics, politics, and ethics) to present a general idea of how nature works and how everything in nature is interconnected. Current environmental concerns are discussed. Human modification of natural systems and strategies for promoting environmental health are emphasized. Included are field trips to local sites during the lab period. Lecture and laboratory are interconnected. Three hours of lecture and three hours of lab work per week.

BIO 141 Botany 4 Credit Hours

Introduces all fields of plant biology and the diversity of plant life inhabiting the biosphere. Included are field trips to local natural areas to study plant ecology and laboratory experiments in plant genetics and plant physiology. Topics of current environmental concern relating to botany are covered. Three hours of lecture and four hours of lab per week.

Prerequisites: BIO 131 or BIO 150 or BIO 152 or equivalent (with a grade of C or better)

Note: Offered occasionally depending on student demand.

BIO 143 Zoology 4 Credit Hours

Examines the structure and function of various animals. Emphasis is on the taxonomic relationships, evolution, embryology, and natural history of the major animal groups, from the single-cell protozoa to the higher animals. Lecture and laboratory work are coordinated. Three hours of lecture and four hours of lab per week.

Prerequisites: BIO 131 or BIO 150 or BIO 152 or equivalent (with a grade of C or better)

Note: Offered occasionally depending on student demand.

BIO 150 Biology: Organisms, Genes, and Ecology 4 Credit Hours

An introductory biology course designed to meet the needs of students interested in transferring to a four-year institution with a major in biological science and for other students with a background and an interest in biology including pre-pharmacy, pre-medical, and pre-dental programs. Lectures focus on diversity and unity of patterns found in living organisms from the perspectives of physiology, inheritance, ecology, and evolution. Laboratory experiments and investigations enhance student learning of cognitive and laboratory skills. Three hours of lecture and three hours of lab per week.

Prerequisites: College preparatory-level high school biology with a B or better or BIO 131 or BIO 152 with a C or better or permission of instructor.

Fall	Winter	Spring	Summer
D	E		

BIO 152 Biology: Cells and Molecular Biology 4 Credit Hours

One semester of a two-semester sequence in introductory biology, designed to meet the needs of students interested in transferring to a four-year institution with a major or minor in biology, including pre-pharmacy, pre-medical, and pre-dental programs. Lectures focus on the diversity and unity of patterns of living organisms from the perspectives of molecular and cell biology. Laboratory experiments and investigations enhance student learning of cognitive and laboratory skills. Three hours of lecture and three hours of lab per week.

Prerequisites: College preparatory biology with a grade of B or better, or BIO 131 or BIO 150 with a C or better, or permission of the instructor

Suggested Prerequisites: Completion of or concurrent enrollment in CHEM 131 (CHEM 141 recommended for biology majors)

Fall	Winter	Spring	Summer
E	D		

BIO 233 Anatomy and Physiology I 4 Credit Hours

Lectures cover the principles and underlying concepts of chemistry, cell biology, histology, articulations, bones, muscles, and the nervous system. Labs reinforce these lecture units. BIO 233 and BIO 234 are a two-semester sequence designed for the student who plans to pursue a career in a health field. Three hours of lecture and two hours of lab per week.

Prerequisites: BIO 131 or BIO 150 or BIO 152 (or the equivalent)

Fall	Winter	Spring	Summer
D/E/W	D/E/W	D/E	D/E

BIO 234 Anatomy and Physiology II 4 Credit Hours

Continuation of BIO 233. Lectures cover the principles and underlying concepts of the special senses, endocrine, circulatory, lymphatic, immunity, respiratory, digestive, urinary, and reproductive systems. Labs reinforce these lecture units. Three hours of lecture and two hours of lab per week.

Prerequisites: BIO 233 at HFCC with a grade of C or better, or permission of the instructor.

Fall	Winter	Spring	Summer
D/E/W	D/E/W	D/E	D/E

BIO 251 Microbiology 5 Credit Hours

Introduction to microbes and their activities. Covers a wide range of material in lecture and laboratory exercises, including structure and function of diverse microbes, nutrition, growth, metabolism, microbial genetics, and the role of microbes in disease, immunity, and other selected applied areas. Emphasis is on studying the biology of microbes and their interaction with humans and the environment, and in learning the techniques used to safely work with bacteria, viruses, and fungi. Recommended for students anticipating further study in biological or biomedical sciences. Two hours of lecture and six hours of lab per week.

Prerequisites: BIO 131, or BIO 150 and 152, or the equivalent with a grade of C or better; CHEM 131 (CHEM 141 is recommended).

Fall	Winter	Spring	Summer
D/E	D/E		

BUSINESS ADMINISTRATION**BBA 110 Business Language Skills 3 Credit Hours**

Trains students in the language skills needed for originating, keyboarding, proofreading, and editing documents. This course provides the skills to produce accurate correspondence quickly.

Prerequisites: Basic keyboarding skills required

Fall	Winter	Spring	Summer
D/E	D/E		

BBA 131 Introduction to Business 4 Credit Hours

A survey course presenting an overall integrated picture of American business and its operations. Included are such topics as forms of business ownership, management, internal organization, production, personnel, labor relations, marketing, short-term and long-term finance, insurance, accounting principles, statistical analysis, business law, and the relationship of government to business.

Fall	Winter	Spring	Summer
D/E/W/O	D/E/W/O	D/E	D/E

BBA 133 Business Behavior and Communication 3 Credit Hours

Introduces students to the basics of appropriate behavior and communication in a business environment. Personal, interpersonal, and group behaviors are discussed, including etiquette, culture and gender issues, and problem solving. Interacting with superiors, peers, subordinates, and clients in person, on the phone, and in presentations is examined. Students will engage in role-playing to learn to deal with situations that can arise on the job.

Fall	Winter	Spring	Summer
D/E	D/E	E	

BBA 155 Customer Service & Salesmanship 3 Credit Hours

Trains students in the functions of a customer service and/or sales representative. The role of customer service and sales in marketing products and services is examined. Special areas of emphasis include communication skills, problem solving, development of customer service and selling strategies, dealing with challenging customers and clients, customer retention, preparing a merchandising manual, making a sales presentation, methods of measuring customer satisfaction levels, and motivational techniques.

Fall	Winter	Spring	Summer
D/E	D/E		

BBA 157 Call Center/Help Desk Practicum 1 Credit Hour

Trains students to work as a customer service representative in a call center or help desk environment. Proper telephone procedures such as greeting customers, effective listening, appropriate responses to inquiries and issues, handling difficult customers, and closing calls will be discussed. Students will be trained to multi-task, dealing with calls while using a personal computer. Simulated calls will be used as a learning tool.

Prerequisites: BCA 101, BCA 106, BBA 155

Fall	Winter	Spring	Summer
D	D		

BBA 231 Business Office Communications 3 Credit Hours

Introduces the basic principles and practices underlying business communication. This course is designed to improve business writing skills by helping students prepare effective business documents that are clear, concise, coherent, complete, courteous, and correct. Some of the documents are created in the classroom using personal computers.

Prerequisites: BBA 110

Fall	Winter	Spring	Summer
D/E	D/E		

BBA 235 Office Administration Practicum 4 Credit Hours

Designed to provide practical, hands-on study and training for the administrative business office professional. Emphasis is based on developing expertise in the responsibilities required for the management and control of information processing functions.

Prerequisites: BCA 143, BCA 145

Corequisite: BBA 232

Fall	Winter	Spring	Summer
	D/E		

BBA 252 Principles of Marketing 3 Credit Hours

A basic survey focusing on marketing functions and institutions, the policies of marketing agencies, and fundamental reasons for current marketing channels. This course also covers the retailing and wholesaling of consumer goods and raw materials. Attention is given to pricing policies and practices, unfair methods of competition, and recent governmental activities affecting marketing.

Prerequisites: BBA 131

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

BMA 110 Business Mathematics 3 Credit Hours

Presents basic math problems from a business person's point of view. This course includes a short review of addition, subtraction, multiplication, and division, as well as decimals, percentages, and fractions. Emphasis is on story problems. Topics may include payroll, interest, bank notes, insurance, annuities, weights and measures, commissions, percentages, inventory, and taxes.

Prerequisites: A grade of C or better in MATH 074 or a satisfactory grade on the math placement test.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

BLW 253 Business Law and the Legal Environment 4 Credit Hours

Introduces the business student to common law and statutory and agency processes. This course surveys the following business law topics: contracts, product liability, corporations, partnerships, agency and federal regulation of consumer product safety, securities, unfair trade practices, and legal research.

Prerequisites: English 131 or concurrent enrollment in English 131.

Fall	Winter	Spring	Summer
D/E	D/E	E	

BCO 190, 191, 192, 193, 194**Business Cooperative Education 1 Credit Hour**

Designed to provide practical, on-the-job work experience related to a particular area of business study. From one to four credit hours may be applied toward a degree program in the Division. Students interested in co-op must have the approval of the appropriate Cooperative Education Specialist prior to registration.

Prerequisites: Permission of the Cooperative Education Specialist.

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

BCO 290, 292 Business Cooperative Education 2 Credit Hours

Designed to provide practical, on-the-job work experience related to a particular area of business study. From one to four credit hours may be applied toward a degree program in the Division. Students interested in co-op must have the approval of the appropriate Cooperative Education Specialist prior to registration.

Prerequisites: Permission of the Cooperative Education Specialist.

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

CERAMICS/SCULPTURE

See Art on page 210.

CHEMISTRY**CHEM 91 Preparatory Chemistry 2 Credit Hours**

A basic introduction to chemistry that includes the study of chemical terminology, the periodic table, chemical nomenclature, equation writing, solution chemistry, the pH scale, and chemical problem solving. This course, designed for students with no high school chemistry, satisfies the high school chemistry admission requirement for some Nursing and Health Careers programs.

Prerequisites: MATH 074 or the equivalent

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

CHEM 95 Chemical Skills 3 Credit Hours

A pre-college course that includes the study of the mathematics of science, chemical terminology, the periodic table, chemical nomenclature, equation writing and chemical problem solving. The purpose of the course is to provide the student who has little or no background the opportunity to prepare for general chemistry (CHEM 141). Three hours of lecture demonstration per week.

Prerequisites: One year of high school algebra or the equivalent

Fall	Winter	Spring	Summer
D	D		

CHEM 131 Principles of Chemistry 4 Credit Hours

An introduction to general inorganic chemistry. Major concepts include atomic structure, bonding, chemical periodicity, stoichiometry, gas laws, solution chemistry, oxidation/reduction, acid/base chemistry, and equilibrium. This course is intended for liberal arts students who wish to meet a laboratory science requirement or for students fulfilling requirements in Health Careers and Nursing programs. Three hours of lecture and two hours of laboratory per week.

Prerequisites: One year of high school algebra; satisfactory score on the Math Placement Test (equivalent to MATH 080).

Fall	Winter	Spring	Summer
D/E	D/E	D	D

CHEM 132 Principles of Organic and Biological Chemistry 4 Credit Hours

The second course in a two-semester sequence, including study of introductory organic chemistry with special emphasis on nomenclature and functional group reactivity, as well as introductory biochemistry and metabolism.

Prerequisites: CHEM 131 or CHEM 141 or the equivalent

Fall	Winter	Spring	Summer
D/E	D/E		

CHEM 141 Principles of General and Inorganic Chemistry I 5 Credit Hours

Includes the study of atomic structure, stoichiometry, molarity, enthalpy, chemical periodicity, bonding and structure, reactions and equations, and properties of gases. This course is for students majoring in science, engineering, mathematics, pharmacy, or other pre-professional programs. Three hours of lecture and four hours of laboratory per week.

Prerequisites: One year of high school algebra or the college equivalent; also a passing grade on the chemistry pretest or CHEM 095 with a grade of C or better; or CHEM 131 with a grade of C or better.

Fall	Winter	Spring	Summer
D/E	D/E	D	

CHEM 142 Principles of General and Inorganic Chemistry II 5 Credit Hours

A continuation of CHEM 141 with special emphasis on properties of liquids and solutions, reaction rates, chemical equilibria, thermodynamics, electrochemistry, acid/base chemistry, nuclear chemistry, and descriptive chemistry of the more common elements (as time allows). Three hours of lecture and four hours of laboratory per week.

Prerequisites: CHEM 141 with a grade of C or better, with Math 175 recommended.

Fall	Winter	Spring	Summer
D/E	D/E		

CHEM 241 Organic Chemistry I 4 Credit Hours

An introduction emphasizing structural theory, stereochemistry, physical properties, reaction mechanisms, and functional group chemistry, covering the first semester of a full year course, and meeting the requirements for premedical, pre-dental, pharmacy, and chemical engineering students. Students should check requirements for organic chemistry at their intended transfer institution. Four hours of lecture per week without lab.

Prerequisites: At least one semester of college chemistry with a grade of C or better.

Fall	Winter	Spring	Summer
D/E	D/E	D	

CHEM 242 Organic Chemistry II 4 Credit Hours

A continuation of Chemistry 241 with special emphasis on carbonyl chemistry, amines, heterocycle chemistry, amino acids, peptides, carbohydrates, and nucleic acid chemistry. This course should meet the requirements for science majors and premedical, pre-dental, pharmacy, and chemical engineering students. Four hours of lecture per week without lab.

Prerequisites: Chem 241 with a grade of C or better.

Fall	Winter	Spring	Summer
D/E	D/E		

CHEM 243 Organic Chemistry Laboratory 2 Credit Hours

Microscale glassware and analytical techniques are used to study fundamental organic chemistry reactions and the preparation of organic compounds. Techniques include distillation, crystallization, and sublimation. Analysis of compounds includes the following: melting points, boiling points, refractive indices, infrared spectroscopy, and chromatography (gas, thin layer, column). Four hours of laboratory per week.

Prerequisites: CHEM 241

Fall	Winter	Spring	Summer
D/E	D/E		

CHEM 244 Organic Chemistry Laboratory II 2 Credit Hours

A follow-up course to CHEM 243 using modern microscale synthetic and analytical techniques. Students learn multi-step organic syntheses. Products are analyzed and verified using published chemical properties. Research techniques are developed for analyzing alternative synthetic methods. Four hours of laboratory per week.

Prerequisites: CHEM 243 and completion of or concurrent enrollment in CHEM 242

Note: Offered occasionally based on student demand.

CHILD DEVELOPMENT**CHD 201 Introduction to Creative Child Care 3 Credit Hours**

Topics include children's developmental stages, planning developmentally appropriate activities for young children, developing curriculum for young children, behavior management, and introduction to CDA credentialing process. The CDA is a national performance-based credential awarded to caregivers that work with children from birth to age five. This is an introductory course in a series designed to enable the candidate to acquire skills and knowledge needed for the CDA assessment process.

Prerequisites: PSY 131 and PSY 152

CHD 202 Portfolio and Assessment Preparation 3 Credit Hours

Topics include CDA credentialing process, knowledge and skills in working with parents, families, and communities, knowledge of the 6 Competency Goals of the 13 functional areas of the CDA process, and preparation of necessary material for CDA credential. This is the final course in a series designed to enable the candidate to acquire the skills, knowledge, and documentation for the CDA assessment.

Prerequisites: CHD 201

CHD 221 Child Development / School-Age Competencies 3 Credit Hours

This course is the first course in a series of three preparatory courses to enable the candidate to acquire the skills, knowledge, and documentation needed to be ready for the assessment process for the Michigan School-Age Credential.

CHD 222 Child Development / School-Age Portfolio Preparation 3 Credit Hours

This course is the second course in a series of three preparatory courses to enable the candidate to acquire the skills, knowledge, and documentation needed to be ready for the assessment process for the Michigan School-Age Credential.

Prerequisites: CHD 221

CISCO NETWORKING ACADEMY PROGRAM

See Computer Networking Academy Program on page 227.

COMPUTER APPLICATIONS

BCA 106 Introduction to Windows 2 Credit Hours

An eight-week course that introduces students to the Windows operating system on a personal computer. Topics include the Windows environment, file management, customizing the system, Windows accessory programs, and the sharing and exchanging of data between programs.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

BCA 125 Introduction to the Internet & Web Pages 3 Credit Hours

This course introduces students to the Internet and the creation and design of web pages. A variety of browsers and search engines are utilized to find information on the World Wide Web. Popular Internet tools such as e-mail, file downloads, file compression, streaming audio and video, and image scans are utilized. Web page software is used to design and create web pages. The maintenance of web pages is examined.

Prerequisites: BCA 101 or BCA 106 or BCA 140

Fall	Winter	Spring	Summer
D/E	D/E	D/E	E

BCA 140 Software Applications 3 Credit Hours

Covers the fundamentals of computer literacy with an emphasis on software usage literacy. Hands-on training in software application programs includes word processing, spreadsheets, data base, and graphics. Assignments include problem solving and critical thinking development components. A version of MS Office will be utilized.

Prerequisites: Ability to keyboard 25 words per minute.

Note: This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

Fall	Winter	Spring	Summer
D/E/W/O	D/E/W/O	D/E	D/E

BCA 143 Word Processing 3 Credit Hours

Instructs students in the use of word processing software. Students learn to input, file, format, print, retrieve, and revise documents. As the semester progresses, more advanced functions are taught including tables, columns, graphics, merging, and sorting. A version of MS Word will be utilized.

Prerequisites: BCA 140

Fall	Winter	Spring	Summer
D/E	D/E		

BCA 145 Spreadsheet Applications 3 Credit Hours

Presents both spreadsheet design concepts and hands-on experience in the use of spreadsheet software. Includes use of a worksheet with graphics and a database management program. Students are required to integrate user-interface concepts, commands, worksheet mechanics, and applications in a problem-solving environment. MS Excel will be utilized.

Prerequisites: BCA 140

Fall	Winter	Spring	Summer
D/E	D/E	E	

BCA 147 Data Base Applications 3 Credit Hours

Explains a data base management system and data base design strategies. Students use hands-on case studies to learn data base principles and then apply those principles to create data base tables, forms, queries, and reports. Each student designs and develops a customized data base. MS Access will be utilized.

Prerequisites: BCA 140

Fall	Winter	Spring	Summer
D/E	D/E	E	

BCA 152 Presentation Software 2 Credit Hours

An eight-week course that introduces a presentation graphics software that enables students to create effective presentations. Students create overhead transparencies, color slide shows, and print materials. Presentations include clipart, scanned photographs, data from CD's, presentation sounds, video clips, and documents from other software applications. MS PowerPoint will be utilized.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	E

COMPUTER INFORMATION SYSTEMS

CIS 100 Introduction to Information Technology 3 Credit Hours

This course will survey the field of computer technology and information management. Topics emphasized in this course include: computer hardware, networking and telecommunications, the use of the Internet for communication, e-commerce, information retrieval, the social impact of technology, computer security, and industry-related careers and programming techniques. Computer laboratory sessions will briefly introduce students to a variety of software packages that will include the Windows operating system, Internet browsers, e-mail, word processing, spreadsheets, presentation graphics, and database management systems.

Note: This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

Fall	Winter	Spring	Summer
D/E/W/O	D/E/W/O	D/E	D/E

CIS 105 Desktop Operating System Concepts 4 Credit Hours

The purpose of this course is to familiarize the students with installing, using, and maintaining a Desktop Operating System. It is a class intended for application programmers and/or network administrators that plan to work and/or program in a Desktop Operating System environment.

Prerequisites: CIS 100

CIS 107 PC Hardware/Software Installation 2 Credit Hours

An intermediate course that will teach the student advanced techniques in PC operations (including hardware/software installation and system upgrading/maintenance), system management and PC performance optimization. Actual hardware and software will be installed by the students.

Prerequisites: CIS 100

CIS 111 SQL for Database Development 3 Credit Hours

An intermediate course familiarizing the student with the SQL language to retrieve and modify tables within a SQL Server database management system. The queries will include outer joins, summary queries and subqueries. Students will use normalization techniques to design and create a database structure. Views and stored procedures will also be discussed. Front-end forms will be created to interface with the back-end table structures.

Prerequisites: One semester of any programming language.

CIS 112 Introduction to Networking 3 Credit Hours

An introductory course covering the basics of Local and Wide Area Networking. Topics will include discussion of the OSI model, network protocols, media architecture and hardware. It will also cover WANs, remote connectivity, TCP/IP, and the Internet as well as the troubleshooting of common network problems.

Prerequisites: CIS 100

CIS 113 Wireless LANs 2 Credit Hours

An intermediate course covering Wireless Networking. Topics will include the coverage of the IEEE 802, 11b standards and relationship to the OSI model. The class will also cover the planning, installation, configuration and troubleshooting of Wireless Networking products.

Prerequisites: CIS 112

CIS 114 Introduction to Novell NetWare Administration 3 Credit Hours

An introduction covering the basics of Novell NetWare Administration. Topics will include file system setup, user administration, security configuration, connecting client workstations, Novell Directory Services management, system monitoring and maintenance as well as the configuration of network printing.

Prerequisites: CIS 112

CIS 116 Advanced Novell NetWare Administration 2 Credit Hours

An advanced course that builds on Novell NetWare Administration skills learned in CIS 114 or elsewhere. The student learns how to install Novell, NetWare, configure various client workstations and connect them to an existing LAN. The students will also set up file systems and install application software, while implementing network security features. The installation and configuration of ZEN Works is covered. Server console administration and troubleshooting network problems will also be discussed.

Prerequisites: CIS 114 or equivalent networking experience.

CIS 121 Introduction to the Internet 2 Credit Hours

The Internet is used by millions of people throughout the world to share information and ideas and to search for information on all kinds of topics electronically. This course introduces the student to the Internet, how it was developed, and how it works. The student will become familiar with the services and tools available, such as E-Mail, Telnet, FTP, Gopher and the World Wide Web. The student will access information through popular online services and will learn about some of the major sources of information.

CIS 122 Web/Internet Technologies 3 Credit Hours

A beginning course, familiarizing the student with Internet, networking and web page authoring fundamentals. Skills obtained will include basic knowledge of Internet technologies, network infrastructure, Web authoring using HTML, and the Unix operating system.

Prerequisites: Prerequisite/Corequisite CIS 125

CIS 123 Web Pages 2 Credit Hours

A class designed to demonstrate the various methods of developing, creating and editing home pages on the Internet. Topics to be discussed will include: HTML, JAVA, HTML Wizards and HTML Editors. The students will develop several home pages. The students will be given instruction on how to post an Internet site on the Web.

Prerequisites: CIS 121 or departmental approval

CIS 124 Introduction to Windows Server Administration 3 Credit Hours

An introductory course covering the basics of Microsoft Windows Server Administration. Topics will include installation and configuration of the server operating system, connecting client workstations, domain and server management, system monitoring and maintenance as well as the configuration of network printing.

Prerequisites: CIS 112

CIS 125 Principles of Programming Logic 4 Credit Hours

A beginning course thoroughly acquainting the student with programming logic techniques. Structured methods of business programming are stressed. Topics include business reports, control breaks, arrays, file maintenance, data validation, character fields, functions, modules, and numbering systems. The student uses the microcomputer lab for compilation and testing.

Prerequisites: CIS 100 or concurrent enrollment in CIS 100

CIS 126 Advanced HTML 4 Credit Hours

An Internet programming and web design course that will teach students the advanced technologies of Hyper Text Markup Language (HTML) and its derivatives. The course will also help students plan and program well designed Web sites.

Prerequisites: CIS 125 or ART 107

CIS 129 Introduction to UNIX with Shell Scripting 4 Credit Hours

An intermediate-level course that will teach students the fundamentals of the UNIX Operation System. This will include the file system, e-mail, editor and standard UNIX utilities. Advanced forms of utilities, regular expressions, and shell scripts will be covered. There will be emphasis on understanding how the UNIX shell operates.

Prerequisites: CIS 125

CIS 130 Visual Basic: Net Programming 3 Credit Hours

An intermediate programming course using Visual Basic.Net for Windows application development. Coding and debugging techniques are covered for an object oriented environment. Also covered is the common Windows form controls used in a graphical user interface application.

Prerequisites: CIS 125

CIS 132 Active Server Pages: Net Programming 3 Credit Hours

An intermediate course that will teach the students advanced technologies of a scripting language used for Web programming. Topics include state management, the proper use of code-behind files, ADO.NET skills for handling database data, web services, web server validation, user and custom server controls.

CIS 157 A+: Hardware 4 Credit Hours

This course is intended to cover the hardware section of the A+ Certification Exam. All types of hardware components will be studied in detail. Installation, configuration, troubleshooting as well as learning how each of these components works. The student will experience hands-on interactive labs with actual hardware components.

Prerequisites: CIS 100 or departmental approval

CIS 158 A+: Operating Systems 4 Credit Hours

This course is intended to cover the software section of the A+ Certification Exam. Various operating systems will be covered from a PC repair technician perspective: how the operating system interacts with the PC's hardware, the boot process, troubleshooting and interaction with application software. The student will experience hands-on interactive labs with various actual operating systems and application installations.

Prerequisites: CIS 157

CIS 160 COBOL Programming 3 Credit Hours

An intermediate-level course in which the student becomes familiar with COBOL syntax and structured logic techniques. These aspects are reinforced by coding laboratory assignments. The student develops logic, codes, and tests and debugs COBOL programs for data validation, control breaks, and table handling.

Prerequisites: CIS 125

CIS 162 PERL Programming 4 Credit Hours

An intermediate-level course that will teach the students a universal scripting language. PERL combines the flexibility of general-purpose programming languages with many of the popular features of UNIX tools. Students will learn these in performing complex searching and manipulation of text, or of data stored in text format.

Prerequisites: CIS 129 or CIS 170

CIS 170 "C" Programming 3 Credit Hours

An intermediate course familiarizing the student with an interactive text editor and the "C" programming language. These features are taught through detailed lectures and coding laboratory assignments. Students test code design and debug programs using the "C" language.

Prerequisites: CIS 125 or MATH 180 (Calculus I)

CIS 171 Java Programming 3 Credit Hours

An intermediate-level course familiarizing the student with the Java programming language and its various components using detailed lectures and coding laboratory assignments. Students design, code, test, and debug programs using the Java language.

Prerequisites: CIS 170

CIS 172 JavaScript Programming 3 Credit Hours

An intermediate-level course in which the student becomes familiar with the JavaScript programming language and its various components. These features are taught through detailed lectures and coding laboratory assignments. Students design, code, test, and debug programs using the JavaScript language, a computer language developed by Netscape for advanced Internet development.

Prerequisites: CIS 170

CIS 186 Game Programming 4 Credit Hours

An intermediate course that will familiarize students with the process, concepts, and techniques of game programming. Topics will include game engines, game scripting and programming languages, game authoring systems, game physics, rendering, level, model and terrain editors, interactivity, special effects and networking.

Prerequisites: CIS 125

Fall D/E	Winter D/E	Spring	Summer
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CIS 212 Networking II 3 Credit Hours

The course is a continuation of CIS 112. It is intended to cover additional Local and Wide Area Networking topics that will aid the student in preparing for the Comp-Tia Network + Certification test. Topics will include Network Operating System basics (Netware, UNIX, and Windows 2000 Server), maintaining and upgrading networks, ensuring integrity and availability, network security, network design and implementation, advanced trouble shooting techniques, review and practice of all topics for the Certification Exam.

Prerequisites: CIS 112

**CIS 215 Advanced Visual BASIC:
Net Database Programming 3 Credit Hours**

This course is an advanced programming course that focuses on writing Windows application forms that interface with a database management system using the VB.Net language. The topics covered are typed and untyped datasets, bound and unbound controls, data views, and parameterized queries. Many other ADO.Net objects are included in this course.

Prerequisites: CIS 130

CIS 220 System Analysis and Design 3 Credit Hours

An advanced course involving the study of techniques used by the systems analyst to design and implement computerized business information systems. Each student participates in a systems project designed to reinforce course material. Written and oral communication skills necessary for the information technology professional are emphasized.

Prerequisites: CIS 111 and either CIS 160 or CIS 170

**CIS 221 Instructional Technology for
Elementary Teachers 3 Credit Hours**

This computer course introduces elementary education majors to the implementation, application and issues of microcomputers in education. Topics include computer literacy, classroom use of hardware and software for student learning and computer resources to stay current with multi-media technology.

Prerequisites: Enrollment in Pre-education program.

Note: This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

CIS 222 Advanced Web/Internet Technologies 4 Credit Hours

A continuation of Web/Internet Technologies, this course presents students with both theoretical and practical instruction on e-commerce site implementation on a web server. Topics include: site usability, site creation methods, site development methods, database issues, transaction management, site performance testing and evaluation, and security.

Prerequisites: CIS 126 and ART 107

**CIS 223 Instructional Technology for
Secondary Teachers 3 Credit Hours**

This computer course introduces secondary education majors to the implementation, application and issue of microcomputers in education. Topics include computer literacy, classroom use of hardware and software for student learning, and computer resources to stay current with multi-media technology.

Prerequisites: Enrollment in Pre-education program

Note: This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

CIS 224 Web Multimedia 4 Credit Hours

An intermediate Internet programming and web design course that familiarizes students with animation for the Web. Basic animation concepts, including plug-ins, frames, tweening, compression and bandwidth will be covered. Students will gain an understanding of the website design process by systematically designing, creating and publishing a web site incorporating web animation techniques that they have learned.

Prerequisites: CIS 126

CIS 227 Web Authoring Design Tools 4 Credit Hours

A web authoring course focused on the theory and design of Web construction. Topics will include: information architecture concepts, Web project management, scenario development and performance evaluations. This course will also introduce and evaluate the most widely used web authoring tools in industry, such as Macromedia Dreamweaver, Microsoft FrontPage, and Allaire Homesite.

Prerequisites: CIS 126 and ART 107

CIS 229 UNIX System Administration 4 Credit Hours

Covers the effective administration of a UNIX system. Discussion is provided on the internals of the UNIX operation system. Laboratory exercises include system start-up and shutdown, file system management, adding and configuring backups and restorations, device management, system security, and system accounting. Each student is required to complete successfully a series of comprehensive exercises to demonstrate proficiency in system administration.

Prerequisites: CIS 129

CIS 230 C++ Programming 3 Credit Hours

An advanced course for students who have a basic understanding of arrays, pointers, structures, and file I/O. It includes theory and application in developing expanded skills in areas such as data and structures and migrating from "C" to "C++."

Prerequisites: CIS 170

CIS 232 C+ Programming 4 Credit Hours

An advanced course for students who have a basic understanding of arrays, pointers, structures and object oriented programming. The goal of this course is to provide students with the knowledge and skills they need to develop C+ applications for the Microsoft .NET Platform. The course focuses on C+ program structure, language syntax, and implementation details.

Prerequisites: CIS 170, CIS 171 or CIS 230

Fall	Winter	Spring	Summer
D			

CIS 270 Data Base Systems 3 Credit Hours

An advanced course familiarizing the student with the organization and management of data base systems. Detailed instruction covers data base retrieval and manipulation, and application program development oriented relational to data bases. ORACLE is used for class lab assignments.

Prerequisites: CIS 111

CIS 272 Project Management 4 Credit Hours

An advanced course involving the study of project management techniques used by the information technology profession, including Microsoft Project software, project context, integration, scope, time, cost, quality, human resources, communications, risk, and procurement management. The course provides a foundation for the CompTIA IT Project+ certification.

Prerequisites: CIS 220 or permission of instructor

CIS 295 Network Design and Implementation 3 Credit Hours

This is the final course in the Network Administration degree program. This capstone course provides learning experiences in the design, implementation and support of a Local Area Network. This course covers basic LAN design methods and tools, NetWork Operating Systems, LAN implementation considerations, LAN hardware, and network troubleshooting techniques. Students will design and implement an actual LAN in the lab complete with file servers, workstations, hubs, switches, and routers.

Prerequisites: Departmental approval.

COMPUTER NETWORKING ACADEMY

CNT 110 Networking Basics: CCNA 1 4 Credit Hours

This course is the first in a series of four courses leading to a CCNA (Cisco Certified Network Associate) certificate. Topics include the OSI model and industry standards, network topologies, Internet Protocol addressing, media access control addressing, data encapsulation, classes of IP addresses and subnetting, subnet masking, and networking components.

Note: CNT 110 is offered the first 8 weeks of both the Fall and Winter semesters.

Fall	Winter	Spring	Summer
D/E	D/E		

CNT 115 Network Infrastructure Essentials 4 Credit Hours

A basic course designed for students interested in the physical aspects of voice and data network cabling and installation. The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmission. Students will develop skills in reading network design documentation, part list set up and purchase, pulling and mounting cable, cable management, choosing wiring closets and patch panel installation and termination as well as installing jacks and cable testing. This hands-on, lab-oriented course stresses documentation, design, and installation issues, as well as laboratory safety, on-the-job safety, and working effectively in group environments.

Prerequisites: CNT 110 or CIS 112 or instructor permission.

Fall	Winter	Spring	Summer
E	E		

CNT 119 Introduction to CCNA 2 1 Credit Hour

This course introduces students to the Cisco Networking Academy Program and to the networking field. The course focuses on network terminology and protocols, local-area networks (LANs), wide-area networks (WANs), the Open System Interconnections (OSI) model, routers, router programming, Internet Protocol (IP) addressing, and network standards.

Prerequisites: CIS 112

CNT 120 Routers and Routing Basics: CCNA 2 4 Credit Hours

This course is the second in a series of four courses leading to a CCNA (Cisco Certified Network Associate) certificate. Topics include router elements, router configurations, managing router configuration files, routed and routing protocols, access lists, and RIP and IGRP routing protocols.

Prerequisites: CNT 110 or CNT 119

Note: CNT 120 is offered the second 8 weeks of both the Fall and Winter semesters.

Fall	Winter	Spring	Summer
D/E	D/E		

CNT 210 Switching Basics and Intermediate Routing: CCNA 3 4 Credit Hours

This course is the third in a series of four courses leading to a CCNA (Cisco Certified Network Associate) certificate. Topics include VLSM, LAN switching, VLANS, LAN design, single-area OSPF, EIGRP, spanning tree protocol and VLAN trunking.

Prerequisites: CNT 120

Note: CNT 210 is offered the first 8 weeks of both the Fall and Winter semesters, and in the Spring.

Fall	Winter	Spring	Summer
D/E	D/E	E	

CNT 220 WAN Technologies: CCNA 4 4 Credit Hours

This course is the final course in the CCNA program sequence leading to a CCNA (Cisco Certified Network Associate) certificate. Topics include WAN and WAN design, NAT and PAT, PPP, ISDN, Frame Relay, network administration, network management, and CCNA certification exam review.

Prerequisites: CNT 210

Note: CNT 220 is offered the second 8 weeks of both the Fall and Winter semesters, and during the Summer.

Fall	Winter	Spring	Summer
D/E	D/E		E

CNT 260 Network Security: Security + Prep 4 Credit Hours

This course is an introduction to network security concepts, communication security, infrastructure security, organizational security, and basic cryptography. The course helps prepare students for the CompTIA Security + certification exam.

Prerequisites: CNT 120 or permission

Fall	Winter	Spring	Summer
E	E		

CNT 291 Advanced Routing: CCNP 1 4 Credit Hours

An advanced course designed for students preparing for the Cisco Certified Networking Professional (CCNP) certification. The course focuses on advanced routing and using Cisco routers connected in local-area networks (LANs) and wide-area networks (WANs) typically found at medium to large network sites. Upon completion of this training course, the student will be able to select and implement the appropriate Cisco IOS services required to build a scalable routed network.

Prerequisites: CNT 220 or CCNA certification

CNT 292 Remote Access: CCNP 2 4 Credit Hours

An advanced course designed for students preparing for the Cisco Certified Networking Professional (CCNP) certification. The course focuses on remote access technologies including asynchronous connections, point-to-point links, ISDN, frame relay, and security.

Prerequisites: CNT 220 or CCNA certification

CNT 293 Multilayer Switching: CCNP 3 4 Credit Hours

An advanced course designed for students preparing for the Cisco Certified Networking Professional (CCNP) certification. The course focuses on the selection and implementation of the appropriate Cisco IOS services to build reliable, scalable multilayer-switched LANs. Students will develop skills with VLANs VTP, STP, inter-VLAN routing, multicasting, and multilayer switching.

Prerequisites: CNT 220 or CCNA certification

CNT 294 Network Troubleshooting: CCNP 4 4 Credit Hours

An advanced course designed for students preparing for the Cisco Certified Networking Professional (CCNP) certification. This fourth and final course focuses on troubleshooting network problems. The course focuses on documenting and base-lining a network, troubleshooting methodologies and tools, and Layers 1 to 7 troubleshooting.

Prerequisites: CNT 291, CNT 292, and CNT 293

COUNSELING**COLL 101 College Success 3 Credit Hours**

This course is designed to help students achieve academic success. Students will become aware of techniques in note-taking for reading and listening, test taking, time management, and stress management. The course will also promote the development of a basic vocabulary for a beginning student, the ability to understand oneself and others, and the ability to appreciate the importance of diversity and the college environment.

Fall	Winter	Spring	Summer
D/E	D/E		

COUN 110 Human Potential Seminar 2 Credit Hours

Uses the group process, which enables each individual to discover and use strengths, talents, and abilities more efficiently. Through goal setting and value clarification, one learns to think positively about oneself and become a more self-directing person.

Fall	Winter	Spring	Summer
D/W	D/W		

COUN 111 Advanced Human Potential Seminar 2 Credit Hours

Uses the group process and the tools developed in COUN 110 to develop life skills that enable each individual to discover his or her potential and to deal more effectively and efficiently with conflicts, blocks, failures, and life-style problems.

Prerequisites: COUN 110 or permission of the instructor

COUN 114 Stress Management – A Personal Approach 2 Credit Hours

Provides a supportive group setting for students to examine their own personal sources of stress, how these stress factors are affecting them, and what they can do to develop more effective coping strategies.

Note: This course meets the graduation requirement for General Education Outcome 6: Wellness (for graduates with the Associate of Arts or Associate of General Studies degree only).

Fall	Winter	Spring	Summer
D			

COUN 115 Assertiveness Training 1 Credit Hour

An experiential course designed to improve communication and behavior. Students learn to differentiate between assertiveness, non-assertiveness, and aggressiveness. Through lectures, discussion, and role-playing, a person begins to become more assertive.

COUN 116 Assertiveness in Daily Living 1 Credit Hour

An advanced course in assertiveness focusing on communication problems with parents, siblings, friends, relatives, and strangers, including specific assertive strategies for successful communication with difficult people. Emphasis is on role-playing situations such as refusing a request, asking a favor, responding to criticism, and being angry.

COUN 118 Assertiveness at Work 1 Credit Hour

An advanced course in assertiveness that discusses how to get the most out of one's work environment. One learns how to apply for a job, assertively prepare a boss for a raise, and negotiate salary. In addition, assertive strategy is offered for successfully handling both criticism from peers and a performance review from the boss.

COUN 119 Issues in Personal Growth **2 Credit Hours**
 Designed to give participants the opportunity to learn about and discuss the specific blocks to personal growth they feel in their lives. Students will become aware of how they hinder their ability to do academic work and to find friendship, love, and happiness. Small group interaction is utilized.

COUN 120 Career Exploration **1 Credit Hour**
 Designed to assist students in exploring and assessing their interests, needs, and values in relation to possible occupations and careers. Both readings and small group discussion are utilized.

Fall	Winter	Spring	Summer
D/E/W	D/E/W		

COUN 125 Life Work Planning **3 Credit Hours**
 Discussion, testing, and computer research enable participants to examine their own resources, strengths, and constraints to determine what is realistic for future change. Decision-making tools are taught so that effective planning results in harmony between one's life and work. Potential trouble areas are examined through problem-solving techniques.

Fall	Winter	Spring	Summer
E/O	E/O		

COUN 127 Job Interview Counseling **1 Credit Hour**
 Offers successful strategies to fight the anxiety that comes with a job interview. Students learn creative methods to secure an interview, what to wear at the interview, how to field questions, what to ask the interviewer, and post-interview follow-up. Each student must have a resume in order to benefit from this class.

COUN 128 Active Parenting **2 Credit Hours**
 Provides classroom discussions, video examples, and a supportive group setting for students to learn the basic principles of active parenting of both children and teens. Students are encouraged to apply these principles to their own situations.

COUN 129 Personality Type and Success **2 Credit Hours**
 Through the use of the Myers-Briggs Type Indicator in a supportive group setting, participants will develop a greater understanding and appreciation of self and others. Understanding type differences will promote better interpersonal relationships in the home, work, and other areas of one's life. Differences in problem-solving and decision-making techniques will also be explored.

Fall	Winter	Spring	Summer
	D		

CRIMINAL JUSTICE/ LAW ENFORCEMENT

CRJ 131 Introduction to Law Enforcement and Criminal Justice **3 Credit Hours**

An overview of the criminal justice system in the U.S. Topics surveyed are the history of law enforcement, the political, sociological, and philosophic background of police functions and the criminal courts. Constitutional problems as they relate to the police function are surveyed, and the use of recent technology in criminal justice is discussed.

Note: This course meets the graduation requirement for General Education Outcome 1: American Society, Events, Institutions and Cultures.

Fall	Winter	Spring	Summer
D/E/O	D/E/O	D/O	

CRJ 132 Police Administration - Staff and Line Operations **3 Credit Hours**

Focuses on uniformed police operations, both patrol and traffic, as well as principles of organization, management, planning, and crime prevention.

Fall	Winter	Spring	Summer
D/E	D/E		

CRJ 134 Criminal Investigation **3 Credit Hours**

An introduction to criminal investigation and the techniques of forensic science. Topics include information accumulation, specific crimes, and preparation for purposes of prosecution.

Prerequisites: CRJ 131

Fall	Winter	Spring	Summer
D/E	D/E		

CRJ 135 Juvenile Justice **3 Credit Hours**

Studies the legal and philosophical basis of the juvenile justice process along with a review of the juvenile court procedures in Michigan. Problems related to delinquency and its control are discussed.

Fall	Winter	Spring	Summer
D/E/O	D/E/O		

CRJ 136 Corrections I - Introduction to Corrections **3 Credit Hours**

A study of the history and philosophy of corrections. An investigation is made of probation and parole and the impact of prisoner rights law on the system as a whole.

Fall	Winter	Spring	Summer
D/E	D/E		

CRJ 138 Probation and Parole **3 Credit Hours**

Covers treatment of convicted law violators by correctional field services before and after prison, analysis of the role of probation and parole officers, and evaluation of community resources applied to the correctional task.

Fall	Winter	Spring	Summer
D/E	D/E		

CRJ 141 Corrections Clients - Human Growth and Development 3 Credit Hours

Investigates human development and its relationship to criminal patterns, stressing the role of environment and family as influences on behavior. Specific problems such as substance abuse and mental pathologies are reviewed, and intervention strategies and treatment alternatives are discussed.

Fall D	Winter E	Spring	Summer
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CRJ 234 Criminalistics: Criminal Investigation Laboratory Techniques 3 Credit Hours

Offers laboratory experience in the fundamentals of investigation, including fingerprinting techniques and the examination of hair, fiber, glass, and firearms and tool marks.

Fall E	Winter E	Spring	Summer
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CRJ 251 Criminal Law 4 Credit Hours

A study of the basic elements of criminal law with particular emphasis on definitions of Michigan crimes.

Fall D/E	Winter D/E	Spring	Summer
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CRJ 252 Criminal Procedure 4 Credit Hours

A continuation of CRJ 251, emphasizing criminal procedure, including the laws of arrest and search and seizure, the rights of the accused, and the roles of the prosecutor, judge, jury, and defense counsel in the judicial process. Both Michigan and federal constitutional issues are discussed.

Prerequisites: CRJ 251

Fall D/E	Winter D/E	Spring	Summer
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CRJ 253 Legal Issues in Corrections/ Probation and Parole 4 Credit Hours

An introduction to constitutional issues relating to corrections. Study is made of court processes, with particular emphasis on major cases affecting corrections, including probation and parole.

Fall D	Winter E	Spring	Summer
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CRJ 285 Topics in Criminal Justice/ Law Enforcement 3 Credit Hours

An exit course covering a series of critical issues facing law enforcement personnel. The primary goals are to help the student understand the diverse roles of the public police and prepare for entry into the job market.

Prerequisites: ENG 131, CRJ 131 and 3 additional hours in criminal justice

Fall D/E	Winter D/E	Spring	Summer
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CRJ 286 Topics in Corrections/ Probation and Parole 3 Credit Hours

An exit course covering a series of critical issues facing corrections, probation, and parole personnel. The primary goals are to help the student understand the diverse roles of corrections, probation, and parole personnel and prepare for the job environment.

Prerequisites: ENG 131, CRJ 136 and 3 additional hours in criminal justice.

Fall D	Winter E	Spring	Summer
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CRJ 291 Criminal Justice Internship 3 Credit Hours

An internship program that provides the student field experience with municipal, county, state, and federal criminal justice agencies and related agencies in the private sector.

Prerequisites: A grade-point average of at least 2.8, completion of 12-hours of criminal justice, and written consent of the Criminal Justice Director before registration.

Fall D/E	Winter D/E	Spring	Summer
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CRJ 292 Criminal Justice Internship II 3 Credit Hours

A continuation of CRJ 291, designed to enhance the opportunity of selected students to prepare for specific employment.

Prerequisites: Successful completion of CRJ 291. A grade point average of at least 2.8, completion of 12-hours of criminal justice, and written consent of the Criminal Justice Director before registration.

Fall D/E	Winter D/E	Spring	Summer
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DANCE

DNC 121 Beginning Tap 2 Credit Hours

A dance form derived from a combination of syncopated African rhythms, Irish clogging, and folk dance. Basic rhythms and steps are explored at a level appropriate for the class. Shoes are discussed during the first class meeting.

Fall D	Winter D	Spring D	Summer D
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DNC 141 Beginning Ballet 2 Credit Hours

A dance form originating in the court of Louis XIV. The movement vocabulary, therefore, is in French. This course connects movement with the French term, permitting the student to properly execute the movement and build on a basic movement vocabulary at the barre, at centre, and through the dance space. A universal movement system, classical dance can be understood throughout the world.

Fall D	Winter	Spring	Summer
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DNC 151 Beginning Modern Dance 2 Credit Hours

Beginning Modern Dance is a beginning level course that provides an exploratory look at dance as a limitless way to express oneself in human movement. Primary emphasis is on developing a basic Modern Dance vocabulary from which to build fresh movement material as well as improving health and fitness of the body, the instrument of dance.

DNC 152 Intermediate Modern Dance 2 Credit Hours

Intermediate Modern Dance looks at this genre as an art form that has a limitless way to express oneself in human movement. Primary emphasis is on building from basic Modern vocabulary, developing ways to find original movement material, and on improving health and fitness of the body, the instrument of dance.

Prerequisites: DNC 151 or permission of the instructor.

Fall D	Winter	Spring	Summer
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DNC 161 Beginning Jazz Dance 2 Credit Hours

Beginning Jazz Dance is a course in which students learn this big, bold percussive movement with many styles. Primary emphasis is on developing knowledge of and experience in basic Jazz vocabulary accompanied by jazz rhythms and syncopation.

DNC 162 Intermediate Jazz Dance 2 Credit Hours

A continuation of DNC 161, exploring further the characteristic jazz movements with the use of more intricate footwork and movement phrases or combinations.

Prerequisites: DNC 161 or permission of the instructor.

DNC 163 Advanced Jazz Dance 2 Credit Hours

Advanced Jazz Dance emphasizes greater rhythmic complexity and movement phrases along with more specific styles within this genre. It incorporates the study of significant choreographers with their unique contributions to this dance form.

Prerequisites: DNC 162 or permission of the instructor.

DNC 221 College Dance Company I, II, III IV 1 Credit Hour

Provides advanced dance students the experience of performing in the variety of genres and settings.

Prerequisites: Admission by audition each term

Suggested Prerequisites: Any level Ballet, Modern, or Jazz

DNC 230 Beginning Choreography 3 Credit Hours

The course provides opportunities to use individual creativity through the composition of dance phrases and studies. With the emphasis on learning by doing, a student can discover how to manipulate the dance elements of time, space and energy and create thematic material from which to build an entire dance. Movement will mainly be composed for solo rather than group works.

Prerequisites: Any level of Ballet, Modern, or Jazz class, or concurrent enrollment in such a class, or permission of the instructor.

ECONOMICS, FINANCE AND INVESTING

BEC 133 Basic Economics 3 Credit Hours

Provides an overview of topics covered in BEC 151 and 152, including the influences of total output, particularly monetary and fiscal policies, detailed analysis of firm decision-making in both product and resource markets, and the principles of international trade. This course serves engineers needing only one course to transfer as well as those who wish to learn more about the free enterprise system.

Fall D/E	Winter D/E	Spring	Summer
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BEC 151 Principles of Macro Economics 3 Credit Hours

This is a required course for Business Administration majors planning to transfer to four-year colleges. This course delineates the theoretical under-pinnings of aggregative economic analysis. Specific areas of study include money and banking, national income accounting, alternative employment theories, governmental interventions, and economic growth.

Fall D/E/W/O	Winter D/E/W/O	Spring D/E/O	Summer D/E
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BEC 152 Principles of Micro Economics 3 Credit Hours

This is a required course for Business Administration majors planning to transfer to four-year colleges. This course delineates the theoretical underpinnings of disaggregative economic analysis. Specific areas of study include the price system, market imperfections, labor unions, governmental interventions, and international economics.

Fall D/E/W/O	Winter D/E/W/O	Spring D/E/O	Summer D/E
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BFN 130 Beginning Investment 3 Credit Hours

Designed to appeal to all students regardless of program major. Introduces students to basic investing principles by examining the security selection process. A careful examination of risk-free, debt, equity, and real estate asset classes leads to students selecting securities and mutual funds to build an investment portfolio. The mechanics of setting up accounts, the buying and selling of securities, and the tax aspects of various accounts are also discussed.

Fall E	Winter E	Spring	Summer
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BFN 141 Personal Finance 3 Credit Hours

Designed to appeal to all students regardless of program major. Everyday financial concerns are examined including obtaining and managing credit, buying, insurance needs, and financing the purchase of a car or a home. Longer-term financial goals such as saving for college tuition and retirement are also explored. The use of stocks, bonds, and mutual funds to reach these objectives is examined. The tax implications of financial decisions are also considered.

Fall D/E	Winter D/E	Spring	Summer
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BFN 253 Principles of Finance 3 Credit Hours

Introduces students to the financing of the modern business enterprise. Topics include financial statement analysis, working capital management, capital acquisition and budgeting, the valuation of securities, and global financial principles.

Prerequisites: BAC 131 and BBA 131

ELECTRICAL/ ELECTRONICS TECHNOLOGY AUTOMATION/ ROBOTICS TECHNOLOGY

ELEC 103 Basic Electricity 4 Credit Hours

A beginning course covering the fundamentals of electricity as applied to the electrical field. Topics include electron theory, Ohm's Law, circuits, magnetism, inductance, capacitance, and alternating current circuits. With both computer simulation and construct circuits, students use voltmeters, ammeters, power supplies, signal generators, and oscilloscopes in the laboratory.

Fall	Winter	Spring	Summer
D/E	D/E		

ELEC 106 Basic Electronics 3 Credit Hours

Introduces the fundamentals of solid-state components found in electronic circuits. Topics include solid state diodes, field effect transistors, and bipolar transistors. Students learn the characteristics of these components and some basic circuits in which they are commonly used. A software program is used to simulate various electronic circuits.

Fall	Winter	Spring	Summer
D/E	D/E		

ELEC 115 Digital Circuits I 3 Credit Hours

An introductory course for electronics majors that covers: digital concepts; binary, hexadecimal, and BCD number systems; TTL and CMOS integrated circuit logic gate technology; Boolean algebra; logic tables; combinational logic; monostable and bistable multivibrators; storage registers; asynchronous counters; and the use of digital electronic simulation software. About half of class time is devoted to hands-on laboratory experiments.

Fall	Winter	Spring	Summer
D/E	D/E		

ELEC 120 Basic Hydraulics 3 Credit Hours

An introductory course designed to familiarize the student with basic hydraulic principles, laws, components, and symbols. Students are introduced to safety, the use of tools, and procedures in the design, building, testing, troubleshooting, and repair of industrial hydraulic systems. This course includes lectures, demonstrations, and laboratory activities.

ELEC 145 AC/DC Rotating Machines 3 Credit Hours

An intermediate-level course concentrating on the theory and application of DC motors and generators, AC alternators, and single-phase and three-phase induction motors. Single-phase and three-phase transformers are also covered. This course includes both lectures and laboratory activities with verification of several circuit principles.

Prerequisites: ELEC 103

ELEC 155 Analog Electronics I 3 Credit Hours

An intermediate-level course covering fundamental circuits and their characteristics, designed to provide a sound understanding of rectifier circuits and amplifier systems. Laboratory work consists of experiments in rectification, filtering, amplification, and coupling.

Prerequisites: ELEC 106

ELEC 185 Pneumatics 3 Credit Hours

Explores the principles of fluid power pneumatics as they apply to industrial systems. Various pneumatic components are studied with respect to their functions within pneumatic power and control systems. This course includes both lecture and laboratory work.

ELEC 190 Electronics Technology Co-op 1 Credit Hour

An advanced course offering practical work experience in the Electronics Robotics Technology field through participation in a supervised cooperative education program. This course integrates work and classroom experience.

Prerequisites: 16 ELEC credits and permission of the instructor

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

ELEC 195 AC/DC Circuit Analysis 3 Credit Hours

A laboratory-oriented intermediate-level course for electronics majors including the study of DC single- and multi-source circuitry with the application of Loop, Node, and Thevenin's theorems. Also included are AC reactive circuits using both phasors and complex numbers for determining reactance, impedance, and power factor. Also included is the study of three-phase power using Delta and Wye configurations.

Prerequisites: ELEC 103

ELEC 200 Ladder Diagrams and Motor Controls 3 Credit Hours

Covers the fundamentals of electrical ladder diagrams and motor control circuits. Ladder logic, as well as labels, documentation, and symbology of electrical drawings, is presented with the use of ladder diagrams for troubleshooting. The student designs and draws control circuits for three-phase induction motors and wires these circuits in the motor control lab. Several single-phase control circuits are included in laboratory exercises. Students will also cover ladder logic lab activities as they pertain to controlling an electro-pneumatic machine cycle.

ELEC 205 Analog Electronics II 3 Credit Hours

An intermediate-level course including discussion of differential amplifiers; operational amplifiers; power amplifiers; oscillators; rf and modulation circuits; voltage-controlled oscillators; phase-locked loops; linear and switching voltage regulators; triggered semiconductor devices such as the SCR, diacs, and triacs; and LASER applications.

Prerequisites: ELEC 155

ELEC 215 Digital Circuits II 3 Credit Hours

An advanced digital course for electronics majors. Topics include synchronous counters, decoders, storage registers, shift registers, clock and timing circuits, serial and parallel adder circuits, Liquid Crystal Displays and drivers, digital-to-analog and analog-to-digital converters, multiplexers and demultiplexers, memory technology, and the use of digital electronic simulation software. About half of class time is devoted to hands-on laboratory experiments.

Prerequisites: ELEC 115

ELEC 245 Programmable Logic Controllers 3 Credit Hours

Begins with the Allen Bradley PLC-5/25 programmable controller system characteristics, followed by a detailed presentation on using the programmable controller to solve the automated control problem, the objective being to enable students to adapt to any PLC system, regardless of manufacturer, in a minimum of time. The course includes approximately 28 hours of lecture followed by 32 hours of laboratory work. The Rockwell software includes a brief introduction to 6200; however, the course concentrates on the use of RSLogix 5 software to control machine cycles.

ELEC 255 Instrumentation Systems 3 Credit Hours

An intermediate-level hands-on course providing the student with an understanding of, and experience with, instrumentation systems. Transducers studied include LVDTs, strain gages, accelerometers, load cells, magnetic pickups, and temperature detectors. Computer-based data acquisition is used extensively, including use of LabVIEW Graphical programming language. A final project is required.

Prerequisites: ELEC 155

ELEC 260 Automation Controls and Robotics 3 Credit Hours

A course intended for advanced students with a basic understanding of the programmable controller. Control specifications written by the student for laboratory automation machines and industrial robots are used to implement controls for non-synchronous and synchronous operation of the machine. Specific topics include techniques, terminology, and documentation currently used in automated manufacturing.

Prerequisites: ELEC 245 with a grade of C or better

ELEC 295 Microprocessor Systems 3 Credit Hours

An advanced-level hands-on course based on the study of the Motorola MC68HC11 microcontroller. Specific topics covered are accumulator instructions, arithmetic and logic instructions, loops and timing instructions, indexed addressing, use of a cross assembler, interfacing with external devices, interrupts, analog-to-digital conversion, timer systems, input capture, EPROM Programming, and serial data exchange. A final interface project is required.

Prerequisites: ELEC 215

EMERGENCY MEDICAL SERVICES

EMS 100 EMT - Basic Fundamentals 9 Credit Hours

This lecture course presents the technical knowledge and skills necessary for certification as a Basic Emergency Medical Technician (EMT-B). This course focuses on Basic Life Support (CPR), airway management, poisoning emergencies, splinting, disaster management, bleeding, shock, emergency child birth, and psychological emergencies, as well as extrications. This course meets the recommendations of the National Department of Transportation for EMT- Basics. Note that successful completion of this course is required for individuals wishing to take the National Registry Certifying Exam for EMT-Basics.

Suggested Prerequisites: AH 105 and AH 100

Note: The following courses must be taken concurrently with EMS 100: EMS 106 and EMS 109. All EMS 100 students must have a current CPR card for the Healthcare Provider, American Heart Association, prior to the 8th week of the EMS 100 level courses. (This can be met by completing AH 105.) It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall	Winter	Spring	Summer
D/E	D/E		

EMS 106 EMT - Basic Procedures 2.5 Credit Hours

This laboratory course is designed to develop overall patient management skills required for Basic EMT. This covers equipment, assessment, evaluation, treatment, documentation, communication and more. Subject matter complements the required co-requisite lecture course in EMS 100 (EMT- Basic Fundamentals). This lab focuses on all essential skills required for the successful completion of the National Registry standard practical examination. This course meets the recommendations of the National Department of Transportation for EMT- Basics.

Suggested Prerequisites: AH 100 and AH 105

Note: The following courses must be taken concurrently with EMS 106: EMS 100 and EMS 109. All EMS 100 students must have a current CPR card for the Healthcare Provider, American Heart Association, prior to the 8th week of the EMS 100 level courses. (This can be met by completing AH 105.) It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall	Winter	Spring	Summer
D/E	D/E		

EMS 109 EMT - Basic Clinical Externship 2 Credit Hours

This course provides a structured clinical experience in the hospital and in the prehospital emergency medical service environment. The purpose of this course is to provide the students an opportunity to demonstrate learned assessment skills, under supervision, in real-life situations. This course meets the recommendations of the National Department of Transportation for EMT- Basics. Note that successful completion of this course is required for individuals wishing to take the National Registry Certifying Exam for EMT-Basics. Due to the nature of this course, all students must have completed the Health Careers Medical packet and provide proof of health insurance prior to attending clinical.

Note: This course is field-based and is self-scheduled with our Clinical Coordinator after the Mid-Term exams for EMS 100 and EMS 106. Students must successfully pass their Mid-Term Exams, turn in complete Health Packets, proof of health insurance, and have purchased the required uniform pants & shoes prior to being allowed to go to the EMS 109 Clinical. Students will receive information from the Clinical Coordinator during the first week of courses. The Clinical Coordinator will come to see students during the EMS 100 class time since EMS 109 does not formally meet on campus.

Prerequisites: Health forms and hepatitis information (See the Health Careers Division). These packets will also be available to EMS students during the first week of school and will be handed out during the EMS 100 course.

Suggested Prerequisites: AH 100 and AH 105

Note: The following courses must be taken concurrently with EMS 109: EMS 100 and EMS 106. All EMS 100 students must have a current CPR card for the Healthcare Provider, American Heart Association, prior to the 8th week of the EMS 100 level courses. (This can be met by completing AH 105.) It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall D/E/W	Winter D/E/W	Spring	Summer
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EMS 200 Paramedic I 3 Credit Hours

This lecture course begins with an overview of EMS systems, injury preventions, medical, legal, and ethical issues as well as general patient assessment. The course progresses the student through advanced assessments in the areas of respiratory and neurologic conditions. The course ends with a focus in pathophysiology as it relates to body functions in the presence of disease or injury.

Prerequisites: Acceptance into the Paramedic Program. This is done via a "Waiting List" and is managed through the EMS Program Manager in Health Careers.

Note: Minimally, students must have a current NREMT certificate or a current EMT-B MI state license, have passed the following courses with a C or better: AH 100, AH 120, BIO 233 and BIO 234.

Suggested Prerequisites: ENG 131 and ENG 132

Note: The following courses must be taken concurrently with EMS 200: EMS 205, EMS 210 and EMS 290. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall E	Winter	Spring	Summer
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EMS 205 Paramedic Lab I 3 Credit Hours

This laboratory course is designed to develop overall patient management skills. This covers equipment, assessment, evaluation, treatment, documentation, communication and more. Subject matter is complementary to the student's corresponding lecture courses in EMS 200 and EMS 210. This particular lab focuses on team building techniques, IV and medication administration, and the management of respiratory and cardiac patients.

Prerequisites: Acceptance into the Paramedic Program. This is done via a "Waiting List" and is managed through the EMS Program Manager in Health Careers.

Suggested Prerequisites: The following courses must be taken concurrently with EMS 205: EMS 200, EMS 210 and EMS 290. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association.

Note: Minimally students must have a current NREMT certificate or a current EMT-B MI state license, and have passed the following courses with a C or better: AH 100, AH 120, BIO 233, BIO 234, ENG 131 and ENG 132.

Fall E	Winter	Spring	Summer
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EMS 210 Paramedic II 3 Credit Hours

This lecture course begins with an overview of basic pharmacology and then introduces students to advanced pharmacological concepts. Intravenous access with fluid and medication administration is the main focus leading into full patient assessment and management. The emphasis is placed upon ventilation, airway, and cardiovascular patients. The course builds to the clinical assessment and management of cardiac dysrhythmias and other cardiovascular conditions.

Prerequisites: Acceptance into the Paramedic Program. This is done via a "Waiting List" and is managed through the EMS Program Manager in Health Careers.

Suggested Prerequisites: The following courses must be taken concurrently with EMS 210: EMS 200, EMS 205 and EMS 290. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Note: Minimally students must have a current NREMT certificate or a current EMT-B MI state license, and have passed the following courses with a C or better: AH 100, AH 120, BIO 233, BIO 234, ENG 131 and ENG 132.

Fall E	Winter	Spring	Summer
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EMS 215 Paramedic Lab II 4 Credit Hours

This laboratory course is designed to develop overall patient management skills. This covers equipment, assessment, evaluation, treatment, documentation, communication and more. Subject matter is complementary to the student's corresponding lecture courses in EMS 220 and EMS 230. This particular lab focuses on the management of the cardiac patient, mega-code scenarios, spinal immobilization, traumatic injuries and traumatic resuscitation.

Prerequisites: EMS 200, EMS 205, EMS 210, and EMS 290

These courses must be successfully completed within the immediately preceding fall semester. All program entry prerequisites, without exception, must be completed by this time.

Suggested Prerequisites: ENG 131 and ENG 132

Note: The following courses must be taken concurrently with EMS 215: EMS 220, EMS 230 and EMS 295. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall	Winter E	Spring	Summer
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EMS 220 Paramedic III 4 Credit Hours

This lecture course helps students to understand the pathophysiology of respiratory disease and neurological emergencies, then integrates this knowledge with assessment findings to develop a field impression and deliver appropriate treatments. This course dedicates an exceptional amount of time detailing the anatomy, physiology, and pathophysiology of various types of trauma. The emphasis is on treating the 'whole patient,' avoiding treatment distractions of any singular injury.

Prerequisites: EMS 200, EMS 205, EMS 210, and EMS 290

These courses must be successfully completed within the immediately preceding fall semester. All program entry prerequisites, without exception, must be completed by this time.

Suggested Prerequisites: ENG 131 and ENG 132

Note: The following courses must be taken concurrently with EMS 220: EMS 230, EMS 215 and EMS 295. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall	Winter E	Spring	Summer
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EMS 225 Paramedic Lab III 2 Credit Hours

This laboratory course is designed to develop overall patient management skills. This covers equipment, assessment, evaluation, treatment, documentation, communication and more. Subject matter is complementary to the student's corresponding lecture course in EMS 240. This particular lab focuses on pediatric, gynecological and obstetric patients. A large focus is dedicated to patient management that incorporates the use of all ALS skills presented in the program.

Prerequisites: EMS 220, EMS 215, EMS 230, and EMS 295

These courses must be successfully completed within the immediately preceding winter semester.

Suggested Prerequisites: ENG 131 and ENG 132

Note: The following courses must be taken concurrently with EMS 240: EMS 225 and EMS 299. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall	Winter	Spring E	Summer
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EMS 230 Paramedic IV 4 Credit Hours

This lecture course helps students to understand the pathophysiology of cardiovascular disease and to recognize and treat the associated dysrhythmias. Students will develop a broad understanding of the anatomy and physiology (review), general pathophysiology, assessment and management of emergencies in the areas of hematology, gastroenterology, toxicology and substance abuse, urology and nephrology, behavioral and psychiatric disorders, and environmental emergencies. This course completes with a special section on geriatric considerations.

Prerequisites: EMS 200, EMS 205, EMS 210, and EMS 290

These courses must be successfully completed within the immediately preceding fall semester. All program entry prerequisites, without exception, must be completed by this time.

Suggested Prerequisites: ENG 131 and ENG 132

Note: The following courses must be taken concurrently with EMS 230: EMS 220, EMS 215 and EMS 295. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall	Winter E	Spring	Summer
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EMS 240 Paramedic V 3 Credit Hours

This lecture course covers specialty topics such as OB/GYN, newborn resuscitation, and pediatrics. 12-Lead ECG is also covered. This includes 12-Lead ECG application and interpretation.

Prerequisites: EMS 220, EMS 215, EMS 230, and EMS 295

These courses must be successfully completed within the immediately preceding winter semester.

Suggested Prerequisites: ENG 131 and ENG 132

Note: The following courses must be taken concurrently with EMS 240: EMS 225 and EMS 299. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall	Winter	Spring E	Summer
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EMS 290 Advanced Clinical I 4 Credit Hours

This competency-based course provides the paramedic student with a structured clinical experience in hospital and field environments. Students must complete designated tasks in specific topic areas. This set of clinical rotations emphasizes intravenous access and global patient management for patients in the operating room and the emergency department. Students are also exposed to a variety of cardiac diseases and dysrhythmias.

Prerequisites: Acceptance into the Paramedic Program. This is done via a "Waiting List" and is managed through the EMS Program Manager in Health Careers.

Suggested Prerequisites: The following courses must be taken concurrently with EMS 290: EMS 200, EMS 205 and EMS 210. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Note: Minimally students must have a current NREMT certificate or a current EMT-B MI state license, and have passed the following courses with a C or better: AH 100, AH 120, BIO 233, BIO 234, ENG 131 and ENG 132.

EMS 295 Advanced Clinical II 4 Credit Hours

This competency-based course provides the paramedic student with a structured clinical experience in the hospital and field environments. Students must complete designated tasks in specific topic areas. This set of clinical rotations emphasizes airway management skills in the operating room and in the field, global cardiac patient management in the intensive care unit, neurologic assessments and trauma patient management in a variety of clinical settings.

Prerequisites: EMS 200, EMS 205, EMS 210, and EMS 290
These courses must be successfully completed within the immediately preceding fall semester. All program entry prerequisites, without exception, must be completed by this time.

Suggested Prerequisites: ENG 131 and ENG 132

Note: The following courses must be taken concurrently with EMS 295: EMS 220, EMS 230 and EMS 215. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall	Winter	Spring	Summer
	D/E/W		

EMS 299 Advanced Clinical III 4 Credit Hours

This competency-based course provides the paramedic student with a structured clinical experience in the hospital and field environments. Students must complete designated tasks in specific topic areas. This set of clinical rotations emphasizes a multitude of situations experienced in an urgent care facility. Students focus on pediatric and obstetrical/gynecological patients. Students who need extended rotations to complete tasks from earlier in the year (who received permission to continue on) can do so after the requisite skills for this rotation have been met. Students who do not need extended rotations may (depending on contracts and availability) choose a global rotation at a specialty site. This may include any one of the following (based on contracts and availability): flight team, intubation animal lab, burn unit, advanced morgue, human cadaver lab, geriatric facility, dialysis lab, cancer center, or psychiatric center.

Prerequisites: EMS 220, EMS 215, EMS 230, and EMS 295
These courses must be successfully completed within the immediately preceding winter semester.

Suggested Prerequisites: ENG 131 and ENG 132

Note: The following courses must be taken concurrently with EMS 299: EMS 225 and EMS 240. All advanced level EMS students must maintain a current CPR card for the Healthcare Provider, American Heart Association. It is recommended that students place into ENG 131 prior to attempting any EMS course.

Fall	Winter	Spring	Summer
		D/E/W	

**ENERGY TECHNOLOGY/
MANUFACTURING/
FACILITIES MAINTENANCE
ENGINEERING**

**Multi-Skilled Technician
(METPRO) Program Courses**

ENT 100 Basic Workplace Skills (PO) 1 Credit Hour

This course is designed to prepare students to function effectively as a multi-level skilled trade or service technician in the energy/maintenance technology/ trade and apprentice fields with emphasis on basic workplace skills and knowledge. The course will emphasize the hands-on aspect of basic skills where possible in a workplace laboratory setting. The course is designed to include the immediate and essential workplace skills required of installation, service, operation and maintenance technicians entering various multiskilled operation and maintenance technician fields. This course covers general workplace and worker personal and employment skills along with safety, hazardous or environmental concerns for workers on the job.

Fall	Winter	Spring	Summer
D/E	D/E		

ENT 101 Introduction to Energy Technology 2 Credit Hours

Introduces students to Energy Technologies and Renewable Energies by providing the study of basic energy conversion systems, differing energy systems and measurement of their basic quantities. The student is introduced to and uses the basic methods for measuring, monitoring, calculating, and analyzing pressure flow, temperature, humidity, electrical, pneumatic, gas analysis, power systems, energy conversions and types related to natural gas, solar energy, fossil fuels, wind, nuclear energy, biomass energy, thermal energy, fuel cells and energies of the future.

Prerequisites: Basic exposure and introduction course to Energy Technology or Fundamentals of Renewable Energies.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

ENT 104 Heating Technology (PO) 4 Credit Hours

Prepares students to be multi-functional entry-level service technicians on residential and light commercial gas, oil, and electric forced air and hot water heating systems and equipment. Covers combustion; venting; piping; applied heating system design and installation; electric and electronic microprocessor-based controls; high-efficiency and mid-efficiency equipment; planned service procedures; applied electrical troubleshooting; and reading, sketching, and writing electrical schematic diagrams for service, installation, and troubleshooting. Lab experiences duplicating the workplace are approximately half of the course and include planned service checking; troubleshooting; and installation, repair, and replacement of components using appropriate tools and instruments.

Prerequisites: ENT 101 and ENT 107 or concurrent enrollment in ENT 107

Suggested Prerequisites: Corequisite ENT 107

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

ENT 105 Introduction to RACH (PO) 2 Credit Hours

An introductory course in heating, air conditioning, and refrigeration, providing the student with basic principles in each of the major subject areas and orientation to the service and maintenance technician's job in the field. Practical laboratory sessions involve copper tubing, test instruments, tools, and equipment.

Suggested Prerequisites: Corequisite: ENT 107

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

ENT 106 Sheet Metal Fabrication for Systems 2 Credit Hours

An introductory, hands-on course that exposes students to the process of layout and fabrication of standard sheet metal fittings. The student, through the use of demonstrations and laboratory exercises, constructs a minimum of twelve standard fittings. This course is 80% hands-on with the remainder concentrating on layout, tools, and safety.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

ENT 107 Applied Instrumentation - Electrical (PO) 2 Credit Hours

An introductory course designed to provide a functional approach to the mechanics of electronics used in the Trades, Energy Technology, Power Engineering and by Multiskilled Technicians. Emphasis is placed on understanding the principles of AC and DC, series and parallel circuits, Ohm's Law, tracing circuit problems by using schematic diagrams, basic electrical and electronic circuits, and electrical and electronic test equipment. This course includes the testing of mechanical systems, identifying problems with microprocessor boards and components related to HVAC and the trades. Laboratory experiences are provided through, wiring of circuits, components and in lab equipment and wiring panels.

Suggested Prerequisites: Corequisite ENT 105 and ENT 104

Note: Winter, Spring, 2006 this course will be replaced by ENT103, 3 credit hours.

Fall	Winter	Spring	Summer
D/E			

ENT 108 Introduction to Heating and Cooling Codes 2 Credit Hours

A basic course which introduces the student to the Michigan Mechanical and AGA Gas Codes which replaced the BOCA codes. This course benefits the student requiring some knowledge of code early in his or her preparation for job-entry-level skills in the Heating and Cooling and Power Engineering Certificate programs.

Prerequisites: ENT 104, ENT 113, or permission of the instructor

ENT 109 HVAC Installation and Start-Up 2 Credit Hours

A course to provide the Entry-Level HVAC Technician the basic hands-on skills for installing and starting up an HVAC system. The course will emphasize practical applications of installation and start-up techniques. It will provide examples and simulations of projects that will require knowledge in sheet metal construction and installation, basic electricity and refrigeration as well as the procedures and safety steps for effectively installing and starting up HVAC systems. Good for hands-on experience, 80% lab experience.

Prerequisites: ENT 101, ENT 104, ENT 105, ENT 106, ENT 107, ENT 108 and ENT 113.

Note: Late afternoon 3:30-5:30 pm, Mondays

Fall	Winter	Spring	Summer
D	D	D	

ENT 113 Refrigeration Technology 4 Credit Hours

Designed to prepare students to be multi-level service technicians in the refrigeration field, covering basic refrigeration system design and components and equipment for various domestic, residential, and light commercial systems. Subjects include refrigerant characteristics; charging; evacuation, dehydration, and recovery; use of refrigeration system tools, materials, and instruments; and installation and repair of these systems. Emphasis is on hands-on troubleshooting and maintaining both mechanical and electrical refrigeration system. ARI Refrigeration Certification handling test conducted last day of the class.

Prerequisites: ENT 101, ENT 104, ENT 105 and ENT 107.

Fall	Winter	Spring	Summer
E	E		E

ENT 119 Air Conditioning Technology 3 Credit Hours

Prepares students to be multi-level service technicians on residential and light commercial combination of heating and air-conditioning systems. This course covers system design and layout; equipment selection; duct system sizing, venting, air balance, and adjustment; air quality control; psychrometrics of air-conditioning systems; and applied installation and repair of total systems. Emphasis is on hands-on troubleshooting and maintaining residential and light commercial total systems. Students use past-gained knowledge of troubleshooting HVAC equipment through learned process functions of mechanical, electrical components and electrical diagrams.

Prerequisites: ENT 101, ENT 104, ENT 105, ENT106, ENT 107, ENT 108 and ENT 113

Fall	Winter	Spring	Summer
E	E		

ENT 141 Power Engineering I- Energy Conversion Fundamental (PO) 2 Credit Hours

A basic course in applied power plant fundamentals which is designed to prepare students to take necessary boiler and steam licensing exams and to prepare them to function effectively as multi-functional power or process plant engineers, boiler operators or heating plant operators. Students study heat fundamentals, basic power plant science, operation and maintenance through applying these principles and related power and heating plant operational concepts to live workplace situations. Students operate equipment in a state-of-the-art cogeneration power plant laboratory setting. Lab experiences, which duplicate workplace skills and meet requirements of National Skill Standards account, for 40-60% of the course.

ENT 145 Power Engineering II - Boilers and Auxiliaries (PO) 4 Credit Hours

A comprehensive applied technology course designed to prepare students for necessary boiler and steam licensing exams and to function effectively as multi-functional facilities, power or process plant engineers, boiler operators, and heating plant operators. Students learn to operate and maintain boilers and auxiliaries and must operate, service, and maintain boiler and auxiliary equipment in a state-of-the-art cogeneration power plant laboratory setting. Lab experiences, which duplicate the workplace and meet the National Skills Standards, account for half the course.

Prerequisites: ENT 141

ENT 196 Energy Management Independent Study (PO/OL) 2 Credit Hours

An advanced study, research, or special projects course open to students who have completed two-thirds of the Energy Technology Associate Degree or a certificate program. Study activities are supervised through consultation of the student and teacher and include the development of a documented plan of work, with specific deadlines and objectives.

Prerequisites: Departmental permission

Fall	Winter	Spring	Summer
E	E		

ENT 201 Applied Instrumentation: Electronics 3 Credit Hours

An intermediate course designed to provide an overview of electronic instruments. Emphasis is placed on the operation and use of electronic instruments by use of application exercises for specific components. Introduction to microprocessor uses is provided.

Prerequisites: ENT 107

Fall	Winter	Spring	Summer
E	E		

ENT 212 Light Commercial Heating Systems (PO) 3 Credit Hours

An advanced college-level heating course on large commercial/ industrial burners and light commercial rooftop systems. This course covers installation, repair, troubleshooting, and service of burners and rooftop systems; flame safeguard control and applications; and boiler and burner control systems. Students study, sketch, wire, and operate systems in the laboratory, which accounts for 50% of the course.

Prerequisites: ENT 104, ENT 107 or ENT 141 and ENT 145, or departmental permission

Fall	Winter	Spring	Summer
E	E		

ENT 216 Light Commercial Refrigeration Systems 3 Credit Hours

An advanced course in the service and installation of light commercial refrigeration and air conditioning units. Laboratory experience (50 percent of the course) includes installation, repair, replacement of major and minor components, and troubleshooting of such items as terminal air conditioning units, rooftop units, ice machines, walk-in coolers, and retail store equipment. Students make extensive use of electrical schematic diagrams, manufacturers' service information, service tools, equipment, and instruments.

Prerequisites: ENT 113 or departmental permission

ENT 219 RACH Light Commercial Systems 3 Credit Hours

An advanced course continuing the study of light commercial heating, air conditioning/cooling systems. The focus is on the lash up, installation, and troubleshooting of all associated controls and control packages. Through lectures and laboratory experiences, students gain knowledge of the functions, operations and components in relation to pneumatic, electronic and DDC (Direct Digital Control), building control systems.

Prerequisites: ENT 113 and concurrent enrollment in ENT 212 and ENT 216 or departmental permission

Fall	Winter	Spring	Summer
	E		

ENT 230 Michigan Mechanical Contractor's Licensing Examination Preparation 4 Credit Hours

Lectures and a variety of testing exercises prepare and help potential contractors qualify to take the Michigan Mechanical Contractor's License Examination. Taken with qualifications, orientation and pre-examination work to prepare for examinations in the classifications of laws, rules and regulations, refrigeration, limited heating service, limited refrigeration and air conditioning service, and HVAC equipment.

Prerequisites: The student will first demonstrate that he or she has the necessary work experience and preparation to qualify for the Michigan Mechanical Contractor Licensing Examinations.

Fall	Winter	Spring	Summer
W			

ENT 231 Applied Digital Control Systems (PO) 3 Credit Hours

The use of feedback, feedforward, ratio, and Cascade control is covered in appropriate settings. Electronic instrumentation is studied with solid-state electronics and the use of integrated circuitry, as well as digital logic as an introduction to microprocessor control. Final control elements and sizing of control-valves are also covered.

Prerequisites: ENT 107 and ENT 201

Fall	Winter	Spring	Summer
E	E		

ENT 235 Industrial Controls Calibration Techniques 3 Credit Hours

Covers the principal aspects of measurement, tuning and calibration. Techniques are demonstrated through laboratory demonstrations and experiences. Emphasis is placed on situations using computer simulations, industrial gauging and standard instrument practices.

Prerequisites: ENT 201

Fall	Winter	Spring	Summer
E	E		

ENT 240 Control Systems: Microprocessor Based 3 Credit Hours

An introduction to microprocessor application in process control: integration of microprocessors with combinational instrumentation and control systems. Appropriate languages and computer programs are covered. Computer interface with process instruments and maintenance are emphasized.

Prerequisites: ENT 101 and ENT 235

Fall	Winter	Spring	Summer
E	E		

ENT 241 Refrigeration Operator License Review (PO) 3 Credit Hours

Designed for refrigeration operators seeking a license. This course covers the fundamentals of operation and maintenance, focusing on license examination subjects such as knowledge of basic refrigeration, problems in heat transfer and refrigeration system operation, and knowledge of special systems. Students answer questions, work problems, and sketch components and systems.

Prerequisites: ENT 105 (Students may take the MFMT 241 on-line course to meet objectives provided by this course)

Fall	Winter	Spring	Summer
E	E		

ENT 248 Power Engineering First Class License Review (PO) 3 Credit Hours

An advanced steam license review course covering power engineering subjects including basic thermodynamics, boiler operation and maintenance, boiler and plant efficiency and emissions control, pumps, auxiliaries, power plant equipment and accessories, turbines, engines, and compressors. It includes a review of national, state, and local steam and boiler codes. Problem solving and lab experiences are included.

Prerequisites: Departmental permission (Students may take the MFMT 248 on-line course to meet objectives provided by this course).

Fall	Winter	Spring	Summer
E	E		

ENT 256 Power Engineering III - Steam Plant Operation Lab (PO) 4 Credit Hours

An applied technology course designed to prepare students to take boiler and steam licensing exams and to function as multi-functional power or process plant engineers, prime mover operations, electric generation equipment operators, and cogeneration plant operators. Students learn to operate and maintain turbines, engines, and plant auxiliaries and accessories and are required to operate, service, and maintain turbine/cogeneration and auxiliary equipment in a state-of-the-art cogeneration power plant laboratory setting. Lab experiences, which duplicate the workplace and meet National Skill Standards, may account for half of the course activities depending upon the students' backgrounds.

Prerequisites: ENT 141, ENT 145 or concurrent enrollment or permission of instructor.

Fall	Winter	Spring	Summer
E	E		

ENT 259 Power Engineering IV- Plant/Building Operations & Maintenance (PO) 2 Credit Hours

An advanced course in applied heat/power plant operation and maintenance designed to prepare students to take boiler and steam licensing exams and to function as multifunctional power or process plant engineers, boiler operators, or heating plant operators. Students learn the operation and maintenance of heat systems and equipment through application of principles and concepts in workplace situations.

Prerequisites: ENT 141, ENT 145 or concurrent enrollment, or permission of the instructor

Fall	Winter	Spring	Summer
E	E		

ENT 260 Energy Systems Management (PO) 4 Credit Hours

A course in the technical, economic, and regulatory aspects of effective energy management, providing in-depth coverage of the Energy Policy Act and offering a comprehensive learning and problem-solving forum for those who want a broader understanding of the latest energy cost-reduction techniques and strategies. Laboratory applications emphasize both residential and commercial energy systems with extensive use of software simulations through assigned energy sites.

Prerequisites: ENT 101, ENT 104, ENT 105, ENT 107, ENT 108, ENT 113, ENT 119 and ENT 219.

Fall	Winter	Spring	Summer
	D/E		

ENT 265 Energy Systems Design 5 Credit Hours

A course presenting the design principles of heating, cooling, and hydronic systems. Topics include both residential and commercial heat loss and gain, equipment selection, duct design, piping design, and air terminal selection.

Prerequisites: ENT 101, ENT 104, ENT 105, ENT 107, ENT 108, ENT 109, ENT 113, ENT 119 and ENT 219.

Fall	Winter	Spring	Summer
D/E	D/E		

ENT 267 Bidding and Estimating for the Mechanical Contractor 2 Credit Hours

A course to provide the Mechanical Contractor the basic skills for conducting an estimate for mechanical construction. The course will emphasize practical applications of estimating techniques. There will be a review of basic computer skills in Windows, Word, Excel and software functions. Blueprint reading skills will also be covered. The course will use commercially available software for setting-up and detailing assigned projects.

Fall	Winter	Spring	Summer
D/E	D/E		

ENT 269 Project Management 2 Credit Hours

A course that initiates a project management approach to planning, scheduling, and controlling a project through the use of case study method analysis. Participants will understand new project management techniques, organization principles, and group synergism. The course will use Microsoft Project Software's, Word and Excel as its base.

Fall	Winter	Spring	Summer
D/E	D/E		

MANUFACTURING/FACILITIES MAINTENANCE ENGINEERING MULTI-SKILLED TECHNICIAN (METPRO) PROGRAM COURSES

Multi-Skilled Technician (METPRO) Program Courses

ENT 100 Basic Workplace Skills (PO) 1 Credit Hour

This course is designed to prepare students to function effectively as a multi-level skilled trade or service technician in the energy/maintenance technology/trade and apprentice fields with emphasis on basic workplace skills and knowledge. The course will emphasize the hands-on aspect of basic skills where possible in a workplace laboratory setting. The course is designed to include the immediate and essential workplace skills required of installation, service, operation and maintenance technicians entering various multiskilled operation and maintenance technician fields. This course covers general workplace and worker personal and employment skills along with safety, hazardous or environmental concerns for workers on the job.

Fall	Winter	Spring	Summer
D/E	D/E		

ENT 101 Introduction to Energy Technology 2 Credit Hours

Introduces students to Energy Technologies and Renewable Energies by providing the study of basic energy conversion systems, differing energy systems and measurement of their basic quantities. The student is introduced to and uses the basic methods for measuring, monitoring, calculating, and analyzing pressure flow, temperature, humidity, electrical, pneumatic, gas analysis, power systems, energy conversions and types related to natural gas, solar energy, fossil fuels, wind, nuclear energy, biomass energy, thermal energy, fuel cells and energies of the future.

Prerequisites: Basic exposure and introduction course to Energy Technology or Fundamentals of Renewable Energies.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

MFMT 102 Applied Mechanical Skills (PO) 2 Credit Hours

An introductory course in the elements of industrial power transmission, motion control, basic hydraulics and pneumatics, alignment, measuring mechanical systems operation and application of mechanical systems and components to industrial process, production operation, and maintenance. Students study and apply procedures for the removal, repair, and installation of machine components and further study methods of installation, lubrication practices, and maintenance procedures for industrial machinery. Includes study of techniques for calibration and repair of electromechanical devices and practice in computations pertaining to industrial machinery.

MFMT 103 Industrial Computer Exploration (PO) 2 Credit Hours

This is an introductory course appropriate for all apprentices. The course is designed to provide computer familiarity, not proficiency. Industrial applications of the computer will be stressed. Computer software, programming, storage/input/output devices, and controls as they apply to industry will be explored. Designed as hands-on and primarily competency-based, the course will provide experiences and demonstrations in keyboarding, DOS, word processors, spreadsheets, databases, computer graphics, basic programming and two-dimensional computer aided drafting.

Notes: TAFD 115-Same Class

This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

MFMT 114 Energy Conversion Principles, Tools, Instruments, Processes (OL) 3 Credit Hours

A basic online course in applied power and process plant heat fundamentals designed to provide introductory practical science studies for students entering the power, facilities and process operation and maintenance fields. The course is designed to provide a basic background for entry-level persons preparing to take boiler and steam licensing exams and to prepare them to function effectively as multi-skilled power or process plant engineers, building engineers, boiler operators or heating plant operators.

Notes: Time TBA

Fall	Winter	Spring	Summer
E	E	E	

**MFMT 115 Boiler (LP) Heating Plant
Operation & Maintenance (OL) 2 Credit Hours**

A basic Boiler (Low Pressure) Heating Plant Operation and Maintenance course covering the necessary information on skills, knowledge and competencies for persons employed as building engineers or seeking positions as building and plant multi-skilled facilities technicians. Building-plant major equipment and controls maintenance for systems are covered to allow the employed or prospective engineer/technician to grasp the elements of operating procedures, required maintenance and repair, along with continuing oversight to ensure continuity of operation. Students study materials which are taken from workplace literature and actual field systems and utilize a workbook to complete multi-skilled tasks similar to those completed by skilled technicians in the field. Students are required to complete sketches, workbook exercises, and optional field activities along with quizzes and exams related to the study materials and field systems.

Fall E	Winter E	Spring	Summer
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**MFMT 116 HP Boiler Operation/Maintenance
And License Prep Course (OL) 2 Credit Hours**

High Pressure Boiler Operation/Maintenance License Preparation Course. On-line.

Prerequisites: Meet current qualifications for taking the HP Boiler Operator's 3rd or 4th Class local or national Steam License Exams which usually equate to 2-3 years of steam power plant experience. Power engineers in the field with one or more years of heating plant or other facilities utility plant operation experience will find this course helpful in preparing for steam license exams as noted above.

**MFMT 116a 3rd Class Turbine/
Engine License Prep (OL) 2 Credit Hours**

Additional preparation in the Turbine/Engine, Auxiliaries and Refrigeration areas for License Preparation for 3rd Class Steam and Refrigeration or 4th Class NIULPE Licenses. This is a course covering the necessary information on skills, knowledge and competencies for persons employed as boiler operators and plant engineers or seeking positions as plant multi-skilled facilities technicians. Building-plant major equipment and controls maintenance for systems are covered to allow the employed or prospective engineer/technician to grasp the elements of operating procedures, required maintenance and repair, along with continuing oversight to ensure continuity of operation. Students study materials which are taken from workplace literature and actual field systems and utilize a workbook to complete sketches, workbook exercises, and optional field activities along with quizzes and exams related to the study materials and field systems.

**MFMT 117 3rd Class Turbine/
Engine License Prep (OL) 2 Credit Hours**

Additional preparation in the Turbine/Engine, Auxiliaries and Refrigeration areas for License Preparation for 3rd Class Steam and Refrigeration or 4th Class NIULPE Licenses. This is a course covering the necessary information on skills, knowledge and competencies for persons employed as boiler operators and plant engineers or seeking positions as plant multi-skilled facilities technicians. Building-plant major equipment and controls maintenance for systems are covered to allow the employed or prospective engineer/technician to grasp the elements of operating procedures, required maintenance and repair, along with continuing oversight to ensure continuity of operation. Students study materials which are taken from workplace literature and actual field systems and utilize a workbook to complete sketches, workbook exercises, and optional field activities along with quizzes and exams related to the study materials and field systems.

**MFMT 151 Power and Process
Plant Operation (OL) 5 Credit Hours**

This is a Basic Power Plant Technology Course designed for persons seeking to enter the field as a power plant operator in a utility plant or industrial process large power plant. This course identifies and involves study of the competencies required for entering this critical field by providing information, review of major and minor power engineering subjects including boilers, basic thermodynamics, boiler operation and maintenance, boiler and plant efficiency and emission control, pumps, auxiliaries, power plant accessories, turbines, engines, electrical, compressors, internal combustion engines, power plant equipment, and review of national, state, and local steam and boiler codes. Provides skill review in solving typical power plant problems and optional laboratory experiences as they may be locally available related to practical exam skills, plant efficiency and basic thermodynamics.

MFMT 234 Facilities Capstone Project I 2 Credit Hours

Initial advanced course in the facilities area providing a project approach to completing a Facilities Capstone activity using workplace competencies. Students will utilize all skills and knowledge developed in prerequisite courses. Students must complete the entire project development to allow hands-on interfacing through planning, completing set-up procedures, performing required maintenance and repair, along with testing and evaluation proper operation. Students work in labs which duplicate the workplace completing multi-skilled tasks similar to those completed by skilled technicians in the field.

Prerequisites: MFMT advanced courses 222-229 or permission

MFMT 241 Power Engineering/Refrigeration License Review (OL) 5 Credit Hours

An advanced college level 1st, 2nd, and 3rd Class Refrigeration Operator License Review and Refrigeration Journeyman course providing information and review of the fundamentals of refrigeration thermodynamics, refrigerants, metering devices, refrigeration system components, refrigeration system operation for ammonia and other refrigerants and refrigeration system operation and maintenance. It focuses on license exam subjects requiring knowledge of basic refrigeration, working heat transfer and refrigeration system operating problems, and special systems covered on the license exams. Students are required to answer questions, work problems, and sketch components and systems.

Note: Time - TBA

MFMT 248 Power Engineering-Steam License Review Course (OL) 5 Credit Hours

A preparatory-level Steam License Review course providing information, review of major and minor power engineering subjects including boilers, basic thermodynamics, boiler operation and maintenance, boiler and plant efficiency and emissions control, pumps, auxiliaries, power plant accessories, turbines, engines, electrical compressors, internal combustion engines, power plant equipment, and review of national, state, and local steam boiler codes. Provides skill review in solving typical power plant problems and laboratory experiences as available related to practical exam skills, plant efficiency and basic thermodynamics.

Prerequisites: Power Engineers and Stationary Engineers seeking a First and/or Second Class Steam License who have been working in the field a minimum of 5-6 years after completing their education or apprenticeship. Having been out of school for this extended period, a review course must be provided to allow these engineers to prepare to take advanced license exams. Students completing HFCC Power Engineering courses have gained lab-type field experience which would allow them to further their education and preparation toward gaining higher class licenses. Power engineers with 4-6 years of experience in a heating plant or other facilities utility plant, industrial steam process power plant and/or utility power plants will find this course helpful in preparing for steam license exams.

ENGINEERING

ENGR 130 Introduction to Engineering 3 Credit Hours

Instructional course work and projects dealing with real world application of teamwork, technical, economic, safety, environmental, and social engineering aspects as related to engineering problems. Technical communication skills to include reporting of a team on engineering projects. Discussion of engineering ethics is presented.

Prerequisites: Pre-engineering enrollment; MATH 110, MATH 112 or high school algebra/trigonometry

Note: Recommended for students interested in pursuing a career in engineering.

Fall	Winter	Spring	Summer
D/E	D/E		

ENGR 201 Science of Materials 3 Credit Hours

An introductory course in the science of engineering materials. The properties of metals, alloys, polymers, and ceramics are correlated with their internal structure (atomic, crystal, micro-, and macro-) and service environment (mechanical, chemical, thermal, magnetic, and radiation effects).

Prerequisites: MATH 180 and CHEM 141

Suggested Prerequisites: Concurrent enrollment in PHYS 231 and MATH 183 is recommended

Fall	Winter	Spring	Summer
E			

ENGR 232 Statics 3 Credit Hours

Covers basic concepts and principles of statics including an introduction to the mechanics of materials. Among the topics covered are vector algebra, equilibrium of mechanical systems, centroids, moments of inertia, stress and deflections of beams under load, statically indeterminate loads, and virtual work.

Prerequisites: MATH 180 and PHYS 231

Note: Recommended for students transferring to engineering school.

Fall	Winter	Spring	Summer
E			

ENGR 233 Dynamics 3 Credit Hours

Covers basic concepts and principles of dynamics with the application of Newton's Laws of Motion to engineering. Topics covered include kinematics, kinetics of particles and rigid bodies, equations of motion, impulse-momentum principles, impact and work-energy principles, and oscillations.

Prerequisites: ENGR 232

Note: Recommended for students transferring to engineering school.

Fall	Winter	Spring	Summer
	E		

ENGLISH

ENG 077 Pronunciation and Conversation for the Non-Native Speaker 3 Credit Hours

A developmental course to improve pronunciation and conversational skills of non-native speakers who already have at least intermediate-level fluency in English. This course is especially designed for those students who have learned English primarily from textbooks and who have had little opportunity for oral practice.

Prerequisites: Students must have at least intermediate-level fluency in English as determined by ESL Compass Test oral component scores.

ENG 078 Developmental Reading for the Non-Native Speaker 3 Credit Hours

Prepares non-native speakers to read at the level of 8.6 on the Nelson Denny Test for acceptance into English 081. It is required for non-native speakers whose scores on the ESL COMPASS Reading Test fall between 70-81. These students must take 078 prior to or concurrently with English 091 or 092. Laboratory work is required.

ENG 079 Basic Reading 3 Credit Hours

Prepares students to read at the level of 8.6 on the Nelson Denny Reading Test for acceptance into English 081. Students placed into English 079 by their ASSET or COMPASS test scores must take it before or concurrently with their first developmental writing course.

ENG 081 Developmental College Reading 3 Credit Hours

A developmental course designed to prepare students to read at an acceptable level in English 131 and 132 or 135. This course is required of students who must enroll in English 093 and whose score on the ASSET Reading Test or the COMPASS test is below the cut-off established by the English Division. Students required to take this course must pass it with a grade of S (Satisfactory) before taking English 131.

ENG 083 College Reading Laboratory 1 Credit Hour

A laboratory course designed to improve reading skills at all levels. Students work with programmed materials, reading kits, audio-visual programs, and teacher-prepared materials. Problems are diagnosed individually, and students attend weekly conferences with the instructor. Evaluation is based on attendance and improvement. This course does not substitute for any other English course at HFCC.

ENG 084 College Reading Laboratory 2 Credit Hours

A laboratory course designed to improve reading skills at all levels. Students work with programmed materials, reading kits, audio-visual programs, and teacher-prepared materials. Problems are diagnosed individually, and students attend weekly conferences with the instructor. Evaluation is based on attendance and improvement. This course does not substitute for any other English course at HFCC.

ENG 086 College Writing Laboratory 1 Credit Hour

This Learning Lab course can be elected autonomously to improve writing skills or can be taken to supplement HFCC composition courses such as English 131. This independent study course, which accommodates the students' skill levels, is designed to improve writing proficiency. Students will receive individual attention in once-a-week conferences with the instructor and will work with computer-assisted materials, audiovisual programs, and teacher-prepared handouts to overcome rhetorical, stylistic, and grammatical problems with writing. Evaluation is based on successful completion of assigned work, improvement, and attendance. This course does not substitute for any other English courses at HFCC.

ENG 088 Basic Writing: Sentences to Paragraphs 3 Credit Hours

English 088 is a developmental writing course required of students whose scores on the ASSET or COMPASS Writing Test indicate that skills need to be learned before they enroll in English 093. Students will learn several sentence patterns, some grammatical and mechanical skills, and various methods for developing and organizing paragraphs. Supplemental laboratory work and conferences will be required. Students must earn a grade of S (satisfactory) before enrolling in English 093.

ENG 091 English for the Non-Native Speaker Basic Writing: Sentences to Paragraphs 3 Credit Hours

English 091 is a three-credit hour, generally nontransferable developmental writing course. It is designed to prepare non-native speakers for English 092 or English 093. Students will learn several sentence patterns, grammatical and mechanical skills, and various methods for developing and organizing paragraphs. Supplemental laboratory assignments and conferences will be required. A grade of S (Satisfactory) is required for entry into English 092 or 093.

ENG 092 Basic Writing for the Non-Native Speaker: Paragraphs to Essays 3 Credit Hours

A developmental course for students who speak English as a second language. It is designed to prepare students to write compositions meeting English 131 and English 132 objectives. In addition to reviewing the types of skills taught in English 091, students will learn more advanced grammatical and mechanical skills and sentence patterns. These skills will be demonstrated in several types of short essays and other assignments. Supplemental laboratory work and conferences will be required. Students must earn a grade of S (Satisfactory) before enrolling in English 131.

ENG 093 Basic Writing: Paragraphs to Essays 3 Credit Hours

This course is intended for students whose placement scores indicate the need for instruction or review in order for them to write acceptable college compositions in English 131. Students requiring ENG 081 should take the course before or concurrently with ENG 093. Various methods such as lectures, group discussions, textbook exercises, peer review, conferences, and lab work will be used to help students improve their expository writing and study skills. To facilitate mastery of writing, students will receive study skills instruction. This course does not substitute for English 131, 132, or 135. Students must earn a grade of S (satisfactory) before enrolling in English 131.

ENG 121 Assisting with Elementary Reading 3 Credit Hours

Designed for individuals working in elementary classrooms as paraprofessionals or desiring employment in that capacity. This course introduces students to various methodologies used to teach and assess elementary reading and acquaints them with basal series, content texts, and trade books. Teacher-made materials, various tutorial methods, ways to aid ESL learners, and teacher-assistance techniques are studied also.

Prerequisites: A satisfactory score on the English placement test or a grade of S in English 093 and a grade of S in English 081, if required.

ENG 131 Composition 3 Credit Hours

English 131 is the first college-level composition course in a two-semester sequence, emphasizing critical reading, critical thinking, and critical writing skills. Through readings students will explore various topics and various types of writing. Through essays, written in and out of class, students will demonstrate the development of a clear main idea through well-organized supporting material, written in correct, effective English. To meet the above goals, a writing assignment which integrates analysis and summary of an article and a persuasive paper incorporating limited outside information will be included.

Prerequisites: A satisfactory score on the English placement test or a grade of S in English 092 or English 093 and a grade of S in English 081 if required.

Fall	Winter	Spring	Summer
D/E/W/O	D/E/W/O	D/E/O	D/E/O

ENG 131 (Honors) - Composition 3 Credit Hours

English 131 (Honors) is the first college-level composition course in a two-semester sequence, emphasizing critical reading, critical thinking, and critical writing skills. Through readings students will explore various topics and various types of writing. Through essays, written in and out of class, students will demonstrate the development of a clear main idea through well-organized supporting material, written in correct, effective English. To meet the above goals, a writing assignment integrating analysis and summary of an article and a persuasive paper incorporating limited outside information will be included. This assignment will focus on a theme related to the Honors Colloquium topic.

Prerequisites: A satisfactory score on the English placement test or a grade of S in English 092 or English 093 and a grade of S in English 081 if required.

ENG 132 Composition II 3 Credit Hours

English 132 is the second course in the two-semester college-level reading and writing sequence that begins with English 131. The course further instructs students in the reading, writing, and critical thinking skills required at four-year colleges and universities and in the workforce. Students will learn how to select, evaluate, analyze, synthesize, reference, and document source material, including a variety of literary works that explore diverse themes and cultural perspectives. Students will then use the source materials to complete a college-level research paper.

Prerequisites: A grade of C- or better in English 131

Note: This course meets the graduation requirement for General Education Outcome 4 and 5: Information Literacy and Written Communication.

ENG 132 (Honors) - Composition II 3 Credit Hours

English 132 (Honors) is the second course in a two-semester college-level reading and writing sequence that begins with English 131. The course further instructs students in the reading, writing, and critical thinking skills required at four-year colleges and universities and in the workforce. Students will learn how to select, evaluate, analyze, synthesize, reference, and document source material, including a variety of literary works that explore diverse themes and cultural perspectives relating to the Honors Colloquium topic. Students will then use the source material to complete a college-level research paper.

Prerequisites: A grade of C- or better in English 131

ENG 135 Business and Technical Writing 3 Credit Hours

The second college-level writing course for students in Career Education programs and others interested in professional communication. Students design communications for the kinds of audiences they will address as professionals. They write resumes, letters, memos, short reports, instructional documents, proposals, and an extensive, research-based documented report.

Prerequisites: ENG 131 with a grade of C- or better

Note: This course meets the graduation requirement for General Education Outcome 4 and 5: Information Literacy and Written Communication.

ENG 139 Creative Writing 3 Credit Hours

An elective writing course that provides students at any level of experience a firm grasp of the fundamentals of imaginative self-expression. The assignments are diverse, ranging from traditional to contemporary forms of poetry, fiction, drama, and imaginative non-fiction, in order to offer students a broad range of new opportunities for development of their own chosen subjects, and new ways to polish their own personal style.

Prerequisites: A satisfactory score on the English placement test or a grade of S in English 093 and a grade of S in English 081, if required.

ENG 231 Introduction to Literature: Poetry and Drama 3 Credit Hours

Focuses on reading, discussion, and written analysis of poems and plays in order to develop an understanding and enjoyment of various authors and works. The poems are mostly British and American, but may, as well, be drawn from other literary traditions; the plays range from ancient Greek tragedy to Shakespeare and modern drama. Video and audio recordings may supplement readings and lectures.

Prerequisites: A grade of C or better in English 131.

ENG 232 Introduction to the Short Story 3 Credit Hours

Focuses on reading, discussion, and written analysis of short stories in order to develop an understanding and enjoyment of various authors and works. Stories are drawn from various literary traditions, although emphasis may be placed on the American tradition, which has been especially productive and influential. Emphasis may also be placed on the historical development of the short story as a distinct literary genre.

Prerequisites: A grade of C or better in English 131.

ENG 233 Introduction to the Novel 3 Credit Hours

Examines how novels both reflect and contribute to the development of the novel as a genre. Students will read major novelists primarily from the nineteenth and twentieth centuries. The titles chosen exemplify important developments and themes in prose fiction, each discussed as a statement of a particular author, a reflection of the times in which the work was written, and an enduring expression of human experience.

Prerequisites: A grade of C or better in English 131.

ENG 234 Topics in Literature 3 Credit Hours

A course in literature organized around a specific theme, genre, or field of inquiry. The student may take the course twice for credit, six hours maximum, but only if the topics are different.

Prerequisites: A grade of C or better in English 131.

ENG 235 American Literature Before 1900 3 Credit Hours

Through discussion and written analysis, English 235 encourages the reading of literary works in their entirety in an attempt to understand the meaning of the texts and their relation to the development of American thought and tradition. Authors include Emerson, Thoreau, Hawthorne, Melville, Dickinson, Whitman, Twain, and Crane. Biographical and critical information is obtained through lectures and reference reading.

Prerequisites: A grade of C or better in English 131.

Note: This course meets the graduation requirement for General Education Outcome 1: American Society, Events, Institutions and Cultures.

ENG 236 American Autobiography 3 Credit Hours

This course will introduce students to published narratives, autobiographies, memoirs, journals and/or diaries by Americans who have significantly influenced the social, cultural, and political composition of America.

Prerequisites: A grade of C or better in English 131.

Note: This course meets the graduation requirement for General Education Outcome 1: American Society, Events, Institutions and Cultures.

ENG 237 American Literature Since 1900 3 Credit Hours

Through discussion and written analysis, English 237 encourages the habit of reading literary works in their entirety in an attempt to understand the meaning of the texts and their relation to the development of American thought and tradition. Themes include alienation, materialism, race relations, identity, conformity/rebellion, technology, environment, and war. Biographical and critical information is obtained through lectures and reference reading.

Prerequisites: A grade of C or better in English 131.

ENG 239 Reading in Modern American Poetry 3 Credit Hours

A survey of modern American poetry emphasizing the period since World War II and including such poets as Robert Frost, Wallace Stevens, William Carlos Williams, Frank O'Hara, Elizabeth Bishop, Anne Sexton, Imamu Amiri Baraka, Gary Snyder, and Allen Ginsberg. Students will learn the techniques and strategies American poets developed to write powerfully of the vast social and cultural changes affecting modern Americans' lives.

Prerequisites: A grade of C or better in English 131.

ENG 241 Shakespeare 3 Credit Hours

An introduction to the works of William Shakespeare, this course includes reading, discussion, and written analysis of six to eight of Shakespeare's comedies, histories, and tragedies. Readings can also include Shakespeare's non-dramatic poetry. Students also have the opportunity to observe, analyze, and evaluate his works in performance, either live or on film. Secondary readings, such as literary criticism and historical context, may also be introduced.

Prerequisites: A grade of C or better in English 131.

ENG 243 Women's Lives in Literature 3 Credit Hours

Women's lives in literature is a course emphasizing the reading and analysis of writing by (or perhaps about) women from the Middle Ages to the present. The materials include drama, poetry, novels, short stories, diaries, memoirs, letters, fantasy, and other. Students will have the opportunity to explore the interaction of dominant and marginal cultures as reflected in literature and the relationship of their individual experiences to women's lives as portrayed in literature.

Prerequisites: A grade of C or better in English 131.

ENG 245 The Bible as Literature 3 Credit Hours

Reading, discussion, and written analysis of major literary selections from the Old and New Testaments. The Bible will be studied not as a religious document but as a source of ideas and style reflected in various works of world literature.

Prerequisites: A grade of C or better in English 131.

ENG 246 Introduction to Children's Literature 3 Credit Hours

Introduces the forms, themes, history, and uses of literature written for children ages three to twelve. Students learn to evaluate and select literature critically and understand its use in preschool, elementary, and middle school classrooms. Genres to be studied include traditional fiction/folktales, contemporary realistic fiction, picture books, fantasy/science fiction, historical fiction, biography, nonfiction, and poetry/verse.

Prerequisites: A grade of C or better in English 131.

ENG 248 African American Literature 3 Credit Hours

A survey of African American Literature from its eighteenth-century beginnings to the modern era, emphasizing the reading and analysis of representative texts in all genres, including poetry, slave narrative, fiction, essay, and drama.

Prerequisites: A grade of C or better in English 131.

ENG 295 Directed Study in English 1 Credit Hour

A course allowing advanced study under the direction of a member of the English Division faculty. This course may be taken only after consultation with the instructor to determine the course content and the credit hours appropriate for the chosen project.

Prerequisites: A grade of C or better in English 131.

ENG 296 Directed Study in English 2 Credit Hours

A course allowing advanced study under the direction of a member of the English Division faculty. This course may be taken only after consultation with the instructor to determine the course content and the credit hours appropriate for the chosen project.

Prerequisites: A grade of C or better in English 131 and permission of instructor, English Division Associate Dean, and Dean of Academic Education.

ENG 297 Directed Study in English 3 Credit Hours

A course allowing advanced study under the direction of a member of the English Division faculty. This course may be taken only after consultation with the instructor to determine the course content and the credit hours appropriate for the chosen project.

Prerequisites: A grade of C or better in English 131 and permission of instructor, English Division Associate Dean, and Dean of Academic Education.

ENGLISH LANGUAGE INSTITUTE (ELI)

ELI 050 Intermediate ESL College Preparatory Reading and Writing 6 Credit Hours

This course emphasizes ESL intermediate-level college preparatory reading and writing skills. Students practice study systems, memory strategies, test preparation skills, and organizational skills while improving vocabulary, dictionary skills, understanding of idioms, and spelling. Students practice comprehension skills such as distinguishing general and specific terms, recognizing main ideas, and drawing conclusions. With frequent writing assignments, this course stresses grammatical accuracy, oral and written sentence patterns, and the basic principles and types of paragraph writing. There is special emphasis on the use of computer software and the web and the use of near-native speech. This course is designed to prepare students for ELI 060, English 092, and English 081. It substitutes for English 078 and English 091.

Prerequisites: Students must have writing skills scores of 55-70 and reading skills scores of 70-81 on the ESL COMPASS Test.

ELI 060 Advanced ESL College Preparatory Reading and Writing 6 Credit Hours

This course is designed to provide college preparatory reading and writing instruction at an advanced level. Students learn note taking and test preparation skills and practice specialized reading in social science, literature, and mathematics. Reading also focuses on making inferences, retaining concepts, organizing facts, and making judgments. A major objective of the course is to prepare students to write college-level expository essays free from major sentence structure errors, faulty agreement problems, and inappropriate diction. Students continue their study of troublesome structures such as noun clauses, infinitive phrases, and conditional expressions. Students speak and understand at a near-fluency level.

Prerequisites: Students must have writing skills scores of 71-85 and reading skills scores of 82-87 on the ESL COMPASS Test.

ELI 090 Pronunciation and Conversation For the Non-Native Speaker 3 Credit Hours

This is a developmental course to improve pronunciation and conversational skills of non-native speakers who already have at least intermediate-level fluency in English. This course is especially designed for professionals and those students who have learned English primarily from textbooks and who have had little opportunity for oral practice.

Prerequisites: Intermediate-level fluency in English

FINANCE

See Economics, Finance and Investing on page 231.

FIRE SCIENCE AND MANAGEMENT

FS 201 Fire Investigation: Origin and Causes 3 Credit Hours

This course presents the fundamentals of arson investigation. The focus is on types of fires and the techniques used to determine if they are accidental or incendiary in nature. Emphasis is placed on investigation and preservation of evidence. The course content follows the recommendations set forth by the NFPA 921 standard. The MI Fire Fighters Training Council recognizes the course as equivalent to the National Fire Academy course, Arson Detection for the First Responder.

Note: This course is offered at the availability of the staff. In general, the course is offered in the fall.

Fall	Winter	Spring	Summer
E			

FITNESS LEADERSHIP

See Health and Physical Education page 250.

FOREIGN LANGUAGES

Arabic
French
German
Italian
Spanish

ARA 131 Elementary Modern Standard Arabic I 4 Credit Hours

Introduces the sounds, pronunciation, and writing system of modern literary Arabic, as well as the basic vocabularies and fundamental grammatical structures necessary in reading, writing, listening, and speaking in the formal oral style. Includes regular classroom practice of Arabic through drills, text, audio and video recordings, and other supplementary material and activities. Also presents topics on Arab culture.

ARA 132 Elementary Modern Standard Arabic II 4 Credit Hours
Develops skills of reading, writing, listening, and speaking of modern literary Arabic at the elementary level, as well as fundamental vocabulary and grammatical structures necessary for reading and listening comprehension. Includes regular classroom practice of Arabic through drills, texts, and audio and video recordings, and other supplementary materials and activities. Presents topics on Arab culture.

FRE 131 Elementary French 4 Credit Hours
Trains the student in pronunciation as well as the basic grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written French. Class assignments are complemented by CD-Roms, tapes, and videos.

FRE 132 Elementary French, Continued 4 Credit Hours
A continuation of French 131 with the addition of short stories. Class assignments are complemented by CD-Roms, tapes, and videos.
Prerequisites: French 131, one year of high school French, or permission of the instructor.

FRE 141 Elementary Conversation 3 Credit Hours
An enrichment course entirely conducted in French designed for students wishing to expand active vocabulary, improve oral facility, and write simple compositions. Class discussions are based on assigned readings, student reports, and current events. This course is transferable but is not a substitute for a basic language requirement. It can be taken concurrently with French 231 or 232.
Prerequisites: Two years of high school French, a minimum of one year of college, or permission of the instructor.

FRE 231 Second Year French 4 Credit Hours
Includes application of grammatical principles by means of oral and written exercises. Students practice pronunciation and comprehension of spoken French. Students write weekly essays. Reading of short stories is added for acquisition of vocabulary and class discussion. Class assignments are complemented by CD-Roms, tapes, and videos.
Prerequisites: French 132, three years of high school French, or permission of the instructor.

FRE 232 Second Year French, Continued 4 Credit Hours
A continuation of French 231, using materials of increasing difficulty. Emphasis is on oral discussion of contemporary life and literature. Students write weekly essays. Class assignments are complemented by CD-Roms, tapes, and videos.
Prerequisites: French 231, four years of high school French, or permission of the instructor.

FRE 296 Directed Study in French 2 Credit Hours
Individual study of a topic of special interest in the area of French for the Honors student, to be undertaken under the direction of a member of the French staff. Appropriate methods of research are applied, and the results reported in a research paper. This class may be repeated once for credit.
Prerequisites: Open to any Honors student who has completed French 132.

GER 131 Elementary German 4 Credit Hours
Trains the student in pronunciation as well as the basic grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written German. Class assignments are complemented by CD-Roms, tapes, and videos.

GER 132 Elementary German, Continued 4 Credit Hours
A continuation of German 131 with the addition of short stories. Class assignments are complemented by CD-Roms, tapes, and videos.
Prerequisites: German 131, one year of high school German, or permission of the instructor.

GER 141 Elementary Conversation 3 Credit Hours
An enrichment course entirely conducted in German designed for students wishing to expand active vocabulary, improve oral facility, and write simple compositions. Class discussions are based on assigned readings, student reports, and current events. This course is transferable but not a substitute for a basic language requirement. It can be taken concurrently with German 231 or 232.

GER 231 Second Year German 4 Credit Hours
Includes application of grammatical principles by means of oral and written exercises. Students practice pronunciation and comprehension of spoken German. Reading of German stories is added for acquisition of vocabulary and class discussion. Students write weekly essays. Class assignments are complemented by CD-Roms, tapes, and videos.
Prerequisites: German 131, three years of high school German, or permission of the instructor

GER 232 Second Year German, Continued 4 Credit Hours
A continuation of German 231, using materials of increasing difficulty. Emphasis is on oral discussion of contemporary life and literature. Students write weekly essays. Class assignments are complemented by CD-Roms, tapes, and videos.
Prerequisites: German 231, four years of high school German, or permission of the instructor

ITAL 131 Elementary Italian 4 Credit Hours
Trains the student in pronunciation as well as basic grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written Italian. Class assignments are complemented with an audio program that accompanies the text.

ITAL 132 Elementary Italian 4 Credit Hours
Completes a systematic survey of grammar and includes discussion of cultural topics. Oral expression is emphasized. Class assignments are complemented with an audio program that accompanies the text.
Prerequisites: Italian 131

SPN 131 Elementary Spanish 4 Credit Hours
Trains the student in pronunciation as well as the basic grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written Spanish. Class assignments are complemented with tapes.

SPN 132 Elementary Spanish, Continued 4 Credit Hours

Completes a systematic survey of grammar and includes discussion of cultural topics. Oral expression is emphasized. Class assignments are complemented by tapes.

Prerequisites: Spanish 131, one year of high school Spanish, or permission of the instructor.

SPN 231 Second Year Spanish 4 Credit Hours

Includes rapid review and application of grammatical principles by means of oral and written exercises and some composition writing. Students continue practice in pronouncing and comprehending the spoken language. Reading both in and out of class promotes speed and comprehension. Some class assignments are complemented by tapes.

Prerequisites: Spanish 132, three years of high school Spanish, or permission of the instructor.

SPN 232 Second Year Spanish, Continued 4 Credit Hours

Emphasizes oral comprehension as well as development of a sufficiently large vocabulary to enable the student to speak, read, and aurally comprehend Spanish with ease. Oral and written reports are required. Class assignments are complemented by tapes.

Prerequisites: Spanish 231, four years of high school Spanish, or permission of the instructor

GEOGRAPHY**GEOG 90 Supplement to Geography 1 Credit Hour**

A supplemental course designed to be taken concurrently with GEOG 131 or GEOG 132. Emphasis is on note-taking, outlining, and textbook study, as well as terminology and concepts of these geography courses.

Suggested Prerequisites: GEOG 131 or GEOG 132

GEOG 131 Principles of Physical Geography 4 Credit Hours

An overview of the physical environment and major earth systems including plate tectonics, climate, land forms, vegetation, and natural hazards with emphasis on the ways humans utilize and change the earth's surface.

GEOG 132 World Regional Geography 3 Credit Hours

An overview of people and places around the world, with emphasis on the cultural, political, social, and economic aspects of regions. Topics are explored by examining ways that humans interact with the environment and one another. Emphasis is placed on the relationships between developed and developing nations.

GEOG 133 Geography of Michigan 2 Credit Hours

A comprehensive survey of the human and environmental landscapes of Michigan. Particular attention is given to the historical geography of settlement and human use of the natural environment.

GEOG 231 Introduction to Geographic Information Systems 3 Credit Hours

An overview of the basic concepts, techniques, and applications of geographic information systems (GIS). Students create spatial data files using GIS software and manipulate and analyze the data. Two hours of lecture and two hours of laboratory per week.

D=Day E=Evening W=Weekend O=Online

GEOLOGY**GEOL 131 Physical Geology 4 Credit Hours**

An introduction to the study of the earth and its structure and to the processes that change it through time. The laboratory work includes some study of minerals, rocks, and maps. Three hours of lecture and two hours of laboratory per week.

Fall D/E	Winter D/E	Spring D/E	Summer D
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GRAPHIC DESIGN

See Art beginning on page 210.

HEALTH INFORMATION TECHNOLOGY**HIT 161 Health Information Processing 2 Credit Hours**

The collection, processing and presentation of information produced in the health information setting. Lecture and laboratory experiences guide the learner to understand data types and data sets used. Students use word processing, graphics presentations, spreadsheets, databases, medical reports, importing and mail merges in the preparation of information needed in health care environments. Competencies are gained through course work and hands-on experience in the computer lab.

Suggested Prerequisites: AH 100, knowledge of a computer keyboard, and a typing proficiency of 30 words per minute. Open to non-HIT majors on a space available basis and with permission of the Program Director of HIT.

Note: This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

HIT 200 Legal Aspects of Health Care 2 Credit Hours

This course examines the patient health record as a legal document and studies the effects of privileged communication laws on the disclosure of medical information. The legal duties owed by health professionals to patients are reviewed in case law. This course prepares the student to testify in court and submit patient records as evidence. Also covered are judicial systems, consents, authorizations, policies and procedures for the protection, control, authorized access and use of patient information.

Prerequisites: HIT 191 or permission of the program director

Note: This course will not be offered after the 2005/2006 academic year. Contact the Health Careers Division for the exact schedule.

Fall D	Winter	Spring	Summer
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HIT 210 Health Care Delivery Systems 3 Credit Hours

This course explores health care organizations in the delivery of services to target patient populations. This course examines past, present, and future delivery systems; types of health care organizations; regulatory agencies; patient service needs, legislation, the financing of health care; patient care settings; types of health care professionals and the compliance issues and standards of healthcare and related organizations. Principles of patient information systems are studied for managed care, ambulatory care, emergency care (hospital-based and free-standing) behavioral health, rehabilitation, long term, skilled nursing and hospice care. Additionally, safety practices and specialized registries are covered.

Prerequisites: HIT 100 or permission of the program director

Note: This course will not be offered after the 2005/2006 academic year.

Contact the Health Careers Division for the exact schedule.

Fall	Winter	Spring	Summer
	D		

HIT 220 Quality Management 2 Credit Hours

This course examines theories and methodologies of quality management and process improvement, their application in performing quality reviews in various health care settings, as well as the utilization of resources. The role of the health information professional in performing these functions; the requirements of federal, accrediting, licensing and payer agencies; and the methods for collecting, processing, and reporting relevant information are covered. This course also covers the functions of utilization management, quality assessment, risk management and professional staff credentialing.

Prerequisites: HIT 100 or permission of the program director

Note: This course will not be offered after the 2005/2006 academic year.

Contact the Health Careers Division for the exact schedule.

Fall	Winter	Spring	Summer
	D		

HIT 230 Ambulatory Coding 3 Credit Hours

The course provides the theory and practice of coding techniques of CPT/HCPCS systems for reimbursement in various types of outpatient health care facilities. This course surveys information required for billing and finance techniques for Ambulatory Payment Classifications. The ability to code in ICD-9-CM is necessary to be successful in this class.

Prerequisites: HIT 150, AH 150, and HIT 191

Note: This course will not be offered after the 2005/2006 academic year.

Contact the Health Careers Division for the exact schedule.

Fall	Winter	Spring	Summer
	D		

HIT 250 Advanced Coding 3 Credit Hours

This course provides the theory and practice of advanced coding techniques in ICD-9-CM. The Prospective Payment System (PPS) is explored in depth with the application of coding to inpatient medical information for optimal reimbursement using grouper and encode software. This course also surveys other classification and nomenclature systems such as SNOMED and DSM.

Prerequisites: HIT 150, HIT 230, HIT 292, AH 150

Note: This course will not be offered after the 2005/2006 academic year.

Contact the Health Careers Division for the exact schedule.

Fall	Winter	Spring	Summer
	D		

HIT 260 Supervisory Management Techniques 3 Credit Hours

This course provides the supervisory techniques used in the management of the personnel and resources in the health information management environment. Policies, procedures, controls, productivity standards, staffing, job descriptions, and management tools are studied. Lab experience appropriate to the organization, supervision, and management of information collection and processing is offered. Quantitative math reasoning will be tested.

Prerequisites: HIT 292 Hospital Practice completed

Note: This course will not be offered after the 2005/2006 academic year.

Contact the Health Careers Division for the exact schedule.

Fall	Winter	Spring	Summer
	D		

HIT 292 Hospital Practice 4 Credit Hours

This is a supervised learning experience that takes place in the hospital health information setting. Students are assigned to selected health care facilities to observe and participate in health information processing functions and procedures. In this professional practice experience (PPE), students apply knowledge acquired in prerequisite and co-requisite classes to actual practice under the direction of qualified health information management practitioners and faculty.

Prerequisites: HIT 191

Suggested Prerequisites: HIT 200, 220, and 230

Note: This course will not be offered after the 2005/2006 academic year.

Contact the Health Careers Division for the exact schedule.

Fall	Winter	Spring	Summer
	D		

HIT 293 Specialized Practice 2 Credit Hours

This course provides exposure to current and emerging roles of the HIM professional. Also covered are specialized records, registries, and their internal and external influences. Students gain insight to professional skill sets required for employment in a variety of positions. Site/role selection is based on special and non-traditional health care applications, patient populations, information requirements, and student interests. Students gain insight into employment opportunities and appropriate roles of Health Information Management practitioners in various settings.

Prerequisites: HIT 292 and completion of, or concurrent enrollment in HIT 260, or permission of program director.

Note: This course will not be offered after the 2005/2006 academic year.

Contact the Health Careers Division for the exact schedule.

Fall	Winter	Spring	Summer
	D		

HEALTH AND PHYSICAL EDUCATION**Fitness Leadership
Sports Skills
Lifetime Sports
Sports Theory****HPEA 104 Basketball I 2 Credit Hours**

Instruction in the fundamental skills of basketball with a comprehensive discussion and implementation of the rules and etiquette.

Fall D	Winter D	Spring	Summer
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HPEA 105 Bowling I 2 Credit Hours

Instruction in the fundamental skills of bowling with a comprehensive discussion and implementation of the rules, etiquette and terminology of the game.

Fall D/E	Winter D/E	Spring	Summer
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HPEA 106 Golf I 2 Credit Hours

Instruction in the fundamental skills of golf, including proper use of woods and irons, putting and specialty shots. Rules, terminology and etiquette will be presented.

Fall D/E	Winter D/E	Spring D	Summer D
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HPEA 109 Tennis I 2 Credit Hours

Provides instruction in the fundamental skills of tennis, including proper grips, ground strokes, volleys and serves. The rules, terminology, scoring and etiquette of tennis are stressed.

Fall D	Winter	Spring D/E	Summer D/E
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HPEA 110 Volleyball I 2 Credit Hours

Covers the fundamental skills, strategy, history, rules and values of volleyball. The student gains social experiences and develops a sense of team play along with an appreciation for the sport as a player and a spectator. Nutrition and health related fitness is included as it pertains to disease prevention and weight prevention.

Fall D	Winter D	Spring D	Summer D
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HPEA 117 Weight Train & Phys Conditioning 2 Credit Hours

Includes the principles and proper technique in strength and cardiovascular conditioning including evaluation of all components of physical fitness. Emphasis is on flexibility, strength cardiovascular conditioning, muscular endurance, and body composition. The course includes nutrition and exercise as it relates to weight management and disease prevention. Risk factors are discussed.

Note: This course meets the graduation requirement for General Education Outcome 6: Wellness (for graduates with the Associate of Arts or Associate of General Studies degree only).

Fall D/E	Winter D/E	Spring D/E	Summer D/E
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HPEA 126 Aerobic Dance 2 Credit Hours

An exercise class that uses movement to music for the purpose of producing a more fit cardiorespiratory system. The benefits are similar to those experienced in jogging, cycling, swimming and cross country skiing. In addition, included in the class is strength and flexibility training. Absolutely no dance background is required.

Note: This course meets the graduation requirement for General Education Outcome 6: Wellness (for graduates with the Associate of Arts or Associate of General Studies degree only).

Fall D	Winter D	Spring D	Summer D
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HPEA 204 Basketball II 2 Credit Hours

Further develops the fundamental skills of basketball, encourages a strong interest in the improvement of team play, and explores the different types of offenses and defenses used in the game.

Prerequisites: HPE 104 or permission of the instructor

Fall D	Winter D	Spring	Summer
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HPEA 205 Bowling II 2 Credit Hours

Designed for students interested in acquiring intermediate-level skills in bowling. Emphasis is on refinement of basic skills and competition in league bowling.

Prerequisites: HPEA 105 or permission by instruction

Fall D/E	Winter D/E	Spring	Summer
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HPEA 206 Golf II 2 Credit Hours

Continuation of HPEA 106 Golf I. Includes a review of basic skills as well as instruction in course management, competitive events, and the rules of golf.

Fall D/E	Winter	Spring D/E	Summer D/E
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HPEA 209 Tennis II 2 Credit Hours

Offers a review of the basic skills, forehand, backhand, and serve, with greater focus on auxiliary strokes, volley, overhead, lob, and spin. Through analysis, drill work, and competitive play, students develop greater ball control, consistency, and court strategy.

Fall D	Winter	Spring D/E	Summer D/E
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HPEA 210 Volleyball II 2 Credit Hours

Designed to develop intermediate skills in volleyball. Emphasis is on court position and strategy, refinement of skills, and tournament play.

HPEA 217 Weight Training and Physical Conditioning II 2 Credit Hours

Continuation of HPEA 117 including the principles and proper technique in strength and cardiovascular conditioning including evaluation of all components of physical fitness. Emphasis is on flexibility, strength cardiovascular conditioning, muscular endurance, and body composition. The course includes nutrition and exercise as it relates to weight management and disease prevention. Risk factors are discussed.

Note: This course meets the graduation requirement for General Education Outcome 6: Wellness (for graduates with the Associate of Arts or Associate of General Studies degree only).

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

HISTORY

HIST 090 Supplement to History 1 Credit Hour

A supplemental course designed to be taken concurrently with one of the following: HIST 111, HIST 112, HIST 113, HIST 151, HIST 152. Emphasis is on note-taking, outlining, and textbook study as well as the vocabulary and content of these history courses.

Suggested Prerequisites: HIST 111 or HIST 112 or HIST 113 or HIST 151 or HIST 152

HIST 111 Ancient World History 3 Credit Hours

An historical survey from the dawn of civilization through the decline of the Ancient World's classical civilizations (the eighth century CE).

HIST 112 Early Modern World History 3 Credit Hours

Continues the study of world civilizations from the eighth century CE to the seventeenth century CE.

HIST 113 Modern World History 3 Credit Hours

Continues study of world civilization from the seventeenth century, including the Scientific, Political, and Industrial Revolutions and their global impact.

AREA HISTORY COURSES

HIST 151 American History I 3 Credit Hours

Covers Colonial America and the United States through the Civil War period.

HIST 152 American History II 3 Credit Hours

Covers the United States since the Civil War period.

HIST 225 The Modern Middle East 3 Credit Hours

Proceeding from the traditional civilizations in the Middle East, examines the impact of the industrialized powers, nationalism, industrialization, and religious and cultural change.

HIST 230 History of England to 1688 3 Credit Hours

A narrative of the formation of the English nation from Roman Britain to the time of the Stuarts, with attention to the economic, religious, and social development of the British people, as well as their constitutional and political development.

HIST 255 African-American History 3 Credit Hours

A history of Black citizens in the United States from African beginnings to the present. Particular emphasis is placed upon the conditions of slavery and on the cultural development of Black people since the Emancipation.

HIST 257 History of Women in the United States 3 Credit Hours

Examines changes in the ideas about women and in the lives of women from colonial times to the present, looking at various classes and ethnic and racial groups. This course also describes the activities and accomplishments of women in the building of the United States.

HIST 260 American Social History Since 1875 3 Credit Hours

A social history of the last hundred years with special attention to social derangements resulting from industrialization and urbanization. This course is not designed to substitute for HIST 152.

Fall	Winter	Spring	Summer
E			

HIST 262 American Labor History 3 Credit Hours

Traces the history of American laborers in the contexts of social group character, industrial unionism, and the responses to the changing conditions of the broader American society.

HIST 265 History of Michigan 3 Credit Hours

A general survey of the historical development of Michigan from the French exploration to the present. The economic, social, and political development of the state is studied as a part of the history of the United States.

HISTORY DIRECTED STUDIES

HIST 295 Historical Methods 1 Credit Hour

Offers an introduction to historical methods, with practical applications for research with historical agencies. The historical investigations are chiefly of the student's own choosing, but it is expected that they will involve assignments off the campus such as at the Dearborn Historical Museum or the Edison Institute at Greenfield Village. This course can only be taken once for transferability.

Prerequisites: Any two history classes and written consent of the instructor.

HIST 296 Historical Methods 2 Credit Hours

Offers an introduction to historical methods, with practical applications for research with historical agencies. The historical investigations are chiefly of the student's own choosing, but it is expected that they will involve assignments off the campus such as at the Dearborn Historical Museum or the Edison Institute at Greenfield Village. This course can only be taken once for transferability.

Prerequisites: Any two history classes and written consent of the instructor.

HIST 297 Historical Methods 3 Credit Hours

Offers an introduction to historical methods, with practical applications for research with historical agencies. The historical investigations are chiefly of the student's own choosing, but it is expected that they will involve assignments off the campus such as at the Dearborn Historical Museum or the Edison Institute at Greenfield Village. This course can only be taken once for transferability.

Prerequisites: Any two history classes and written consent of the instructor.

HONORS

Honors English Composition 131 and 132 (See page 244.)

HONORS HISTORY

**Historical Methods - Directed Studies
HIST 295, 296, 297 Historical Methods**

HONORS HUMANITIES

Honors 151 Colloquium 3 Credit Hours

An interdisciplinary humanities course that examines a given topic or problem from a variety of approaches. Emphasis is placed on the interchange of ideas among the honors students under the direction of a teacher.

Prerequisites: Henry Ford II Honors Program

Honors 231 Honors Directed Studies 1 Credit Hour

In these sophomore-level directed studies, students are challenged to apply the knowledge and research skills acquired in their freshman year in the Henry Ford II Honors Program. Students work individually with a faculty member of their choice on a mutually-agreed upon study topic. Students present summaries of their research before a meeting of Henry Ford II Honors Program students and faculty held at the end of the semester.

Prerequisites: Henry Ford II Honors Program

Honors 232 Honors Directed Studies 1 Credit Hour

In these sophomore-level directed studies, students are challenged to apply the knowledge and research skills acquired in their freshman year in the Henry Ford II Honors Program. Students work individually with a faculty member of their choice on a mutually-agreed upon study topic. Students present summaries of their research before a meeting of Henry Ford II Honors Program students and faculty held at the end of the semester.

Prerequisites: Henry Ford II Honors Program

Honors 233 Honors Directed Studies 1 Credit Hour

In these sophomore-level directed studies, students are challenged to apply the knowledge and research skills acquired in their freshman year in the Henry Ford II Honors Program. Students work individually with a faculty member of their choice on a mutually-agreed upon study topic. Students present summaries of their research before a meeting of Henry Ford II Honors Program students and faculty held at the end of the semester.

Prerequisites: Henry Ford II Honors Program

Honors 234 Honors Directed Studies 1 Credit Hour

In these sophomore-level directed studies, students are challenged to apply the knowledge and research skills acquired in their freshman year in the Henry Ford II Honors Program. Students work individually with a faculty member of their choice on a mutually-agreed upon study topic. Students present summaries of their research before a meeting of Henry Ford II Honors Program students and faculty held at the end of the semester.

Prerequisites: Henry Ford II Honors Program

Honors 251 Great Works 3 Credit Hours

An introduction to the great works of world literature, music, drama, and film. Each "Great Work" will be put into its social, cultural, political, and artistic context and related topics and themes will be explored.

Prerequisites: Henry Ford II Honors Program

HOSPITALITY STUDIES

HOSP 101 Wines of the World 1 Credit Hour

Examines the major grape varieties, the effect of soil and climate, classification systems, and the unique methods of various wine makers. Instruction focuses on the major wine producing areas, tracing the process of wine making from grape to bottle to table and giving complete guidelines for reading a wine label as well as purchasing, storing, and serving.

Note: 5 sessions course - see schedule for dates that the class meets.

Fall	Winter	Spring	Summer
E			

HOSP 103 Major Wine Grape Varieties 1 Credit Hour

An advanced class for those students interested in examining varietal wines from many broad geographical areas. Students learn to identify alcohol, acid, sugar, and tannin in wines. Vintage and specialty wines are studied. This course provides information relating to the challenges of wine service in the hospitality industry.

Suggested Prerequisites: HOSP 101

Note: 5 sessions course - see schedule for dates that the class meets.

Fall	Winter	Spring	Summer
	E		

HOSP 105 Applied Foodservice Sanitation 2 Credit Hours

A study of food contaminants, bacterial growth, safe food storage, and safe food handling procedures, as well as procedures for scheduling, cleaning, sanitizing, and pest control for facilities and equipment. At the completion of this course students will have the opportunity to take the examination given by the National Restaurant Association - Educational Foundation. Students successfully completing the exam will be awarded the Serve Safe Food Protection Manager Certificate, which is recognized by the local health department.

HOSP 108 Creative Cookery 3 Credit Hours

Explores the art of cooking, including international dishes, fundamentals of ingredients, and catering techniques. This course stimulates the imagination, brings out originality, and perfects skills, from the initial concept to purchasing, preparation, and culinary presentations.

Note: Chefs uniform required to be purchased for culinary lab.

Fall	Winter E	Spring	Summer
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HOSP 110 Introduction to Hospitality Industry 3 Credit Hours

Surveys career opportunities in the hospitality industry. Presents hospitality as a single, yet interrelated industry, emphasizing problem-solving tools rather than answers, and points out trends, past and present. The following areas will be explored: marketing, franchising, food service operations, hotel operations, and tourism.

Fall D/E	Winter D	Spring E	Summer
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HOSP 115 International Cooking 4 Credit Hours

Demographic changes and the accessibility of travel have altered our cultural perspective of the world pertaining to a culinary journey. Students will develop a comprehensive picture of cuisines throughout the world. Emphasis will be on the country's specific ingredients, cooking methods, terminology and presentation. A variety of international dishes will be prepared and served by students. This course will enlighten students on the evolution of each region's cookery and how it affects the cuisine of the present time.

Note: Cognate course for Culinary Art and Hotel, Restaurant Management Associate in Applied Science Degree.

Chefs uniform required to be purchased for culinary lab.

Fall	Winter	Spring D	Summer
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HOSP 121 Introduction to Quality Food Preparation - Lecture 2 Credit Hours

Covers basic concepts in food preparation and techniques used in food service operations. This course includes the mastery of basic culinary terminology, proper use of tools and equipment, interpretation of recipes and formulas, and production methodology. Emphasis is placed on proper safety and sanitation.

Prerequisites: Concurrent enrollment in HOSP 123

Suggested Prerequisites: HOSP 105

Fall D	Winter D	Spring	Summer
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HOSP 123 Introduction to Professional Cooking - Lab 6 Credit Hours

Teaches students to apply basic concepts in food preparation and techniques in food service operations, including proper kitchen procedures with hands-on food production methods. The student applies the principles, standards, and practices involved in professional quantity food production.

Prerequisites: Concurrent enrollment in HOSP 121

Suggested Prerequisites: HOSP 105

Note: Chefs uniform required to be purchased for culinary lab.

Fall D	Winter D	Spring	Summer
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HOSP 130 Food and Nutrition 3 Credit Hours

Examines basic concepts of nutrition, food composition, food technology, and controversies in nutrition and marketing nutrition in the food service business. Discussion and study topics include carbohydrates, fats, protein, vitamins, minerals, RDA, food labeling, menu planning, weight management, cardiovascular disease, nutrition and cancer, modifying recipes for health and lower calorie content.

Fall D	Winter E	Spring	Summer
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HOSP 140 Advanced Food Preparation 8 Credit Hours

Provides practical experience in quantity food preparation. This class is designed so that each unit of the kitchen is emphasized. Students participate in broiling, sauteing, meat cutting, baking, preparing buffets, and identifying products. They demonstrate their culinary skills in the student training dining room -Fifty-One O One Restaurant - Student & Culinary Art Center.

Prerequisites: HOSP 123 or concurrent enrollment in HOSP 123

Suggested Prerequisites: HOSP 105

Note: Chefs uniform required to be purchased for culinary lab.

Fall D/E	Winter D/E	Spring	Summer
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HOSP 150 Dining Room Operation (Fifty-One O One) 3 Credit Hours

Applies basic principles of table service in the production dining room. Emphasis is placed upon effective serving procedures and techniques, including cordial and prompt attention to customers, proper dress and grooming practices, and in-depth knowledge of menu items.

Fall D/E	Winter D/E	Spring	Summer
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HOSP 160 Food and Beverage Purchasing 3 Credit Hours

Explains procedures for purchasing food and beverages for hotels, restaurants, and institutions. Emphasis is placed on markets, federal and trade grades, governmental regulations, packaging, comparative versus price buying, yields, and quality controls.

Prerequisites: Completion of or concurrent enrollment in HOSP 110

Fall E	Winter D	Spring	Summer
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HOSP 170 Food and Beverage Controls 3 Credit Hours

A detailed study of wines, spirits, beer, soft drinks, and their importance to the hospitality industry. The student becomes familiar with various food and beverage cost control systems. This course emphasizes food and beverage cost calculation, inventory control, and profit.

Prerequisites: Completion of/or concurrent enrollment in HOSP 110

Suggested Prerequisites: BMA 110 Business Mathematics or higher

Fall	Winter	Spring	Summer
E	D		

HOSP 190 Hospitality Studies Co-Op 1 Credit Hour

Offers practical work experience within a hospitality or tourism related organization through participation in a supervised cooperative education program. This course integrates work experience, classroom instruction, and related career issues.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

HOSP 210 Hotel and Restaurant Supervision 3 Credit Hours

Covers current topics in the hotel industry. Students participate in simulated collective bargaining and hotel sales. They also study and review major organizations, hotel management, personnel development and human resources, which include recruiting, orientation, evaluating, discipline, time management and managing change.

Prerequisites: HOSP 110 or concurrent enrollment

Fall	Winter	Spring	Summer
D	D/E		

HOSP 221 Front Office Procedures 3 Credit Hours

Designed to familiarize the student with the major profit center of the lodging industry: the Rooms Department, including an analysis of the various jobs in the hotel-motel front office. Emphasis is on the guest cycle: reservations, rooming, registration, guest relations, night audit, and check-out procedures.

Prerequisites: Completion of/or concurrent enrollment in HOSP 110

Suggested Prerequisites: Basic computer skills -BCA 140

Note: Required for all Hotel, Restaurant Management students, can be used as a cognate course for Culinary Arts degree.

Fall	Winter	Spring	Summer
		D/E	

HOSP 230 Pastry and Foods I 6 Credit Hours

A basic study in the fine art of food preparation, with the emphasis on the fundamentals of baking and the decoration of cakes, pastries, and cold foods. Students are introduced to classical cuisine and to the art of the garde manger. This course also includes instruction on buffet menus and banquet planning.

Prerequisites: HOSP 110, HOSP 123, and HOSP 140

Note: Chefs uniform required to be purchased for culinary lab.

Fall	Winter	Spring	Summer
D	W		

HOSP 240 Pastry and Foods II 6 Credit Hours

Provides advanced study in the art of food preparation, emphasizing the techniques for making successful and popular pastries. This course includes instruction in the art of cake designing, baking, and decorating; preparing European pastries, petit fours, and specialty desserts; and decorating and glazing cold food and decorative centerpieces. Students receive in-depth instruction in catering, salon competition, and menu planning.

Prerequisites: HOSP 110, HOSP 123, and HOSP 140

Note: Chefs uniform required to be purchased for culinary lab.

Fall	Winter	Spring	Summer
W	D		

HOSP 245 Hotel and Restaurant Desserts 3 Credit Hours

Specifically designed to provide practical information for the individual serious about the baking industry. The emphasis is placed on individual practice and production. This course includes volume banquet desserts, chocolate decorating, sugar casting, and the intricacy of cake decorating. Additional attention is focused on assembling and presenting desserts, including tortes, petit fours, French pastries, candies, and decorative centerpieces.

Note: This course is required for the Culinary and Baking Certificate

Fall	Winter	Spring	Summer
E			

HOSP 250 Hospitality and Travel Marketing 3 Credit Hours

Examines the basic needs and values of cooperative marketing effort among hotels, airlines, restaurants, travel agents, and others in the industry. Discussion and study topics include marketing, research and analysis, development and implementation of marketing plans and strategies, advertising, promotions, public relations, and pricing structures.

Suggested Prerequisites: HOSP 110

Fall	Winter	Spring	Summer
E	D		

HOSP 280 Culinary Art, Food I 3 Credit Hours

Students will become acquainted with the application of basic concepts in food preparation and techniques in food service operations. This course includes proper use of kitchen procedures with hands-on food production methods. The student will utilize the principles, standards and practices involved in professional quantity food production.

Suggested Prerequisites: HOSP 105

Note: Intended for evening students only. HOSP 280 and HOSP 285 can be substituted for HOSP 121 and HOSP 123 for graduation requirements. Chefs uniform required to be purchased for culinary lab.

Fall	Winter	Spring	Summer
E	E		

HOSP 285 Culinary Art, Food II 3 Credit Hours

A continuation of HOSP 280 covering recipe conversions and modification to produce a variety of food items. Special categories discussed are baking principles and preparation of cold and hot entrees. Students are required to cover menu planning, and demonstrate a mystery basket in the culinary lab.

Prerequisites: HOSP 280

Suggested Prerequisites: HOSP 105

Note: Intended for evening students only. HOSP 280 and HOSP 285 can be substituted for HOSP 121 and HOSP 123 for graduation requirements. Chefs uniform required to be purchased for culinary lab

Fall	Winter	Spring	Summer
E	E		

HOSP 290 Hospitality Studies Co-Op 2 Credit Hours

Offers practical work experience within a hospitality or tourism related organization through participation in a supervised cooperative education program. This course integrates work experience, classroom instruction, and related career issues.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

Fall	Winter	Spring	Summer
D/E/W	D/E/W	D/E/W	D/E/W

HUMANITIES

HUM 101 Introduction to the Humanities 3 Credit Hours

Introduces the visual arts, music, and drama of Western and Non-Western societies. This course teaches appreciation of the arts through the study of individual works. It focuses on the aesthetic and technical aspects of the arts, as well as the understanding of the arts in the light of historical and cultural conditions.

Prerequisites: ENG 131

Fall	Winter	Spring	Summer
E	W		

INDUSTRIAL DRAFTING AND CAD

DRAF 110 Introduction to Industrial Drafting 3 Credit Hours

A drafting course for the student who plans to pursue the program in Industrial Drafting and CAD Technology or needs instruction in the basics of drafting. Units of instruction include the use of drafting instruments, lettering techniques, geometric construction, orthographic projection, pictorial drawing, basic dimensioning, section and auxiliary views, introduction to assembly drawings, and interpretation of drawings.

Note: Recommended concurrent with DRAF 120

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

DRAF 120 Introduction to CAD 4 Credit Hours

A basic computer aided drafting class for the student who plans to pursue the program in Industrial Drafting and CAD Technology or who has a need for instruction in basic CAD operation. Topics considered are: computer operations, geometric construction, construction of orthographic drawings, auxiliary and section views, blocks, and dimensioning.

Suggested Prerequisites: DRAF 110

Note: Recommended concurrent with DRAF 110

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

DRAF 123 Introduction to CATIA V5 2 Credit Hours

An introductory course in which the student will learn the basics of CATIA V5 and its functionality. The student will use Part Design, Sketcher, Drafting, and Assembly Design Workbenches to make models that are properly constructed and constrained. CATIA's tools and tool bars will be demonstrated and used in these Work Benches.

Prerequisites: The student must have completed one of the following: DRAF 120, equivalent CAD class, CAD work experience, or permission of instructor.

Fall	Winter	Spring	Summer
E/W	E/W	E	E

DRAF 125 CATIA V5 Level II 2 Credit Hours

This course will extend the skills and knowledge of CATIA V5 that were learned in the previous class (DRAF 123). Some Workbenches will be expanded upon from the previous class, and others will be introduced. Topics will include advanced part design, advanced assemblies, kinematics simulations, the use of the specification tree, creating design tables, and using component catalogs.

Prerequisites: DRAF 123

Fall	Winter	Spring	Summer
E/W	E/W	E	E

DRAF 127 CATIA V5 Level III 2 Credit Hours

This operations course is in the use of the Drafting Workbench and in Surfacing. The application of dimensions and tolerances, and the creation of advanced views will be learned in the Drafting environment. Instruction in surfacing will include extruding and the creation of simple and complex surfaces in the Generative Shape Design Workbench.

Prerequisites: DRAF 123

Note: May be taken before or concurrently with DRAF 125.

Fall	Winter	Spring	Summer
E/W	E/W	E	E

DRAF 130 Technical Descriptive Geometry 3 Credit Hours

An intermediate-level drafting course in advanced projection techniques. Auxiliary views are used to manipulate geometry to define the relationship between points, lines, planes, and solids. The course also includes topics on revolution, intersections, and developments.

Prerequisites: DRAF 110

Fall	Winter	Spring	Summer
D	D		

DRAF 142 Industrial Detailing 4 Credit Hours

An intermediate-level class in the making of working drawings using proper dimensioning techniques. Showing necessary views, placement of dimensions, use of different dimensioning styles, and calculation of tolerances are the basis of instruction. The function and relationship of mating parts in an assembly are considered when dimensioning to insure proper fit and function. Threads, fasteners, and common manufacturing operations are applied and dimensioned. Standard and commercial parts are selected from catalogs. Set up and application of CAD dimensioning styles and tolerances are utilized.

Prerequisites: DRAF 110 and DRAF 120

Fall	Winter	Spring	Summer
D	D		

DRAF 210 Die Design 3 Credit Hours

An advanced drawing and process oriented course in the layout and design of production press work dies. Typical dies examined are blank, cam pierce, form cutoff, draw, and progressive. Press computations and accessories are put in perspective as they relate to design problems. Drawing assignments are done extensively on CAD.

Prerequisites: DRAF 130, DRAF 142

Note: MATH 100 or above recommended

Fall	Winter	Spring	Summer
D			

DRAF 220 Machine Element Drafting 2 Credit Hours

An advanced course providing an insight into the study of mechanisms, their motions, and related skeletal construction. Calculations are made to determine size and capacity requirements of machine elements and standard parts. Industrial techniques are applied to detail drawing of various machine parts. Drawing assignments are done extensively on CAD.

Prerequisites: DRAF 130, DRAF 142

Note: Math 100 or above recommended.

Fall	Winter	Spring	Summer
D			

DRAF 230 Jigs, Fixtures, Tools 3 Credit Hours

An advanced process-oriented drafting course in design, layout, and detail of production tooling. Consideration is given to locating, clamping, and tolerancing jigs and fixtures for the manufacture of an industrial part. Standard parts catalogs and library reference material provide guidance in solving design problems. Drawing assignments are done extensively on CAD.

Prerequisites: DRAF 130, DRAF 142

Note: Math 100 or above recommended

Fall	Winter	Spring	Summer
	D		

DRAF 240 Product Drawing 2 Credit Hours

An advanced drawing course that examines the demands of product drafting. The design process is applied in the development of a product with consideration given to its function, material, ergonomics, and its ability to be economically manufactured. Drawing assignments are done extensively on CAD.

Prerequisites: DRAF 130, DRAF 142

Suggested Prerequisites: Math 100 or above recommended

Fall	Winter	Spring	Summer
	D		

DRAF 255 CAD Advanced Techniques 4 Credit Hours

A CAD course to develop skill in the advanced operations of making three-dimensional drawings. Solids analysis and the manipulation of geometry using auxiliary views are practiced. Concepts of descriptive geometry and detailing are reviewed and expanded as they relate to CAD model geometry.

Note: Must take DRAF 130 and DRAF 142 before or concurrently with DRAF 255.

Fall	Winter	Spring	Summer
D	E		

DRAF 260 Advanced CAD Applications Solid Modeling 4 Credit Hours

A course in three-dimensional, feature-based parametric solid CAD. In this course the student will create complex three-dimensional parametric models and then generate two-dimensional views from those CAD models. Single parts and assemblies are developed, constrained, and manipulated in the modeling process.

Note: Must take DRAF 130 and DRAF 142 before or concurrently with DRAF 260.

Fall	Winter	Spring	Summer
E	D		

INTERIOR DESIGN

See Art beginning on page 210.

INTERNETWORKING TECHNOLOGY

See Computer Networking Academy on page 227.

JOURNALISM

JOUR 131 Journalism 3 Credit Hours

A course designed to be an introduction to news writing. In this course the students learn to write exciting news stories, thought-provoking opinion columns, and stimulating reviews. Students also read and analyze professional newspapers.

JOUR 134 Advertising 3 Credit Hours

A study of the advertising industry and how it functions in our lives. The student learns to write advertising copy based on the theories of selling a product. A single advertiser is studied and an advertising campaign is developed.

LEGAL ASSISTANT

LGA 120 Introduction to the Law and Paralegalism 2 Credit Hours

Sets forth the scope of paralegal employment including on-the-job realities of the occupation and the language of the law office. The numerous skills required to be successful are examined by introducing students to the creation of legal documents using both written and electronic research tools.

Fall E	Winter E	Spring	Summer
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LGA 121 Legal Writing and Research I 2 Credit Hours

Sets forth the scope of language in the law office, carefully examines its numerous skills, and promotes a sense of confidence in the various writing activities of a law office.

Prerequisites: ENG 131, LGA 120, BLW 253

Fall E	Winter E	Spring	Summer
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LGA 122 Legal Writing and Research II 3 Credit Hours

After an introduction to legal bibliography and library tools, teaches the basic skills of legal research and the techniques for legal writing. Through a series of progressively complex exercises, students develop their ability to analyze, interpret, and communicate factual information and legal thought.

Prerequisites: LGA 121

Fall E	Winter E	Spring	Summer
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LGA 130 Trial Practice and Appeals Civil and Criminal 3 Credit Hours

Provides an understanding of trial practice in both civil and criminal trials, beginning with a review of the preparation of the basic pleading necessary to institute and respond to a civil law suit and the necessary elements of a criminal complaint, warrant, information, and grand jury indictment. The course focuses on the discovery process under both the state and federal court rules.

Prerequisites: LGA 121

Fall	Winter E	Spring	Summer
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LGA 133 Wills, Trusts 2 Credit Hours

A study of the basic provisions of wills and trusts and their effect on the distribution of assets.

Prerequisites: LGA 121

LGA 135 Family Law 3 Credit Hours

A survey of general divorce procedure, beginning with the pre-commencement interview determining underlying problems of the parties and possible solutions, collection of pertinent data regarding property, custody, support, or other relief available, and the commencement of the action, followed by functions of the Friend of the Court, miscellaneous motion practice, order preparation, judgment preparation, and enforcement procedures. Also covered are paternity actions, uniform reciprocal support action, and marriage counseling.

Prerequisites: LGA 121

Fall	Winter E	Spring	Summer
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LGA 136 Probate Administration (Administration of Decedents Estates) 3 Credit Hours

Provides information and procedures with respect to the administration of the estate of a decedent from the time of the notification of death through the final distribution. Included is an examination of court procedures and forms and documents. Consideration is also given to the tax aspects of estate administration and to client contact.

Prerequisites: LGA 121

Fall E	Winter	Spring	Summer
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LGA 137 Property Law 2 Credit Hours

A study of the principles of property law with particular emphasis on the type of property, property rights, landlord and tenant rights, easements, and bailments. This is a survey course intended to give the student a general understanding of the property concepts which permeate the field of law.

Prerequisites: LGA 121

Fall E	Winter	Spring	Summer
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LGA 138 Corporate and Tax Law 3 Credit Hours

Explains the various forms a business association may take, such as sole proprietorship, partnership, and corporation, including a description of each, their structure, power, formation, and registration, rights, and liabilities to the public. This course further surveys the theory of taxation behind each business association and its ramifications on ownership.

Prerequisites: LGA 121

Fall	Winter E	Spring	Summer
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LGA 139 Commercial Law and Collection 2 Credit Hours

Explains commercial law, including contract formation, the rights and duties of the parties, and their remedies upon default. This course acquaints the student with the sale of goods and the remedies of buyer and seller in the marketplace, as well as the collection process, including debtor and creditor relief, judgments small claims, bankruptcy, consumer protection, and bills and notes.

Prerequisites: LGA 121

Fall E	Winter	Spring	Summer
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LGA 141 Personal Injury and Torts 3 Credit Hours

Provides a detailed study of pretrial case preparation. Topics include screening clients, gathering and organizing files, legal investigation, client interviewing, civil legal theory, drafting pleadings such as complaint, answer, and affirmative defenses, and preparing a trialbook.

Prerequisites: LGA 121

Fall	Winter	Spring	Summer
E			

LGA 292 Legal Assistant Internship 2 Credit Hours

Offers credit for actual work experience in a legal office. Students should have completed most of the course work in the Legal Assistant program before applying for the internship.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

Fall	Winter	Spring	Summer
D/E/W	D/E/W	D/E/W	D/E/W

LGA 293 Legal Assistant Internship 3 Credit Hours

Offers credit for actual work experience in a legal office. Students should have completed most of the course work in the Legal Assistant program before applying for the internship.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

Fall	Winter	Spring	Summer
D/E/W	D/E/W	D/E/W	D/E/W

LGA 294 Legal Assistant Internship 4 Credit Hours

Offers credit for actual work experience in a legal office. Students should have completed most of the course work in the Legal Assistant program before applying for the internship.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

Fall	Winter	Spring	Summer
D/E/W	D/E/W	D/E/W	D/E/W

MANAGEMENT

MGT 230 Principles of Management 3 Credit Hours

A study of the functions, principles, and philosophy of modern management, as well as of the nature and structure of organizations. Brief consideration also is given to recent developments in corporate decision-making and styles of managerial leadership. Classes consist of lectures, discussion, and case studies.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

MGT 231 Supervision and Teambuilding 3 Credit Hours

This course is designed for supervisors, individuals recently promoted to supervision, and employees interested in moving into a supervisory role. The class will assist students in developing and improving their supervisory skills. Emphasis is placed on preparation for leadership, supervisory responsibilities, the objectives of management, on-the-job communication, motivation, and teambuilding strategies. The basic objectives of staff management are also discussed.

Fall	Winter	Spring	Summer
D/E	D/E		

MGT 232 Human Resources Management 3 Credit Hours

Examines business organization and management as they apply to the personnel functions of recruitment, selection, placement, induction, and training. Attention is given to job analysis, evaluation, maintenance and measurement of morale, union-management relations, and the economic and physical security of employees.

Fall	Winter	Spring	Summer
D/E	D/E		

MGT 237 Psychology in the Workplace 3 Credit Hours

An introduction to psychological theory, research and practice as they relate to the business environment. Workplace issues examined include selection criteria and predictors, training and development, performance appraisal, employee motivation and satisfaction, and occupational health.

Fall	Winter	Spring	Summer
D/E			

MGT 238 Labor-Management Relations 3 Credit Hours

Examines the principles underlying the management-union relationship. This course analyzes the legal and institutional framework in which collective bargaining takes place and probes the nature, content, and problems of the collective bargaining process through lecture, discussion, and case analysis. The purpose and problems of employee benefit plans are analyzed. Both principles and techniques are emphasized.

Fall	Winter	Spring	Summer
	D/E		

MGT 240 Creative Problem Solving 3 Credit Hours

Operates as a workshop with emphasis on experimentation, group studies, and students' input based on the expression of their needs. This course examines the history of creativity, recent findings of creativity research, and the application of those findings to problem-solving techniques. The introduction of such techniques to the place of work is studied and planned.

Fall	Winter	Spring	Summer
D/E	D/E		

MGT 241 Small Business Management & Entrepreneurship 3 Credit Hours

Examines the role of small business and entrepreneurship in the economy. The role and need for a business plan when starting a business is examined. Financial, marketing, management, and location considerations are examined. Internet and online businesses are discussed. Students prepare a business plan for a start-up business of their choosing.

Suggested Prerequisites: BBA 131

Fall D/E	Winter D/E	Spring	Summer
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MANUFACTURING PRODUCTIVITY SYSTEMS

MPS 100 Manufacturing Processes I 6 Credit Hours

A beginning hands-on course with theory in which the student gains experiences in manufacturing processes involving turning, threading, drilling, reaming, tapping, milling, and shaping. Part processing, machines, and tooling used along with speeds and feeds and inspection techniques are covered in relation to operations. Safety is an integral part of the course.

Fall D/E	Winter D/E	Spring E	Summer
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MPS 110 Manufacturing Processes II 6 Credit Hours

A hands-on course with some theory in which the student gains advanced manufacturing processes experience on the lathe, mills, and grinders. The proper and safe use of equipment and tools used in performing machining operations is integral to this course. The efficient use and the troubleshooting of carbide, ceramic, and diamond cutting tool materials are covered.

Prerequisites: Completion of or concurrent enrollment in MPS 100, or permission of the instructor

Fall E/W	Winter E	Spring E	Summer
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MPS 120 Practical Problems In Machine Tools I 4 Credit Hours

A course for students who wish to increase their machining efficiency and quality of workmanship. Individualized instruction helps the student overcome deficiencies in machining on the lathe, drill press, and shaper. Tool sharpening, set-up, and safety are stressed.

Prerequisites: Completion of or concurrent enrollment in MPS 100

Fall E	Winter E	Spring	Summer
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MPS 125 Practical Problems in Machine Tools II 4 Credit Hours

Designed to develop the student's machining efficiency. Individualized instruction helps the student overcome any deficiencies in machining on the lathe, mill, or grinders. Material, tolerance, finish, and design are considered in emphasizing quality and quantity of parts within a time limit. Safe work habits are stressed.

Prerequisites: Completion of or concurrent enrollment in MPS 100

Fall E	Winter E	Spring	Summer
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MPS 130 Quality Control Gaging and Inspection 4 Credit Hours

A beginning course that covers the following manufacturing inspection methods: layout; surface plate techniques; tool and instrument reading and uses; and floor and receiving inspection. Surface finish measurement, introduction to SPC techniques, and GDT are integral portions of this course.

Fall E	Winter	Spring	Summer
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MPS 140 Introduction to CNC 4 Credit Hours

A beginning course covering the basic concepts of computer numerical control (CNC). Experience is obtained through the setup, operation, and programming of a CNC Mill and CNC Lathe.

Prerequisites: Completion of or concurrent enrollment in MPS 100

Fall D/E	Winter D/E	Spring E	Summer
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MPS 145 CNC Operations 6 Credit Hours

Introduces the student to the concept of computer numerical control (CNC) operations as they exist in the manufacturing environment. Students acquire skills in setup, operation, and programming of the CNC Mill and CNC Lathe through MDI and off-line programming.

Prerequisites: MPS 140

Fall	Winter E	Spring	Summer
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MPS 146 Introduction to CNC Machine Tool Probing 1 Credit Hour

This course covers the elementary functions of use and application of the electronic probe on a Vertical Machining Center. Topics covered in this course include: set-up and calibration of the probe, and use and application of the following cycles - Bore/Boss measuring cycle, Web/Pocket measuring cycle, and internal and external cycle. Students will be involved in both classroom and laboratory applications activities.

Prerequisites: MPS 145

Fall E	Winter	Spring	Summer
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MPS 147 Basic Macro Programming for CNC 1.5 Credit Hours

This is an introductory course to Macro programming as applied to CNC machine tools. Basic elements of this type of programming include: defining a macro, defined variables vs. undefined variables, the use and application of arithmetic, logical and Boolean operators. This course includes both classroom and application based activities in the CNC laboratory.

Prerequisites: MPS 145

Fall E	Winter	Spring	Summer
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MPS 148 Advanced CNC Probing 1 Credit Hour

This course takes the student to the next level in the use and application of the electronic probe on CNC machine tools. Students will be involved in writing their own cycles to use the probe in such activities as: vector measuring, 4th axis applications, stock allowance and angle measurement along with work coordinate offset measurement. Students will prove their work on the CNC Vertical Machining Center.

Prerequisites: MPS 145, MPS 146, MPS 147

Fall	Winter E	Spring	Summer
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MPS 150 SPC In Manufacturing 4 Credit Hours

Covers the use of SPC (Statistical Process Control) in manufacturing to achieve optimum product quality at lowest cost. Development of statistical charts and their interpretation related to process improvement are integral parts of the course. Formulas pertaining to various charts, gage R & R, Cp, and Cpk are covered.

Fall	Winter E	Spring	Summer
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MPS 160 Computer Assisted N/C Programming 4 Credit Hours

An introductory course in computer-assisted part programming. The student will use CAD/CAM software running on a personal computer (PC). Programming for both the CNC Mill and CNC Lathe will be done in this class.

Prerequisites: MET 140 or departmental approval

Fall E	Winter E	Spring	Summer
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MPS 170 Advanced Computer Assisted N/C Programming 4 Credit Hours

A study in advanced methods of part programming using CAD/CAM software on a personal computer (PC). Special emphasis is placed on programming three-dimensional parts. Class assignments will also include multiple-part programming.

Prerequisites: MPS 160

Fall	Winter	Spring E	Summer
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MPS 210 Non-Traditional Manufacturing Processes 4 Credit Hours

An advanced course covering theory in the "nontraditional" material removal techniques applying mechanical, chemical, electrical, and thermal energies. Practical experience includes electrode development and operation of EDM. Safety is stressed.

Prerequisites: MPS 110 or permission of the instructor

Fall	Winter	Spring E	Summer
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MPS 275 Advanced CNC Operations 6 Credit Hours

Concentrates on the total aspects of computer numerical control (CNC) as applied in manufacturing today. This course covers estimating for CNC manufacturing, DNC, tool selection, cutting tool material selection, and small batch production.

Prerequisites: MPS 145

Fall E	Winter	Spring	Summer
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MARKETING

See Business Administration on page 220.

MATHEMATICS

MATH 074 Pre-Algebra 4 Credit Hours

This course is intended to prepare students for algebra in MATH 080 or MATH 100. Topics covered include fractions, percents, measurement and geometry, signed numbers, linear equations and proportions. Techniques of problem solving and applications are included throughout the course.

Fall D/E/W	Winter D/E/W	Spring D/E	Summer D/E
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MATH 080 Beginning Algebra 3 Credit Hours

This course is intended as a developmental course for students who need to develop skills in beginning algebra topics. Topics covered include solutions of linear equations and inequalities, an introduction to graphing linear equations, polynomial operations, factoring, properties of integer exponents, and solutions to quadratic equations by factoring. Techniques of problem solving and applications are included throughout the course.

Prerequisites: A grade of C or better in Math 074 or a satisfactory score on the placement test

Fall D/E/W/O	Winter D/E/W/O	Spring D/E	Summer D/E
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MATH 100 Basic Technical Mathematics 4 Credit Hours

This course is intended for students in technology programs who have not had one year of algebra and one year of geometry or who need to review beginning algebra and geometry. Topics include a review of arithmetic, an introduction to the graphing calculator, working with approximate numbers, dimensional analysis, beginning algebra, geometry, trigonometry and statistics. This course emphasizes practical technical applications.

Prerequisites: A satisfactory score on the placement test

Fall D/E	Winter D/E	Spring D	Summer
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MATH 101 Mathematics for Health Careers 4 Credit Hours

Provides the mathematical skills required for various careers in the health professions. Topics include computational skills, essential algebraic concepts, ratio and proportion, measurement and geometry, and an introduction to data analysis with problems chosen to represent those commonly encountered in health careers. Problem-solving strategies are included throughout the course.

Fall D	Winter D	Spring	Summer
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MATH 103 Technical Mathematics 4 Credit Hours

This course is intended for students in technology programs who have had MATH 100 or one year of Beginning Algebra. Topics covered include functions and graphs, properties of lines, the trigonometric functions, systems of linear equations, rational expressions, quadratic equations, solution of right triangles, vectors, integer exponents, linear regression, complex numbers, and an introduction to the graphing calculator.

Prerequisites: A grade of C or better in MATH 100 or a satisfactory score on the placement test.

Fall	Winter	Spring	Summer
D/E	D/E		

MATH 110 Intermediate Algebra 4 Credit Hours

Topics covered include solving linear, quadratic, rational, and square root equations, solving linear inequalities, an introduction to functions, graphs of linear and quadratic functions, rational expressions, exponents, radicals, and solving systems of linear equations. Techniques of problem solving and applications are included throughout the course along with modeling data using linear and quadratic functions.

Prerequisites: A grade of C or better in MATH 080 or a satisfactory score on the placement test.

Fall	Winter	Spring	Summer
D/E/W/O	D/E/W/O	D/E/O	D/E

MATH 112 Trigonometry 3 Credit Hours

Intended for students in a technical or science program that requires a knowledge of trigonometry. Topics include circular functions and their graphs, identities, conditional equations, the solution of triangles, vectors, and physical applications. This course does not satisfy the MATH 180 prerequisite.

Prerequisites: A grade of C or better in MATH 110 or MATH 103 or a satisfactory score on the placement test

Fall	Winter	Spring	Summer
D/E	D/E		

MATH 115 College Algebra 5 Credit Hours

Topics include coordinate geometry, functions and their graphs, algebraic and graphical solutions of equations and inequalities, graphs and zeros of polynomial functions, Fundamental Theorem of Algebra, conic sections, linear modeling, systems of equations and inequalities, matrices and their operations, sequences and series, and the Binomial Theorem. Techniques of problem solving and applications are included along with an introduction to the usage of graphing calculators.

Prerequisites: A grade of C or better in Math 110 or a satisfactory score on the placement test

Fall	Winter	Spring	Summer
D/E/O	D/E/O	D/E	D/E

MATH 121 Mathematics for Elementary Teachers I 3 Credit Hours

Intended for students who are involved in a curriculum for elementary teachers. Topics include problem solving, an introduction to logic, set theory, number theory, numeration systems, whole numbers, and fractions. Concept development, communication skills, both oral and written, and problem solving skills will be addressed in accordance with the NCTM Standards. Topics in algebra will be integrated throughout.

Prerequisites: A grade of C or better in Math 110 or a satisfactory score on the placement test

Suggested Prerequisites: ENG 131 must be taken prior to or during the same semester as Math 121.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	

MATH 140 Introduction to Statistics 3 Credit Hours

An introductory course for students in business administration, education, social sciences, engineering, and other fields in which data are collected and predictions are made. Topics covered include descriptive measures, the summarizing of data, an introduction to probability, probability functions, the normal distribution, sampling theory, hypothesis testing, correlation, and regression. Students are exposed to the use of technology for data analysis.

Prerequisites: A grade of C or better in Math 110 or a satisfactory score on the placement test

Fall	Winter	Spring	Summer
D/E	D/E	D/E	E

MATH 150 Finite Mathematics 4 Credit Hours

For students in business administration and the social sciences. Topics include mathematical models, sets, systems of equations, linear programming, the mathematics of finance, and probability. Students are exposed to using technology for business-related applications.

Prerequisites: A grade of C or better in Math 110 or a satisfactory score on the placement test

Fall	Winter	Spring	Summer
W	W		

MATH 153 Calculus for Business, Life and Social Science 5 Credit Hours

For students in business and life and social sciences but not engineering, mathematics, or physical science majors. This course is an introduction to the study of differential and integral calculus of algebraic, logarithmic, and exponential functions of one variable. Topics covered include graphical, numerical and algebraic determination of derivatives and definite integrals, applications of the derivative including minima and maxima, and integration and its applications. Applications are included throughout the course. Credit cannot be earned for both Math 153 and Math 180.

Prerequisites: A grade of C or better in Math 115 or Math 150 or Math 175, or a satisfactory score on the placement test

Fall	Winter	Spring	Summer
D/E/O	D/E/O		

MATH 175 Precalculus**5 Credit Hours**

Topics include algebraic, graphical, and numerical representations of functions, including composition and inverses of functions. The primary focus is the study of rational functions, exponential and logarithmic functions, and trigonometric functions of real numbers and angles. Also included are analytic trigonometry, solutions of triangles, polar coordinates and vectors. Techniques of problem solving and applications are included throughout the course requiring the frequent usage of graphing calculators.

Prerequisites: A grade of C or better in Math 115 or a satisfactory score on the placement test

Fall	Winter	Spring	Summer
D/E/O	D/E/O	D/E	D/E

MATH 180 Calculus I**5 Credit Hours**

For students whose program of study requires a concentration in mathematics. Topics include limits, continuity, the derivative, differentiation of algebraic, exponential, logarithmic, trigonometric, and inverse trigonometric functions, applications of the derivative, antidifferentiation and the definite integral. Numerical, graphical, and algebraic approaches are used whenever possible. Credit cannot be earned for both MATH 153 and MATH 180.

Prerequisites: A grade of C or better in Math 175 or a satisfactory score on the placement test.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	E

MATH 183 Calculus II**5 Credit Hours**

Topics include applications of the integral, techniques of integration, numerical integration, improper integrals, solutions of differential equations, polynomial approximations of functions, and infinite series. Numerical, graphical, and algebraic approaches are used whenever possible. Applications are included throughout the course.

Prerequisites: A grade of C or better in Math 180

Fall	Winter	Spring	Summer
D/E	D/E	E	

MATH 221 Mathematics for**Elementary Teachers II****3 Credit Hours**

Intended for students who are involved in a curriculum for elementary teachers. Topics include the rational numbers, the real numbers, algebra, and topics from geometry. Geometer's Sketchpad will be used to develop geometry content. Concept development, communication skills, both oral and written, and problem solving skills will be addressed in accordance with the NCTM Standards.

Prerequisites: A grade of C or better in Math 121 and a grade of C or better in English 131

Fall	Winter	Spring	Summer
D/E	D/E	D/E	E

MATH 225 Mathematics for**Elementary Teachers III****3 Credit Hours**

Intended for students who are involved in a curriculum for elementary teachers. Topics include probability and statistics and topics from geometry. Geometer's Sketchpad will be used to develop geometry content. Computer software will be used to enhance the probability and statistics units. Concept development, communication skills, both oral and written, and problem solving skills will be addressed in accordance with the NCTM Standards.

Prerequisites: A grade of C or better in Math 221

Fall	Winter	Spring	Summer
D/E	D/E	D	E

MATH 275 Discrete Mathematics**4 Credit Hours**

Intended for students in a computer engineering or computer science program. Topics include logic, methods of proof, set theory, algorithms, recursion, correctness, relations, partial orderings, graphs, trees, Boolean algebra, grammars, and finite-state machines. Various applications are included throughout the course.

Prerequisites: A grade of C or better in Math 180, or a grade of C or better in Math 175 and concurrent enrollment in Math 180.

Fall	Winter	Spring	Summer
E	E		

MATH 280 Calculus III**5 Credit Hours**

Topics covered include the calculus of vector-valued functions, the differential calculus of functions of more than one variable, directional derivatives, gradients, partial derivatives, multiple integration, vector fields and line integrals. Numerical, graphical, and algebraic approaches are utilized whenever possible. Applications are included throughout the course.

Prerequisites: A grade of C or better in MATH 183

Fall	Winter	Spring	Summer
D/E	D/E		

MATH 283 Linear Algebra**3 Credit Hours**

An introduction to matrix algebra and linear algebra. Topics include systems of linear equations, matrix operations and properties of matrices, determinants, the vector space R^n , general vector spaces, inner product spaces, linear transformations, and eigenvalues and eigenvectors. Various applications are presented.

Prerequisites: A grade of C or better in MATH 183

Fall	Winter	Spring	Summer
D	E		

MATH 289 Differential Equations**4 Credit Hours**

Introduces ordinary differential equations by means of numerical, graphical, and algebraic analysis. Topics include first order differential equations, second and higher order linear equations, methods for nonhomogeneous second order equations, series solutions, systems of first order equations, and Laplace transforms. Various applications are covered throughout the course.

Prerequisites: A grade of C or better in MATH 280, or a grade of C or better in Math 183 and concurrent enrollment in Math 280

Fall	Winter	Spring	Summer
D/E	D/E		

MATH 293 Topics in Mathematics 3 Credit Hours

Designed to explore selected topics as determined by an instructor. The specific topic or topics are announced together with the prerequisites each term. The student can repeat the course for additional credit when different topics are offered. This course may not be applied toward fulfilling the specific degree requirements for an associate degree.

Prerequisites: Permission of the instructor

MEDICAL ASSISTANT & MEDICAL RECEPTIONIST-BILLER

MOA 100 Medical Office Procedures I-Administrative 3 Credit Hours

Serves as the foundation course for both the Medical Assistant and Medical Receptionist-Biller programs. This course presents the administrative and office skills needed for understanding the significance of membership in a service profession. Topics included are personal qualifications, employability skills, ethical/legal responsibilities, receptionist duties, scheduling appointments, telephone techniques, filing, maintaining patient records, billing and collecting fees, bookkeeping, and computer applications.

Suggested Prerequisites: Corequisite: AH 100

Note: Students considering either Medical Office Assistant or Medical Receptionist-Biller programs need to coordinate their schedule with the health careers advisor. Please see the Admission Requirements for the Medical Assistant program as well as the recommendations for the Medical Receptionist-Biller program.

Fall	Winter	Spring	Summer
D/E	D		

MOA 110 Processing Health Insurance Claims 2 Credit Hours

This lecture/lab course is designed as an introductory insurance billing course centering on the medical office as well as physician insurance billing. It presents the coding procedures using the CPT/HCPCS Manual and related ICD-9 diagnosis necessary for billing Blue Shield, Medicare, Medicaid, and commercial carriers. Students will complete insurance claim forms for each of the major carriers.

Suggested Prerequisites: Corequisite: AH 100

Note: Medical Receptionist-Billers students please note that MOA 110 is a required pre-requisite for both MOA 180 and MOA 200.

Fall	Winter	Spring	Summer
D/E	D		

MOA 120 Medical Office Computer Applications 2 Credit Hours

Lecture and laboratory experiences will introduce the learner to microcomputer applications unique to the medical office. Applications will include the following computerized tasks: establishing information files, appointments, patient account information, accounts receivable, aging accounts, insurance billing, recall notice, and production reports.

Suggested Prerequisites: Corequisite: AH 100

Fall	Winter	Spring	Summer
D	D/E		

MOA 150 Medical Office Assistant Procedures II-Clinical 5 Credit Hours

An advanced course designed for students admitted to the program, includes the medical assisting principles and procedures specifically related to the clinical area, such as vital signs, administration of medications, venipuncture, medical and surgical asepsis, assisting with examinations and treatments, electrocardiography, routine diagnostic laboratory tests, and medical emergencies.

Prerequisites: MOA 100, AH 100, BIO 134 and admission to the MOA Program

Note: Students enrolled must submit a completed physical examination form and proof of Hepatitis B protection or an appropriate waiver.

Fall	Winter	Spring	Summer
	D		

MOA 160 Basic X-Ray Techniques 2 Credit Hours

Designed for medical assistants and other health care workers who assist with radiographic procedures in ambulatory care facilities. This lecture/lab course focuses upon the basic components of radiation protection, radiation safety, basic radiologic positioning, fundamental procedures, equipment, special studies, darkroom procedure as well as film processing.

Note: MOA 160 is also highly recommended for students applying for admission to HFCC's Radiographer Program.

Fall	Winter	Spring	Summer
E	D/E	D/E	

MOA 170 Medical Correspondence 3 Credit Hours

Emphasizes spelling, grammar, punctuation, as well as specific writing styles for medical assistants/receptionist-billers. This course focuses upon the variety of correspondence encountered in an ambulatory health care facility. Lecture and laboratory activities lead to an exit performance of speed, accuracy and clarity in the preparation of printed documents.

Prerequisites: AH 100

Recommended: Keyboarding proficiency of 30 wpm

Fall	Winter	Spring	Summer
	D		

MOA 180 Computerized Medical Billing 2 Credit Hours

Introduces computerized entry and electronic submission of claims including preliminary entry of practice information, codes for diagnosis and procedures, patient demographics, and insurance information. Students will utilize software developed for Blue Cross and Blue Shield of Michigan.

Prerequisites: MOA 110 and MOA 120

Fall	Winter E	Spring	Summer
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MOA 190 Medical Office Externship 4 Credit Hours

An eight-week capstone experience for the Medical Assistant student, including twenty-four hours of clinical experience weekly under the supervision of the College's clinical coordinator and the assigned on-site clinical supervisor in an assigned ambulatory health-care facility. This course includes a weekly two-hour seminar, and it allows the medical assistant student to integrate and demonstrate all of the skills learned while rotating through administrative and clinical settings.

Prerequisites: Completion of all program requirements and instructor's permission

Note: Accreditation standards require that students do not receive compensation/payment, monetary or otherwise, from any clinical site for any portion of their clinical externship (MOA 190 Medical Office Externship).

Fall D	Winter	Spring D	Summer
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MOA 200 Advanced Physician Billing Techniques 3 Credit Hours

Focuses upon in-depth coverage of ambulatory coding procedures as well as claims problem solving for medical insurance specialists. This advanced course provides additional skills for the medical assistant and/or receptionist-biller and builds upon a basic understanding of processing health insurance claims.

Prerequisites: Required: MOA 110

Suggested Prerequisites: MOA 180

Fall	Winter E	Spring	Summer
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MUSIC

MUS 107 Concert Choir 1 Credit Hour

Four semesters of Concert Choir including preparation and performance of a broad spectrum of choral music, from classical to pop, show tunes, and jazz. At least two performance are scheduled each semester, often accompanied by band or orchestra. These courses are open to college students and adult members of the community. New singers may audition during the first week of class. No preparation is necessary, only a good ear and a clear voice.

Fall D/E/W	Winter D/E/W	Spring	Summer
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MUS 108 Concert Choir 1 Credit Hour

Second of four semesters of Concert Choir including preparation and performance of a broad spectrum of choral music, from classical to pop, show tunes, and jazz. At least two performance are scheduled each semester, often accompanied by band or orchestra. These courses are open to college students and adult members of the community. New singers may audition during the first week of class. No preparation is necessary, only a good ear and a clear voice.

Prerequisites: Follow course sequence

Fall D/E/W	Winter D/E/W	Spring	Summer
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MUS 109 Wind Ensemble 1 Credit Hour

Four semesters of wind Ensemble (symphony band) including preparation and performance of standard concert band and transcriptions of all styles. This group performs for college as well as community functions. These courses are open to college students, adult members of the community, and advanced placement high school students. Woodwind, brass, and percussion instrumentalists should contact the director for auditions prior to the first rehearsal.

Fall E	Winter E	Spring	Summer
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MUS 110 Wind Ensemble 1 Credit Hour

Four semesters of wind Ensemble (symphony band) including preparation and performance of standard concert band and transcriptions of all styles. This group performs for college as well as community functions. These courses are open to college students, adult members of the community, and advanced placement high school students. Woodwind, brass, and percussion instrumentalists should contact the director for auditions prior to the first rehearsal.

Fall E	Winter E	Spring	Summer
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MUS 111 Jazz Lab Band 1 Credit Hour

Four semesters of Jazz Lab Band, including preparation and performance of a variety of jazz styles from swing to contemporary. This group, which performs several concerts each semester, is open to college students, and adult members of the community. New instrumentalists should contact the director to arrange for an audition prior to the first rehearsal.

Fall E	Winter E	Spring	Summer
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MUS 112 Jazz Lab Band 1 Credit Hour

Four semesters of Jazz Lab Band, including preparation and performance of a variety of jazz styles from swing to contemporary. This group, which performs several concerts each semester, is open to college students, and adult members of the community. New instrumentalists should contact the director to arrange for an audition prior to the first rehearsal.

Fall E	Winter E	Spring	Summer
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MUS 113 Applied Music 1 Credit Hour

Four sequential semesters of weekly hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music lead teacher during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a fee to the private instructor.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 114 Applied Music 2 Credit Hours

Four sequential semesters of weekly 1 hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music lead teacher during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a fee to the private instructor.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 115 Applied Music 1 Credit Hour

Four sequential semesters of weekly hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music lead teacher during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a fee to the private instructor.

Fall	Winter	Spring	Summer
E	E		

MUS 116 Applied Music 2 Credit Hours

Four sequential semesters of weekly hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music lead teacher during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a fee to the private instructor.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 117 Class Piano I 2 Credit Hours

Beginning piano students learn to read and play piano music. Instruction takes place in the HFCC digital piano lab.

Fall	Winter	Spring	Summer
D	D		

MUS 118 Class Piano II 2 Credit Hours

Builds upon skills developed in MUS 117 (Piano 1). Instruction takes place in the HFCC digital piano lab.

Prerequisites: MUS 117 or permission of the instructor

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 121 Jazz Improvisation 2 Credit Hours

Two sequential semesters of jazz improvisation in which skills are developed through the study of jazz theory and the performances of a variety of jazz styles in a small group, jazz combo setting.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
E	E		

MUS 122 Jazz Improvisation 2 Credit Hours

Two sequential semesters of jazz improvisation in which skills are developed through the study of jazz theory and the performances of a variety of jazz styles in a small group, jazz combo setting.

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 123 Voice Techniques I 2 Credit Hours

This course covers basic singing techniques including breath control, diction, posture, and tone quality; instruction takes place in a classroom setting. Techniques are applied to a variety of songs. This course is for singers of all ages and interests.

Fall	Winter	Spring	Summer
D	E		

MUS 130 Music Appreciation 3 Credit Hours

This basic appreciation course includes a study of the elements of music and emphasizes listening skills, music vocabulary, and an open-mindedness toward all music. Fulfills humanities requirements.

Fall	Winter	Spring	Summer
D/E	D/E	D	E

MUS 132 Music Literature 3 Credit Hours

A survey of various musical compositions from the Medieval period through the Twentieth Century, emphasizing the development of listening skills. Provides more in-depth knowledge than MUS 130.

Fall	Winter	Spring	Summer
	E		

MUS 133 The History of Rock and Roll 3 Credit Hours

This course covers Rock & Roll from its origins to the present. A field trip to The Rock & Roll Hall of Fame is offered. This course is primarily for the non-music major and fulfills humanities requirements.

Fall	Winter	Spring	Summer
D/E/O	D/E	D/E	D/E

MUS 134 Music Fundamentals 3 Credit Hours

Explains how to read music, including notes, clefs, rhythms, time signatures, scales, intervals, and basic chords. This course is recommended for the student who has a minimal background in music.

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 138 Music Theory I 3 Credit Hours

This course covers basic elements of music including pitch, intervals, triads, major and minor keys, time signatures and rhythm.

Suggested Prerequisites: MUS 141

Fall	Winter	Spring	Summer
D	D		

MUS 139 Music Theory II 3 Credit Hours

Second semester music theory, covering triads in inversion, phrase and cadences, harmonic progressions, and four part harmonization.

Prerequisites: MUS 138 or permission of the instructor

Suggested Prerequisites: MUS 142

Fall	Winter	Spring	Summer
D/E	D		

MUS 141 Sight Singing/Ear Training I 2 Credit Hours

This course teaches singing and the transcribing of simple melodies, as well as fundamental conducting techniques for the development of rhythmic skills. This course is recommended for all instrumental and vocal musicians.

Suggested Prerequisites: MUS 138

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 142 Sight Singing/Ear Training II 2 Credit Hours

This course is a second semester of sight singing and ear training. Students learn to sing and transcribe two-part and four-part pieces in major and minor keys. More challenging than MUS 141. This course is recommended for aspiring full-time music students.

Prerequisites: MUS 141 or permission of the instructor

Suggested Prerequisites: MUS 139

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 143 Show Choir 1 Credit Hour

Four sequential semesters of Jazz Choir, covering preparation and performance of a variety of jazz and popular music. This group performs for college as well as community functions. Auditions are held during the first week of class.

Prerequisites: Audition only

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 144 Show Choir 1 Credit Hour

Four sequential semesters of Jazz Choir, covering preparation and performance of a variety of jazz and popular music. This group performs for college as well as community functions. Auditions are held during the first week of class.

Prerequisites: Auditions only

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 147 Basic Music I for the Elementary Classroom Teacher 3 Credit Hours

Develops useful musical skills for future elementary classroom teachers. No prior musical experience is necessary.

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 149 Music Synthesis 2 Credit Hours

Teaches how to combine the power of the computer with MIDI equipment to create and manipulate digital music. This course covers current practices in music synthesis including basic theory and the creation of printed music. Basic knowledge of music fundamentals, personal computers, and piano keyboard is recommended but not required.

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 151 Introduction to Music Technology 3 Credit Hours

This course introduces the uses of technology in creating, promoting and managing music. Students will gain practical experience through hands-on projects. Topics to be covered include basic computer operation, MIDI set-up and uses, using music notation software, using music instruction software, and the uses of spreadsheets and word processors to manage musical events. Students are required to spend time outside of class in the music technology lab in order to complete assignments.

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 152 Music Notation with Finale I 2 Credit Hours

This course provides basic instruction in the use of "Finale," by Coda. "Finale" is the industry standard for music software. Students will use the music technology lab to gain hands-on experience with Finale. Topics to be covered include basic document set-up, using templates, use of the tool palettes, importing and saving files, and file playback. Students must have a basic knowledge of how to use a computer.

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 207 Concert Choir 1 Credit Hour

Three out of four semesters of Concert Choir including preparation and performance of a broad spectrum of choral music, from classical to pop, show tunes, and jazz. At least two performances are scheduled each semester, often accompanied by band or orchestra. These courses are open to college students and adult members of the community. New singers may audition during the first week of class. No preparation is necessary, only a good ear and a clear voice.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 208 Concert Choir 1 Credit Hour

The Fourth semester of Concert Choir including preparation and performance of a broad spectrum of choral music, from classical to pop, show tunes, and jazz. At least two performances are scheduled each semester, often accompanied by band or orchestra. These courses are open to college students and adult members of the community. New singers may audition during the first week of class. No preparation is necessary, only a good ear and a clear voice.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 209 Symphonic Wind Ensemble 1 Credit Hour

Three of the four semesters of Wind Ensemble (symphony band) including preparation and performance of standard concert band and transcriptions of all styles. This group performs for college as well as community functions. These courses are open to college students, adult members of the community, and advanced placement high school students. Woodwind, brass, and percussion instrumentalists should contact the director for auditions prior to the first rehearsal.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 210 Symphonic Wind Ensemble 1 Credit Hour

The fourth semester of Wind Ensemble (symphony band) including preparation and performance of standard concert band and transcriptions of all styles. This group performs for college as well as community functions. These courses are open to college students, adult members of the community, and advanced placement high school students. Woodwind, brass, and percussion instrumentalists should contact the director for auditions prior to the first rehearsal.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 211 Jazz Lab Band 1 Credit Hour

Three out of four semesters of Jazz Lab Band, including preparation and performance of a variety of jazz styles from swing to contemporary. This group, which performs several concerts each semester, is open to college students, and adult members of the community. New instrumentalists should contact the director to arrange for an audition prior to the first rehearsal.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 212 Jazz Lab Band 1 Credit Hour

Fourth semester of Jazz Lab Band, including preparation and performance of a variety of jazz styles from swing to contemporary. This group, which performs several concerts each semester, is open to college students, and adult members of the community. New instrumentalists should contact the director to arrange for an audition prior to the first rehearsal.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 213 Applied Music 1 Credit Hour

Four sequential semesters of weekly half-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music lead teacher during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a fee to the private instructor.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 214 Applied Music 2 Credit Hours

Four sequential semesters of weekly one-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music lead teacher during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a fee to the private instructor.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 215 Applied Music 1 Credit Hour

Four sequential semesters of weekly half-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music lead teacher during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a fee to the private instructor.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 216 Applied Music 2 Credit Hours

Four sequential semesters of weekly one-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music lead teacher during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a fee to the private instructor.

Prerequisites: Follow course sequence

Fall	Winter	Spring	Summer
D/E	D/E		

MUS 232 Music History I 3 Credit Hours

An intensive course providing a practical background in Western music from Greek Antiquity to 1750. Musical forms, styles, composers, compositions, and important influences on the development of Western music are covered through text readings, listening examples, and class discussion.

Fall D/E	Winter D/E	Spring	Summer
MUS 233 Music History II			3 Credit Hours
An intensive course providing a practical background in Western music from 1750 to the present. Musical forms, styles, composers, compositions, and important influences on the development of Western music are covered through text readings, listening examples, and class discussion.			

Fall D/E	Winter D/E	Spring	Summer
MUS 238 Music Theory III			3 Credit Hours
Fourth semester of Music Theory, building upon skills developed in MUS 139.			
<i>Prerequisites:</i> MUS 139 or permission of the instructor			

Fall D/E	Winter D	Spring	Summer
MUS 243 Show Choir			1 Credit Hour
Third and fourth semesters of Show Choir.			
<i>Prerequisites:</i> MUS 144			

Fall D/E	Winter D	Spring	Summer
MUS 244 Show Choir			1 Credit Hour
Third and fourth semesters of Show Choir.			
<i>Prerequisites:</i> MUS 144			

NURSING

Fall D/E	Winter D/E	Spring D	Summer
NSG 083 Supplement to Nursing and Self-Care II and III			1 Credit Hour
Supplemental course designed in two sections, taken concurrently, to provide special help with NSG 150, Nursing and Self-Care II, and NSG 155, Nursing and Self-Care III. Emphasis is on the use of critical thinking to facilitate application of psychiatric and medical-surgical nursing theory to clinical practice. One hour of lecture per week.			
<i>Note:</i> Student must be enrolled NSG 150/155. Be sure to choose the supplemental that starts with the course taken during the first eight weeks. Students should see Nursing Department with any questions.			

Fall	Winter D/E	Spring	Summer
NSG 085 Supplement to Nursing and Self-Care IV			1 Credit Hour
Supplemental course designed to be taken concurrently with NSG 220, Nursing and Self-Care IV, in order to provide special help with the course. Emphasis is on the use of critical thinking to facilitate application of medical-surgical nursing theory to clinical practice. One to one-and-a-half hours of lecture per week.			
<i>Suggested Prerequisites:</i> NSG 220			

Fall	Winter D/E	Spring	Summer
NSG 087 Supplement to Nursing and Self-Care V			1 Credit Hour

Supplemental course designed in two sections, taken concurrently, to provide special help with NSG 250, Nursing and Self-Care V. Emphasis is on the use of critical thinking to facilitate application of maternity and pediatric nursing theory to clinical practice. One or two hours of lecture per week for ten weeks.

Suggested Prerequisites: NSG 250

Note: Students should select the section that matches the area of NSG 250 that they are currently in. If they are in OB the first five weeks, they should choose the supplemental that starts with OB concepts and not the one that starts with Pediatrics.

Fall D/E	Winter	Spring	Summer
NSG 091 Nursing Systems II for Articulating LPN Transition			1 Credit Hour
Course required of all students registered and admitted into the LPN-ADN Advanced Placement Bridge articulation from St. Clair College. Course will provide a detailed overview of the Advanced Placement program and methods available to receive nursing course credits. Students will begin the process of assimilation into the advanced, second level of the nursing program through completion of required clinical paperwork. Course will introduce Dorothea Orem's Self-Care Deficit Theory Model, document math competency in medication administration, and validate application of the nursing process. Individual advisement will be available to each student.			
<i>Prerequisites:</i> Acceptance into the Nursing Program as an Advanced Placement student articulating to the A.D.N. program from St. Clair College, Canada. Permission of the Associate Dean of Nursing and L.P.N.			

Fall D/E	Winter	Spring	Summer
NSG 095 Calculating Medication Dosages I			1.5 Credit Hours
Aids the student entering the nursing program who experiences difficulty with mathematics. Emphasis is on working actual clinical medication and intravenous problems with accuracy and proficiency in a realistic time period. Proficiency in calculating dosages is gained through class work, practice problems, and practice timed testing. Three hours of class per week for eight weeks. Summer and fall semesters only.			
<i>Prerequisites:</i> Enrollment in the first year of the Nursing program or approval of the division.			
<i>Note:</i> Day or evening offerings depend on student requests and availability of instructors.			

Fall D/E	Winter	Spring D/E	Summer
NSG 096 Calculating Medication Dosages II			1.5 Credit Hours
Aids the student experiencing difficulty with calculating dosages who desires more intensive assistance. Emphasis is on working complex dosages and intravenous and pediatric calculations with accuracy in a realistic time period. Proficiency in calculating dosages for medical/surgical and pediatric clients is gained through class work, practice problems, and practice time testing. Three hours of class per week for eight weeks. Summer semester only.			
<i>Prerequisites:</i> Enrollment in the second year of the Nursing program or in current nursing practice.			

Fall	Winter	Spring	Summer D/E
NSG 097 Calculating Pediatric			

Medication Dosages

0.5 Credit Hour

Aids the student experiencing difficulty with calculating dosages. Emphasis is on working pediatric medication/intravenous problems with accuracy within a realistic time period. Knowledge of the process of calculating pediatric dosages based on weight, body surface area, and intravenous flow rates is gained. Proficiency is attained through classwork, practice problems, and practice timed testing. Four hours of class on two Saturdays. Winter semester only.

Prerequisites: Enrollment in a pediatric nursing course.

Suggested Prerequisites: This medication administration course is taken concurrently with NSG 250.

Fall	Winter D	Spring	Summer
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NSG 098 Calculating Medication Dosage

Advanced Medical Surgical Nursing 0 Credit Hours

This course is designed for the student entering the second year nursing classes, who needs assistance with dosage calculations. Emphasis is on complex medication and ICU medication dosage calculations. Students gain proficiency in calculating medication dosage problems for advanced medical/surgical clients through class work, timed practice tests, and assigned homework problems.

Prerequisites: Enrollment in NSG 220

Fall	Winter	Spring	Summer D/E
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NSG 120 Nursing and Health Care Systems I 2 Credit Hours

Socializes the student nurse into today's nursing and introduces concepts necessary for functioning at optimal levels as a student and ADN graduate nurse. This course includes Orem's Self-Care Deficit Theory of Nursing; principles of major theories such as role, learning, systems, and change; professional values and ethics; legal issues; trends and components of the health care delivery system. Two consecutive hours of theory per week.

Prerequisites: Acceptance to the Nursing program

Note: The theory portion of this course is taught during the day. The students who enter the program in fall take the course in fall. Those who enter in winter semester take it in winter.

Fall D	Winter D	Spring	Summer
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NSG 123 Introduction to Nursing Systems and Self-Care I Skills (for LPN Advanced Placement) 4.5 Credit Hours

A transition course for LPNs that acknowledges and accepts the commonalities in their license to practice. The course recognizes that the LPN has the skills described in the course objectives by virtue of their graduation from an accredited LPN program and proof of a Michigan license to practice.

Prerequisites: Acceptance into the Nursing Program as a L.P.N. Advanced Placement student; BIO 233, BIO 234, PSY 131, PSY 253, and ENG 131, ENG 132. Student is also required to pass the NET. (Nurse Entrance Test)

Note: The Advanced Placement students who successfully complete NSG 124 are awarded NSG 123. Student takes NSG 120 concurrently with NSG 124 in the first semester.

NSG 124 Introduction to Nursing Systems and

Self Care I Theory

(for LPN Advanced Placement) 2.5 Credit Hours

A transition course for LPNs that acknowledge and accept commonalities in their licenses to practice. The course introduces the nursing process, Orem's Self-Care Model, performance of a physical appraisal and math dosage proficiency. Emphasis on time management and problem solving skills assists the LPN to successfully bridge role transition.

Prerequisites: Acceptance into Nursing's LPN Advanced Placement program.

Note: This course is offered only in fall and only for the L.P.N. Advanced Placement students. NSG 120 is taken concurrently with NSG 124.

Fall E	Winter	Spring	Summer
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NSG 126 Nursing and Self-Care I 7 Credit Hours

Introduces the nursing process and Orem's Self-Care Model as the conceptual model for nursing practice. Laboratory practice precedes clinical experience with actual clients. In clinical experience the emphasis is on development of competence for ADN roles. Proficiency in dosage calculation is required for continuation in the course. Four hours of theory, twelve hours of clinical practice per week in an acute hospital or extended care setting.

Prerequisites: Acceptance to the Nursing program.

Suggested Prerequisites: NSG 120, BIO 233, PSY 131, and BLS-C

Note: It is strongly suggested that all non-nursing support courses are completed prior to entry to the Nursing program. There is one section of theory taught in the evening during the fall only. This course is taken in fall by students who are accepted in the fall and in winter by those accepted in the winter.

Fall D/E	Winter D	Spring	Summer
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NSG 150 Nursing and Self-Care II 5 Credit Hours

Continues development of the nursing process to assist psychiatric adult clients with diagnoses related to indirect self-destructive behavior, inability to relate with others, alterations in mood, severe anxiety, social maladaptation, and psycho-physiological conditions. Legal/ethical standards for ADN practice are explained. Therapeutic communication and therapeutic use of self are emphasized. Five hours of theory and fifteen hours of clinical practice per week for 7.5 weeks in a mental health care setting.

Prerequisites: NSG 120, NSG 126, BIO 233, and PSY 131

Suggested Prerequisites: NSG 155, PSY 253, and BIO 234

Note: It is highly suggested that the student complete PSY 253 prior to taking this course and not concurrently. This course is offered in winter for students accepted into the program in fall. It is offered in spring or summer for students accepted into the program in winter.

Fall	Winter D/E	Spring D	Summer D
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NSG 155 Nursing and Self-Care III 5 Credit Hours

Continues development of competency in the nursing process to help adults achieve self-care goals. Principles, concepts, and factors related to the client's health state are emphasized. Legal/ethical dimensions of practice are integrated with nurse agency, ADN role, and standards of care. Current issues and trends in delivery of quality health care are included. Proficiency in dosage calculation is required for continuation in the course. Five hours of theory and fifteen hours of clinical practice per week for 7.5 weeks in an acute hospital care setting.

Prerequisites: NSG 120, NSG 126, BIO 233, and PSY 131

Suggested Prerequisites: NSG 150, PSY 253, and BIO 234

Note: It is suggested that students complete PSY 253 and BIO 234 prior to taking this course. This course is offered in winter for students who are accepted into the program in fall. It is offered in spring or summer for students who are accepted into the program in winter.

Fall	Winter D/E	Spring D	Summer D
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NSG 203 Introduction to Critical Care I 2 Credit Hours

Provides beginning theoretical concepts related to caring for the critically ill client for the student or practicing nurse who is considering specializing in this area. This course covers different content areas than NSG 204. It meets three hours per week for ten consecutive weeks.

Prerequisites: Enrollment in the third semester of the Nursing program or a licensed nurse, and completion of BIO 234.

Note: This theory course assists students who are approaching the beginning of their second year to apply medical/surgical concepts, integrate medications, and understand the need for accurate lab results in planning client care. It is a wonderful enhancement course for students who are not successful with the first attempt at NSG 220. This course is offered only spring or summer not both. See class schedule.

Fall	Winter	Spring D/E	Summer D/E
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NSG 204 Critical Care II 2 Credit Hours

Designed for the beginning practitioner or nurse inexperienced in critical care nursing. Emphasis is on the nursing responsibilities associated with meeting the needs of clients with disorders of the cardiovascular, neurological, and pulmonary systems. This class meets three hours per week for ten weeks.

Prerequisites: Licensed registered nurse or completion of NSG 220

Fall	Winter	Spring	Summer D/E
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NSG 210 Healing Practices: Alternative

and Complementary Therapies 3 Credit Hours

Introduces the student to a variety of healing philosophies and beliefs. Discussion covers the resurgence of natural healing and the role of the National Center for Complementary and Alternative Medicine (NCCAM). Topics may include: herbal medicine, nutrition, supplements, homeopathy, naturopathy, mind-body therapies, posture/mobility/movement therapies, touch and bodywork, chiropractic, energy therapies, Eastern therapies, and other traditional and indigenous therapies. Can also be taken for independent study with permission of the instructor.

Note: Course is offered according to student request and availability of instructor.

All interested nurses, members of the college community, and local community members are invited.

Fall	Winter	Spring D/E	Summer D/E
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NSG 220 Nursing and Self-Care IV 10 Credit Hours

Provides continued development of competency in using the nursing process to help adults with common medical-surgical problems, emphasizing principles, concepts, and factors related to the client's health state, as well as issues, trends, legal and ethical accountability, and promotion of quality care in nursing practice. Proficiency in dosage and IV calculation is required for continuation in the course. Six hours of theory and twelve hours of clinical practice per week in an acute hospital setting is required.

Prerequisites: NSG 120, 126, 150, 155; BIO 233, 234; BLS-C; PSY 131, 253; SOC 131; ENG 131,132.

Fall D/E	Winter	Spring	Summer
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NSG 250 Nursing and Self-Care V 7 Credit Hours

Develops competency in using the nursing process to help the child (birth through adolescence) and childbearing-family achieve self-care goals, applying scientific principles, concepts, and factors related to the child and the family as a self-care agent. Current issues, trends, legal and ethical accountability, and the promotion of quality care are integrated into nursing practice. Five hours of theory, twelve hours of clinical practice per week for ten weeks (five weeks in pediatric setting and five weeks in maternity setting).

Prerequisites: NSG 120, 125, 150, 155, 220; BIO 233, 234; PSY 131, 253; SOC 131; ENG 131, ENG 132

Note: It is suggested that nursing students take all non-nursing support courses before entering the program. However, students may elect to take POLS 131 at this time. Students spend the first five weeks in pediatric nursing or in maternity nursing. After five weeks, they switch to the opposite specialty.

Fall	Winter D/E	Spring	Summer
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NSG 255 Nursing and Health Care Systems II 3 Credit Hours

Emphasizes the transition phase from student to ADN graduate nurse, focusing on management strategies necessary for setting priorities, including organizing and delegating work when responsible for a group of clients and applying prior learning in delivery of nursing care, work relationships, and legal and ethical accountability in the promotion of quality care. Three hours of theory, fifteen hours of clinical per week for five weeks in an acute hospital or extended care setting.

Prerequisites: NSG 120, 125, 150, 155, 220, 250; BIO 233, 234; PSY 131, PSY 253; SOC 131; ENG 131, ENG 132

Suggested Prerequisites: POLS 131

Note: This is the capstone course for nursing. All non-nursing courses should be completed at this point with a C or better. A computer competency test or computer course that fulfills the college requirement for computer literacy should be completed as well.

Fall	Winter	Spring	Summer
	D/E		

NSG 285 Pathophysiology for Nurses 4 Credit Hours

This course covers the etiology of diseases, the pathophysiological changes occurring in the body, and the clinical features of the disease. Diagnostic methods, complications of each disorder, prognosis and treatment plans are reviewed. Emphasis is placed on helping RNs and nursing students understand the disease process and apply concepts to clinical practice, including pharmacological measures and treatment modalities. The course uses critical thinking skills to integrate pathophysiological concepts and enhance the learning process.

Prerequisites: Passing grade of C or better in BIO 233/234 or equivalent, or Registered Nurse licensure.

Note: This course assists students with a greater understanding of the disease process. It is an elective open to all nursing students or those who are considering a nursing career. Students who fall out of NSG 155 or NSG 220 are strongly advised to take this course.

Fall	Winter	Spring	Summer
E		D/E	

NURSING ASSISTANT PROGRAM

NCS 100 Competency Evaluated Nurse Aide 16 Credit Hours

Basic nursing skills necessary to perform the duties of a nurse aide are acquired. The course incorporates 90 hours of theory, 128 hours of clinical laboratory practice, and 52 hours in a clinical agency. Successful mastery allows testing at the state level to receive the C.E.N.A. designation.

Prerequisites: High school graduate or G.E.D.

Fall	Winter	Spring	Summer
D	D	D	D

PHARMACY TECHNOLOGY

PHT 100 Introduction to Pharmacy Technology 2 Credit Hours

An introduction to the role of the pharmacy technician in the delivery of pharmacy services. Discussion topics include ethical, legal, and professional issues. Special emphasis is placed on pharmaceutical terminology, specific distribution systems, and pharmacy standards. Two hours of lecture per week.

Prerequisites: Acceptance into the Pharmacy Technician program.

Suggested Prerequisites: Co-requisites: PHT 124

Note: Please see the admission requirements for the Pharmacy Technician Program.

Fall	Winter	Spring	Summer
D			

PHT 119 Out Patient Pharmacy Externship 2 Credit Hours

Assignment to selected outpatient pharmacy facilities for directed practice in pharmacy technology. This is a required, supervised learning experience under the direction of a pharmacist. Rotation selections include community, independent, and hospital out patient pharmacy locations. The eight week clinical rotations include eight hours per week in the clinical area.

Prerequisites: Acceptance into the Pharmacy Technician Program and PHT 100, PHT 124, and PHT 130

Suggested Prerequisites: Co-requisites: PHT 125, PHT 150, PHT 165, and PHT 175

Note: The eight week externship rotation begins in March. You must be enrolled and passing in all of the following courses while completing the Out Patient Externship Rotation: PHT 125, PHT 150, PHT 165, and PHT 175.

Fall	Winter	Spring	Summer
	D/E		

PHT 124 Pharmacology for Pharmacy Technicians I 3 Credit Hours

The first of a two-course sequence in pharmacology for pharmacy technicians. The course examines general pharmacological concepts, principles, actions, side effects, dosage forms, and route of administration. The course will cover concepts in drug development and drug usage, focusing on antibiotics, antifungal, antihistamines, decongestants, antitussives, expectorants, anesthetics, and analgesics. The nervous system is also highlighted. Three hours of lecture per week.

Prerequisites: Acceptance into the Pharmacy Technician Program

Suggested Prerequisites: Co-requisites: PHT 100 and AH 100

Fall	Winter	Spring	Summer
D			

PHT 125 Pharmacology for Pharmacy Technicians II 3 Credit Hours

The second part of a two-course sequence in pharmacology for pharmacy technicians. The course will cover systems including respiratory, gastrointestinal, endocrine, renal, and cardiac. Muscle relaxants, topicals, and vitamins and nutritional supplements are also studied in this course. Chemotherapy and infection control are highlighted. Students learn to recognize inconsistencies in orders, routes of administration, and frequency of administration. Three hours of lecture per week.

Prerequisites: PHT 124

Suggested Prerequisites: Corequisites: PHT 150 and PHT 175

Fall	Winter D	Spring	Summer
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PHT 130 Pharmacy Software Applications 1 Credit Hour

Computer technology has become a vital component of pharmacy practice in all settings (community, long term care, hospital, and industry). This course will introduce various specialized pharmacy programs: medication dispensing, drug information, pharmacokinetics, management, quality assessment and procurement. The course will also emphasize record keeping, billing as well as drug distribution systems.

Prerequisites: Acceptance into the Pharmacy Technician program

Suggested Prerequisites: Corequisites: PHT 100 and HCS 131

Fall D	Winter	Spring	Summer
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PHT 144 Pharmacy College Admission Testing (PCAT) and Current Issues in Pre-Pharmacy 2 Credit Hours

This seminar course will provide an overview of the pharmacy profession including licensure, areas of practice, career options, and pharmacy workplace issues. General pharmacy school information including the PHARM D curriculum, the considerations in selecting a school of pharmacy, and admission requirements will be discussed. A mock PCAT exam will be given to determine the student's strengths and weaknesses. Select test preparation options will then be discussed.

Prerequisites: (Recommended, but not required) BIO 152, CHEM 141, ENG 131, CIS 100 or BCA 140.

Suggested Prerequisites: (Recommended, but not required) CHEM 142, SPC 131, PHYS 131, ENG 132.

Fall E	Winter E	Spring	Summer
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PHT 150 Pharmaceutical Calculations 3 Credit Hours

Applies basic mathematical skills in calculations required for the usual dosage determinations, as well as solution preparations using weight, metric, household, and apothecary systems. Discussion in applying ratio and proportion, allegations, and business calculations in pharmacy operations. Two lecture hours per week and one hour computer lab per week.

Prerequisites: PHT 100, PHT 124 and MATH 101 and MATH 110

Suggested Prerequisites: Co-requisites: PHT 125 and PHT 175

Fall	Winter D	Spring	Summer
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PHT 165 Issues in Pharmacy 2 Credit Hours

Explores today's health care environment, emphasizing the issues facing pharmacy and the pharmacy technician. Skills, talents, and tools required to cope today and succeed tomorrow are developed. This course covers such workplace topics as communication issues, CQI for the pharmacy, legal issues, teamwork concepts, and patient instruction techniques. Student participation, role playing, and other interactive learning methods are emphasized.

Prerequisites: Acceptance into the Pharmacy Technician Program and PHT 100

Fall	Winter D	Spring	Summer
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PHT 175 Applied Pharmacy Systems 4 Credit Hours

Gives detailed instruction in medication distribution systems, including in-patient systems, preparation of intravenous admixtures, prescription dispensing to ambulatory patients, compounding, manufacturing and repackaging, and inventory control systems. Instruction also includes inpatient and out patient software for order entry and patient profiles. Two hours of lecture per week and two hours of laboratory per week.

Suggested Prerequisites: PHT 100, PHT 124, and PHT 130

Note: Co-requisites: PHT 125 and PHT 150

Fall	Winter D	Spring	Summer
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PHT 193 Pharmacy Externship 3 Credit Hours

Assignment to selected health care facilities for directed clinical practice in pharmacy technology. This is a required, supervised learning experience under the direction of a pharmacist. Rotation selections include hospital, home infusion, and long-term care pharmacy locations. A special ten- to twelve-week spring, summer, or fall session includes thirty-two or twenty-four hours per week in the clinical area.

Prerequisites: Successful completion of all required Pharmacy Technician course work.

Fall D	Winter	Spring D	Summer D
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PHILOSOPHY**PHIL 131 Introduction to Logic 3 Credit Hours**

Examines the methods and principles of assertion and validity in argumentation. This course includes the study of the nature of logic and its relationship to language, informal fallacies, and both traditional and modern symbolic methods of deduction.

Note: First semester course for all students.

Fall D/E	Winter D/E	Spring D/E	Summer D/E
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PHIL 133 History of Philosophy to the 18th Century 3 Credit Hours

An introduction to the history of Western philosophy from its origins in Greece to the rise of science. Six stages of intellectual development will be examined from Thales to Hobbes.

Note: Second semester course for all students.

Fall D/E	Winter	Spring	Summer
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PHIL 135 History of Modern Philosophy 3 Credit Hours

A continuation of the history of Western philosophy focusing on the major philosophers and major developments through the twentieth century from Descartes through Wittgenstein. Influential currents such as rationalism, empiricism, idealism, romanticism, Marxism, Darwinism, positivism, pragmatism, phenomenology, existentialism, and analysis are examined.

Note: Third semester course for all students.

Fall	Winter D	Spring	Summer
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PHIL 137 Topics in Philosophy 3 Credit Hours

A non-historical approach to philosophy for serious students interested in the professions or for professionals interested in focusing on topics of professional or personal significance. Section offerings are sufficiently diverse to acquaint serious students or professionals with the extensive scope of philosophy. The range of philosophy is as broad as human experience. Diverse areas such as philosophy of religion, philosophy of science, aesthetics, philosophy of law, business ethics, biomedical ethics, or philosophy of language may be the current topic offered that semester. Topics vary each semester and with each instructor.

Fall D	Winter	Spring	Summer
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PHIL 139 Ethics 3 Credit Hours

Ethics emphasizes practical and normative ethical questions as well as analytical or metaethical questions. This course provides a systematic examination of problems by covering various classical and contemporary theories which include standards or criteria of moral action, the nature and justification of both value judgments and moral judgments, the nature of ethical knowledge, the meaning of ethical terms, intelligent decision-making, and free will vs determination.

Note: Fourth semester course for all students.

Fall D/E	Winter D/E	Spring D/E	Summer D/E
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PHYSICAL FITNESS

HPE 120 Lifetime Fitness (Rotating Skill) 2 Credit Hours

This course rotates fitness activities for each term's class with up-to-date movement for health and enjoyment. Overall body conditioning may include such activities as Tae Bo, Kick Boxing Aerobics, Step Aerobics or Pilates. Refer to the subtitle for the specific activity following the course title "Lifetime Fitness."

HPE 127 Aquacise 1 Credit Hour

Designed to emphasize the importance of physical fitness through water exercise. The benefits of swimming, proper exercise alignment, and various creative exercises will be incorporated into this class. No swimming skill is required.

HPE 140 Lifetime Wellness 2 Credit Hours

The most prominent cause of death and disability in North America are diseases that are largely lifestyle related. Statistics indicate that nearly 80% of these deaths could be prevented by following a positive lifestyle. That is the focus of this course. The class will assess the student's current level of wellness and provide the tools necessary to improve and motivate the student to practice healthier lifestyles throughout adulthood.

Note: This course meets the graduation requirement for General Education Outcome 6: Wellness (for graduates with the Associate of Arts or Associate of General Studies degree only).

Fall D/E	Winter D/E	Spring	Summer
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HPE 142 Advanced First Aid 3 Credit Hours

Provides information and skills for identifying life-threatening conditions and carrying out emergency procedures at the scene of an accident. The American Red Cross Emergency Response certificate is issued if student performance is satisfactory. Also, a student may become certified in Basic Life Support for the professional rescuer. This course is useful to any adult in his or her daily life.

Note: This course meets the graduation requirement for General Education Outcome 6: Wellness (for graduates with the Associate of Arts or Associate of General Studies degree only).

HPE 150 Physiology of Exercise 3 Credit Hours

Designed to teach the basic physiological principles of exercise. The student will learn what changes occur to the body during exercise and as a result of regular exercise. Emphasis is on applied exercise physiology to improve health and fitness of the general population and how to optimize performance. Ideal for the student interested in pursuing further study in the health or physical education field. Also, the serious exercise participant may find this class useful in establishing an individualized exercise program. Physical therapists, nutritionists, and health care professionals find this class a complement to their fields of study.

Fall E	Winter D	Spring	Summer
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HPE 151 Methods of Teaching Aerobic Exercise 3 Credit Hours

A course for the individual interested in ideas and teaching techniques used when instructing exercise classes and personal training. The student learns what should be included in a total exercise program and how to develop appropriate exercises for different segments of the population. This course is designed to help students pass industry certification exams in personal training and group exercise.

Fall D	Winter E	Spring	Summer
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HPE 152 Tests and Measurements 2 Credit Hours

Provides a background of tests and measurements in health and physical education, including methods for evaluating the health-related and skill-related components of physical fitness. Tests include anthropometric measurement, stress testing, and posture evaluation. Students also learn to evaluate test results and understand how they can be useful to the exercise participant. This course is required in the Fitness Leadership program.

Fall	Winter	Spring	Summer
D	D		

HPE 153 Nutrition 2 Credit Hours

Emphasizes the importance of proper nutrition through the understanding of basic nutrition principles and their application to everyday life. Dietary requirements of protein, carbohydrates, fats, vitamins and minerals are explained along with their food sources. Other topics include digestion and metabolism; weight loss, weight gain and stabilization; water balance and exercise.

Note: This course meets the graduation requirement for General Education Outcome 6: Wellness (for graduates with the Associate of Arts or Associate of General Studies degree only).

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

HPE 154 Facility and Equipment Management 2 Credit Hours

Explains the planning and operation of an athletic or health club facility. Specifically, this course includes instruction in the operation of a swimming pool, the selection and care of exercise and strength equipment and the management of a locker room. This is a required course in the Fitness Leadership Program.

Fall	Winter	Spring	Summer
D	D		

HPE 155 Relax Techniques for Stress Management 2 Credit Hours

Teaches the physiology of the stress response and how to recognize this response. Emphasis is on the use of stress reduction techniques and how to incorporate these into one's lifestyle.

Note: This course meets the graduation requirement for General Education Outcome 6: Wellness (for graduates with the Associate of Arts or Associate of General Studies degree only).

HPE 156 Personal Training 3 Credit Hours

This course prepares students for the American Council on Exercise (ACE) Personal Trainer Certification Exam and other national exams. Students obtain the skills and knowledge needed to provide personal training to clients in a fitness center as well as one-on-one instruction.

Fall	Winter	Spring	Summer
	E		

HPE 192 Internship in Physical Education 2 Credit Hours

This internship is for students nearing completion of the Fitness Leadership program. The student will complete 100 supervised hours in a work setting such as a community center, physical education classroom, physical therapy center or wellness center. Students are encouraged to choose internship sites that will provide important job opportunities as well as strengthen an area in which they are weak. The internship is unpaid and may be completed at times that are convenient for the student and the internship site.

Fall	Winter	Spring	Summer
D/E	D/E		

HPE 232 Water Safety Instructor (WSI) 3 Credit Hours

The Water Safety Course (SWI) is designed to train candidates to teach the American Red Cross swimming and water safety courses. It includes making WSI candidates aware of safety precautions for teaching health and safety courses, teaching persons with diverse cultural backgrounds, teaching persons with disabilities, customizing courses for adults, evaluating student performance and administrative procedures required of ARC instructors.

HPE 253 Nutrition for the Professional 3 Credit Hours

A course designed to teach health care professionals the basics of nutrition and its application to disease, growth and development.

HPE 260 Health, Nutrition, and PE 3 Credit Hours

This course will provide information in the three areas of Health, Nutrition and Physical Education that the classroom teacher will need for knowledge and practical use in teaching. Teaching strategies and projects in Health and Nutrition as well as movement education and games will be presented. The emphasis will be for potential teachers to provide learning experiences for children's development of positive lifestyle behaviors, as well as to fulfill objectives for the Michigan Model for Health.

Fall	Winter	Spring	Summer
D/E	D/E		

PHYSICAL SCIENCE**PSCI 131 Introduction to Physical Science 4 Credit Hours**

Covers topics from the five major areas of physical science - astronomy, physics, chemistry, geology, and meteorology - in order to help non-science majors understand and appreciate the interaction between energy and matter in nature. Laboratory experiences are designed to improve scientific intuition and develop confidence in dealing with science. Three hours of lecture and two hours of laboratory per week.

Fall	Winter	Spring	Summer
D/E	D/E	D	

PSCI 133 Atomic Science 2 Credit Hours

A non-mathematical introduction to the basic concepts of atomic energy. This course is designed to help the non-scientific student enjoy and appreciate current trends in science, nuclear reactions, and atomic energy in particular. The approach taken is historical and philosophical. Effort is made to place concepts in their relation to prevalent thinking. Two hours of lecture per week.

Note: Offered occasionally based on student demand.

PHYSICAL THERAPIST ASSISTANT

PTA 102 Introduction to Physical Therapy Practice 2 Credit Hours

Introduces the student to health care and specifically the field of physical therapy. Course content includes instruction in the roles of various health professionals, the concept of the rehab team, the history and scope of physical therapy, legal and ethical issues related to communication and the practice of physical therapy, and organizational structures of various types of physical therapy facilities. Students will also learn about the role of the PTA, various methods of documentation used in physical therapy, and the structure and function of the American Physical Therapy Association. Current issues and trends in physical therapy will be discussed and students will become familiar with the Guide to PT Practice.

Prerequisites: Admission to the PTA Program

Note: PTA 132 and PTA 165 are to be taken concurrently

Fall D	Winter	Spring	Summer
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PTA 108 Therapeutic Techniques I 3 Credit Hours

Provides instruction in patient care with an emphasis on physical therapy interventions. Course content includes vital signs assessment, body mechanics, bed mobility and positioning, PROM exercise, transfers, gait training, patient and family education, and the use of wheelchairs and assistive devices. Students practice techniques in a guided lab setting.

Prerequisites: Admission to the PTA Program, PTA 102, PTA 132, and PTA 165

Note: PTA 118, PTA 119, PTA 142, and PTA 220 must be taken concurrently

Fall	Winter D	Spring	Summer
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PTA 118 Exercise Techniques I 2 Credit Hours

Provides instruction in therapeutic exercise procedures utilized by physical therapist assistants. Course content includes assessment of joint motion and muscle strength, implications of ROM and muscle testing for exercise prescription, types of exercise, basic exercise programs, and the use of exercise equipment. Course focuses on theory only.

Prerequisites: Admission to the PTA Program, BIO 233, PTA 102, PTA 132, and PTA 165

Note: PTA 108, PTA 119, PTA 142, and PTA 220 must be taken concurrently

Fall	Winter D	Spring	Summer
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PTA 119 Exercise Techniques II 4 Credit Hours

Provides opportunity for application of the techniques learned in PTA 118. Focuses on therapeutic exercise procedures utilized by physical therapist assistants as well as assessment of joint motion and muscle strength, implications of ROM and muscle testing for exercise prescription, types of exercise, basic exercise programs, and the use of exercise equipment. Students practice techniques in a guided lab setting.

Prerequisites: Admission to the PTA Program, BIO 233, PTA 102, PTA 132, and PTA 165

Note: PTA 108, PTA 118, PTA 142, and PTA 220 must be taken concurrently

Fall	Winter D	Spring	Summer
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PTA 128 Therapeutic Techniques II 2 Credit Hours

Provides instruction in patient care with an emphasis on physical therapy interventions. Course content includes aseptic techniques and wound care, chest PT, manual therapy techniques (specifically massage and myofascial release), assessment and interventions associated with use of orthotics and prosthetics. Students practice techniques in a guided lab setting.

Prerequisites: Admission to the PTA Program, PTA 108, PTA 118, PTA 119, PTA 132, PTA 165, and PTA 220

Fall	Winter	Spring D	Summer
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PTA 132 Kinesiology for PTAs 3 Credit Hours

Focuses on a review of surface anatomy and functional anatomy, muscles and muscle function, proper posture and analysis of posture, and gait analysis and deviations. A lab component familiarizes the student with functional aspects of human motion. Medical terminology is reinforced.

Prerequisites: Admission to the PTA Program and BIO 233

Note: PTA 102 and PTA 165 are to be taken concurrently

Fall D	Winter	Spring	Summer
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PTA 142 Therapeutic Modalities 3 Credit Hours

Provides instruction in the principles, indications, contraindications, and precautions of physical agents including heat, cold, water, electrical stimulation, traction, light, and sound. Students practice techniques in a guided lab setting.

Prerequisites: Admission to the PTA Program, PTA 102, PTA 132, and PHYS 133

Note: PTA 108, PTA 118, PTA 119, and PTA 220 must be taken concurrently

Fall	Winter D	Spring	Summer
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PTA 165 Life Span Development 2 Credit Hours

Explains the normal gross motor development of humans from infancy on. The early developmental sequence and reflexive maturation are related to rehabilitation techniques utilized with adult patients. The development of adults, the aging process, and death and dying are discussed. Psychosocial and cognitive issues throughout the life span will be incorporated into course material.

Prerequisites: Admission to the PTA program and BIO 233

Note: PTA 102 and PTA 132 are to be taken concurrently

Fall D	Winter	Spring	Summer
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PTA 220 Pathologic Conditions 3 Credit Hours

Provides instruction in the signs, symptoms, etiology, course, prognosis, medical intervention, and treatment of disease with an emphasis on diseases commonly encountered in physical therapy. Medical terminology is reinforced.

Prerequisites: Admission to the PTA Program and AH 100

Note: PTA 118, PTA 119, PTA 108, and PTA 142 must be taken concurrently

Fall	Winter D	Spring	Summer
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PTA 250 Extremity Orthopedics 4 Credit Hours

Provides instruction in the etiology, course, prognosis, medical intervention, and treatment of orthopedic conditions of the extremities. Course content includes physical therapy intervention. Students practice techniques in a guided lab setting.

Prerequisites: Admission to the PTA Program and PTA 132

Note: PTA 254, PTA 262, PTA 264, and PTA 291 must be taken concurrently

Fall D	Winter	Spring	Summer
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PTA 254 Spinal Orthopedics 3 Credit Hours

Provides instruction in the etiology, course, prognosis, medical intervention, and treatment of orthopedic conditions of the spine. Course content includes physical therapy intervention. Students practice techniques in a guided lab setting.

Prerequisites: Admission to the PTA Program and PTA 132

Note: PTA 250, PTA 262, PTA 264, and PTA 291 must be taken concurrently

Fall D	Winter	Spring	Summer
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PTA 262 Rehabilitation of Neurological Conditions I 2 Credit Hours

Provides review of basic neuroanatomy and neurophysiology followed by instruction in the theory and rationale of the treatment approach for the patient with neurological involvement. Emphasis is on the functional approach to patient treatment including the use of Neurodevelopmental Treatment and Proprioceptive Neuromuscular Facilitation for adults with neurological conditions such as traumatic brain injury and cerebrovascular accidents.

Prerequisites: Admission to the PTA Program and PTA 132

Note: PTA 264, PTA 250, PTA 254, And PTA 291 are to be taken concurrently

Fall D	Winter	Spring	Summer
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PTA 264 Rehabilitation of Neurological Conditions II 4 Credit Hours

Provides opportunity for application of the techniques learned in PTA 262 with an emphasis on the functional approach to patient treatment. This includes the use of Neurodevelopmental Treatment and Proprioceptive Neuromuscular Facilitation for adults with neurological conditions such as traumatic brain injury and cerebrovascular accidents. Students practice techniques in a guided lab setting.

Prerequisites: Admission to the PTA Program and PTA 132

Note: PTA 262, PTA 250, PTA 254, and PTA 291 are to be taken concurrently

Fall D	Winter	Spring	Summer
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PTA 270 Physical Therapist Assistant Seminar 1 Credit Hour

This course is intended to integrate classroom and practical clinical experiences. The course includes student presentations and discussions as well as review and reinforcement of clinical skills, medical terminology, and effective communication skills.

Prerequisites: Admission to the PTA Program and PTA 291

Fall	Winter D	Spring	Summer
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PTA 291 Clinical Externship I 2 Credit Hours

A part-time supervised clinical practicum at affiliated physical therapy departments. Students participate in patient treatment under the delegation and supervision of a licensed physical therapist.

Prerequisites: Admission to the PTA Program, PTA 106, PTA 115, PTA 121, PTA 142, and PTA 220

Fall D	Winter	Spring	Summer
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PTA 295 Clinical Externship II 9 Credit Hours

A full-time supervised clinical practicum at affiliated physical therapy departments. Students participate in patient treatment under the delegation and supervision of a licensed physical therapist.

Prerequisites: Admission to the PTA Program and PTA 291

Fall	Winter D	Spring	Summer
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PHYSICS**PHYS 120 Technical Physics 4 Credit Hours**

Designed mainly to give students majoring in technical areas an understanding of physical principles and their application to industry. This course consists of a study of measurements, forces, motion, and vectors; energy, power, and machines; properties of materials and fluids; and heat and heat transfer. Three hours of lecture and two hours of laboratory per week.

Prerequisites: Completion of or concurrent enrollment in MATH 103

Fall E	Winter E	Spring E	Summer
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PHYS 121 Technical Physics (Continued) 4 Credit Hours

A continuation of Physics 120 into wave motion, electricity, and DC electrical circuits, atomic physics, and nuclear physics. Three hours of lecture and two hours of laboratory per week.

Prerequisites: PHYS 120

Fall	Winter E	Spring	Summer
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PHYS 131 Liberal Arts Physics 4 Credit Hours

A liberal arts course in the principles of physics, including units on mechanics, heat, and sound. Designed to fulfill partially the physics requirement in pre-medicine, pre-dentistry, teaching, and law. Three hours of lecture and three hours of laboratory each week.

Prerequisites: Two years of high school algebra and one semester of trigonometry with a grade of C or better or equivalent college courses

Fall D/E/W/O	Winter D/E/W/O	Spring D/O	Summer
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PHYS 132 Liberal Arts Physics (Continued) 4 Credit Hours

A continuation of PHYS 131. Units on electricity, magnetism, light, and modern physics are included. Three hours of lecture and three hours of laboratory per week.

Prerequisites: PHYS 131 with a grade of C or better

Fall	Winter D/E	Spring	Summer D
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PHYS 133 Principles of Physics 4 Credit Hours

A one-semester survey course on physical principles of motion, energy, fluids, electromagnetism, waves, light, radiation, and the atom. This course is designed to meet the need for a one-semester course in physics in many areas including Allied Health, teacher education, business, and social science. Three hours of lecture and two hours of laboratory per week.

Prerequisites: One year of high school algebra

Fall D/E	Winter D/E	Spring	Summer
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PHYS 231 Engineering Physics 5 Credit Hours

A general course to meet the requirements of engineering students and physics majors. Special emphasis is placed on relating physical principles to mathematical techniques in problem solving. This lecture and laboratory course covers mechanics, wave motion, and thermodynamics. Four hours of lecture and three hours of laboratory per week.

Prerequisites: MATH 180, with MATH 183 recommended.

Fall D/E	Winter E	Spring D	Summer
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PHYS 232 Engineering Physics (Continued) 5 Credit Hours

A continuation of PHYS 231. Topics covered are electricity and magnetism and physical and geometrical optics. Four hours of lecture and three hours of laboratory per week.

Prerequisites: PHYS 231 with a grade of C or better and MATH 183; concurrent enrollment in MATH 280 is recommended.

Fall D	Winter D	Spring	Summer
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PHYS 233 Engineering Physics (Continued) 4 Credit Hours

A continuation of PHYS 232 emphasizing modern physics. Included are topics on solid state physics, nuclear and atomic physics, and fundamental particles. The application of mathematics is limited to elementary use of the wave mechanical approach to quantum mechanics. Four hours of lecture and three hours of laboratory per week.

Prerequisites: PHYS 232 with a grade C or better and MATH 280; MATH 289 is recommended.

POLITICAL SCIENCE

POLS 090 Supplement to Political Science 1 Credit Hour

A supplemental course designed to be taken concurrently with Political Science 131. Emphasis is on note-taking, outlining, and textbook study as well as the vocabulary and content of the Political Science 131 course.

Suggested Prerequisites: POLS 131

POLS 131 Introduction to American Government and Political Science 3 Credit Hours

Examines principles and problems of American political institutions, including the role of government and politics in society, the balancing of liberty with authority, and theories of the state. Mechanisms of popular control (public opinion, pressure groups, political parties, elections) and formal structure are examined. Additional components include foreign policy, public policy, and contemporary events.

Note: This course meets the graduation requirement for General Education Outcome 1: American Society, Events, Institutions and Cultures.

POLS 132 Current Issues In American Politics 3 Credit Hours

Examines issues which dominate U.S. governmental agendas. The emphasis is on critical thinking about public policy questions related to the environment, energy, and the emerging global political economy.

POLS 135 American Legal Systems and Processes 3 Credit Hours

Considers legal systems as social/political phenomena and explores the U. S. Constitution, landmark court decisions, and patterns of behavior characterizing legal system participants. This course is appropriate as a lead-in for those interested in the fields of political science, criminal justice, legal secretarial, and paralegal, as well as those considering law school.

POLS 152 International Relations 3 Credit Hours

Designed to help the student understand the diverse phenomena of international relations, the complex patterns of political and economic conflict, interdependence between nation-states and non-governmental organizations. The student is encouraged to think critically and analytically about the world and develop a healthy skepticism toward simple solutions to complex world problems. This course also surveys American foreign policy.

POLS 153 Comparative Government 3 Credit Hours

Examines political institutions and behavior by comparing selected developed nation-states institutions and policies, including the United States, Canada, Japan, and the European Union, with Third World or less-developed nation-states. Students learn to analyze the political and policy consequences of differences and similarities in political institutions. As a result, students gain deeper insight into their own political institutions and behavior.

POLS 154 Metropolitan Politics 3 Credit Hours
 Surveys types of urban government, including special districts. Local legislative, executive, and judicial functions are described. The importance of participation by both the masses and the elite is studied. Land use, tax structure, housing, and regional governments are analyzed on the national and state levels. Select case studies from the Detroit metropolitan area are used.

POLS 155 State and Local Government 3 Credit Hours
 Examines political institutions and processes in the fifty states, including their cultures and constitutions, as well as the public policies of state governments in areas such as education, social welfare, and the environment. City governments are studied using Detroit as a basis for comparison.

PSYCHOLOGY

PSY 090 Supplement to Psychology 1 Credit Hour
 A supplemental course designed to be taken concurrently with Psychology 131. Emphasis is on note-taking, outlining, and textbook study as well as the vocabulary and content of the Psychology 131 course.
Prerequisites: PSY 131

PSY 131 Introductory Psychology 3 Credit Hours
 Introduces elementary concepts and principles related to the scientific study of behavior and the mental processes of cognition and affective states. Variables examined include the history of psychology, the scientific method, theory, biological foundations, psychological processes related to cognition and affective states, developmental changes over time, and applications related to healthy and unhealthy personalities.

PSY 152 Child Psychology 3 Credit Hours
 Provides information on the physical, emotional, intellectual, and social development of the child and adolescent. This includes a variety of theories, recent research, and practical application. A field experience or the equivalent is required.
Prerequisites: PSY 131

PSY 161 Human Sexuality 3 Credit Hours
 Designed to help students evaluate their own attitudes, feelings, and beliefs about sexuality and compare them to those held by others. Frank, open discussions and explicit visual materials cover historical and contemporary issues related to the physiological, emotional, cultural, and legal implications of sexuality with emphasis on the expanding research that is contributing to serious intellectual inquiry.
Prerequisites: PSY 131

PSY 251 Abnormal Psychology 3 Credit Hours
 Students will explore the nature and causes of various forms of abnormal behavior, including schizophrenia, depression, anxiety and other disorders which influence an individual's behavior, feelings, and thought patterns. Disorders will be viewed from psychological, cultural, developmental, and historical perspectives. This class will explore the symptoms, etiology and treatment of each disorder.
Prerequisites: PSY 131

Fall D	Winter D	Spring D	Summer
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PSY 253 Life Span Development 3 Credit Hours
 The study of change in the behavioral processes of individuals as a function of aging throughout the life span. The course begins with prenatal concerns and progresses through the years of infancy, childhood, adolescence, adulthood, and aging. Course content includes theory and research associated with biological, cognitive, affective, and social development.
Prerequisites: PSY 131

PSY 254 Social Psychology 3 Credit Hours
 Introduces the social forces affecting people's lives and how people affect their group. This course examines three areas of behavior resulting from intentional influence, membership in a group, and social interaction. Self-perception, behavior and attitude, attraction, aggression, altruism, and group process are also explored. This course may be taken for credit in either psychology or sociology but not both. (See SOC 254.)
Prerequisites: SOC 131 and PSY 131 or permission of the instructor

PSY 256 Educational Psychology 3 Credit Hours
 Covers theories of learning and cognition, how development proceeds, and the implications for instruction of a diverse student population and how to deal with those implications effectively. Managing classroom discipline, as well as motivating, instructing, and assessing students to assure progress in learning are also covered. This course is not to be taken concurrently with PSY 152. (See PSY 294.)
Prerequisites: PSY 131

PSY 294 Educational Psychology Practicum 1 Credit Hour
 A practicum in observing child behavior and instructional techniques in public school. Students seeking elementary certification observe grades 1 through 8, and those seeking secondary certification observe grades 7 through 12. Forty-five clock hours are required.
Suggested Prerequisites: Enrollment in PSY 256 and permission of instructor

RADIOGRAPHER

RAD 101 Introduction to Radiography 1 Credit Hour

Provides an overview of radiography and its role within health care delivery. Student responsibilities are outlined. Students are oriented to the academic and administrative structure, key departments and personnel, and the profession as a whole. Basic principles of radiation protection, basic equipment manipulation, and types of diagnostic examinations are introduced.

Prerequisites: Acceptance into the Radiographer program.

Note: RAD 108, RAD 109, RAD 111, and RAD 118 must be taken concurrently.

Fall	Winter	Spring	Summer
D			

RAD 108 Patient Care Techniques 3 Credit Hours

Explains the concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency care procedures are described, as well as infection control procedures utilizing Universal Precautions. The radiographer's role in patient education is discussed, as are the parameters of professional practice, including the radiographer's major areas of responsibility in the delivery of health care.

Prerequisites: Acceptance into the Radiographer program

Note: RAD 101, RAD 109, RAD 111, and RAD 118 must be taken concurrently.

Fall	Winter	Spring	Summer
D			

RAD 109 Clinical Education I 3 Credit Hours

A course offering structured clinical experiences in chart recognition, basic assessment, patient communication, and basic radiographic procedures and policies.

Prerequisites: Acceptance into the Radiographer program

Note: RAD 101, RAD 108, RAD 111, and RAD 118 must be taken concurrently.

Fall	Winter	Spring	Summer
D			

RAD 111 Principles of Radiation Protection 2 Credit Hours

Provides an overview of the principles of radiation protection, including responsibilities of the radiographer for the patients, personnel, and public. This course addresses the concepts of As Low As Reasonably Achievable, stochastic and nonstochastic effects, and effective absorbed dose equivalent limits. Regulatory agencies are identified, and the involvement of those agencies in radiation protection is discussed.

Prerequisites: Acceptance into the Radiographer program

Note: RAD 101, RAD 108, RAD 109, and RAD 118 must be taken concurrently.

Fall	Winter	Spring	Summer
D			

RAD 118 Radiographic Positioning I 3 Credit Hours

This is the first of a five semester curriculum in radiographic positioning and procedures. The material is presented through lecture and laboratory components. The course provides a knowledge of positioning terminology, chest, abdomen, and upper extremity procedures. Students will be presented with positioning guidelines during lecture. Psychomotor skills and common knowledge are reinforced through laboratory assignments. Film critique is also a part of the course.

Prerequisites: Acceptance into the Radiographer program

Note: RAD 101, RAD 108, RAD 109, and RAD 111 must be taken concurrently.

Fall	Winter	Spring	Summer
D			

RAD 158 Radiographic Positioning II 3 Credit Hours

This is the second of a five semester curriculum in radiographic positioning and procedures. The material is presented through lecture and laboratory components. The course provides a knowledge of positioning terminology, shoulder girdle, lower extremity, and pelvic girdle procedures. Students will be presented with positioning guidelines during lecture. Psychomotor skills and common knowledge are reinforced through laboratory assignments. Film critique is also part of this course.

Prerequisites: RAD 101, RAD 108, RAD 109, RAD 111, RAD 118, BIO 233

Note: RAD 161, RAD 171, RAD 190, RAD 257 must be taken concurrently.

Fall	Winter	Spring	Summer
	D		

RAD 161 Imaging Equipment 1 Credit Hour

This course is designed to provide knowledge routinely utilized to produce diagnostic images. Various recording media and techniques are discussed. The major emphasis will be on the components of the diagnostic x-ray tube and fluoroscopic imaging systems. Other imaging equipment, such as CT, MRI, and digital imaging are also described.

Prerequisites: RAD 101, RAD 108, RAD 109, RAD 111, RAD 118

Note: RAD 158, RAD 171, RAD 190, RAD 257 must be taken concurrently.

Fall	Winter	Spring	Summer
	D		

RAD 166 Radiographic Film Processing 2 Credit Hours

Provides the knowledge needed to process radiographic film. Requirements for the processing area are identified, and film, film holders, and intensifying screens are discussed. This course also explains processing procedures and artifacts.

Prerequisites: RAD 206, RAD 209, RAD 212, RAD 227, PHYS 133

Note: RAD 267, RAD 274, RAD 290 must be taken concurrently.

Fall	Winter	Spring	Summer
	D		

RAD 171 Principles of Exposure and Film Evaluation 3 Credit Hours

This course is designed to provide the student with knowledge of factors that govern and influence the production of the radiographic image. The student will learn about the main properties of a radiograph—density, contrast, detail and distortion—and all factors that control and/or contribute to producing a quality image. Lecture material is supplemented with experiments which apply classroom knowledge to the clinical setting. Students will present experiment findings. The parameters of film evaluation will be discussed in this course. The process of film critique will continue in all sections of radiographic positioning. Throughout the educational period students should engage in film evaluation at the clinical setting.

Prerequisites: RAD 101, RAD 108, RAD 109, RAD 111, and RAD 118

Note: RAD 158, RAD 161, RAD 190, RAD 257 must be taken concurrently.

Fall	Winter D	Spring	Summer
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RAD 188 Radiographic Positioning III 2.5 Credit Hours

This is the third course in radiographic positioning and procedures. The course provides a knowledge of radiographic anatomy and positioning of the vertebral column and the bony thorax. Lecture material is supplemented with laboratory experiences.

Prerequisites: RAD 158, RAD 161, RAD 171, RAD 190, RAD 257

Note: RAD 194 must be taken concurrently.

Fall	Winter D	Spring	Summer
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RAD 190 Clinical Education II 3 Credit Hours

A structured clinical course focusing on basic radiographic equipment, techniques, procedures, and positioning. Patient interaction is also a component of this course.

Prerequisites: RAD 109

Note: RAD 158, RAD 161, RAD 171, RAD 257 must be taken concurrently.

Fall	Winter D	Spring	Summer
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RAD 194 Clinical Education III 1 Credit Hour

A structured clinical course focusing on procedures and techniques needed for radiographic studies of the upper and lower extremities, chest, abdomen, trunk, and spine. Patient interaction is also a component of this rotation.

Prerequisites: RAD 190

Note: RAD 188 must be taken concurrently.

Fall	Winter	Spring D	Summer
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RAD 197 Clinical Education IV 3 Credit Hours

A continuation of the clinical experiences of RAD 194, with emphasis on technical proficiency and quality.

Prerequisites: RAD 194

Fall	Winter	Spring	Summer D
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RAD 206 Pathology/Film Evaluation 2 Credit Hours

A lecture course introducing students to the parameters of film evaluation. Throughout the positioning courses, students should participate in regular, formal sessions of such evaluation, with increasing complexity of radiographic exams and critique. The pathology unit of this course provides an introduction to the concepts of disease and the relationship of pathology to various radiographic procedures.

Prerequisites: RAD 188

Note: RAD 209, RAD 212, and RAD 227 must be taken concurrently.

Fall D	Winter	Spring	Summer
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RAD 209 Clinical Education V 3 Credit Hours

A structured clinical course emphasizing the radiographic procedures involving the spine and bony thorax.

Prerequisites: RAD 197

Note: RAD 206, RAD 212, RAD 227 must be taken concurrently.

Fall D	Winter	Spring	Summer
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RAD 212 Introduction to Quality Assurance 1 Credit Hour

Provides an introduction to the evaluation of radiographic systems to assure consistency in the production of quality images. The components involved in the radiography system are identified, and tests and procedures to evaluate these components are discussed. State and federal standards are described. Students are required to perform routine tests of diagnostic x-ray equipment.

Prerequisites: RAD 188

Note: RAD 206, RAD 209, RAD 227 must be taken concurrently.

Fall D	Winter	Spring	Summer
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RAD 227 Radiographic Positioning IV 3 Credit Hours

Designed to address, through lecture and laboratory sessions, radiographic anatomy and positioning of the skull, facial bones, paranasal sinuses, and mastoids.

Prerequisites: RAD 188

Note: RAD 206, RAD 209, RAD 212 must be taken concurrently.

Fall D	Winter	Spring	Summer
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RAD 257 Radiographic Positioning V 2 Credit Hours

This is a section of a five semester curriculum in radiologic positioning and procedures. This course will cover the equipment needs, contrast requirements, and general procedures for radiographic examinations of the gastrointestinal tract, biliary tract, and urinary system. Consideration will also be given to special procedures in diagnostic radiography. Additionally, students will study and evaluate radiographic images of these procedures.

Prerequisites: RAD 101, RAD 108, RAD 109, RAD 111, RAD 118

Note: RAD 158, RAD 161, RAD 171, RAD 190 must be taken concurrently.

Fall	Winter D	Spring	Summer
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RAD 267 Radiation Physics 4 Credit Hours

Provides a knowledge of basic physics, including electrostatics, electrodynamics, electromagnetic induction, fundamentals of x-ray generating equipment, x-ray production, and beam characteristics. X-ray photon interactions with matter will be reviewed.

Prerequisites: RAD 206, RAD 212, RAD 227, RAD 209

Note: RAD 166, RAD 274 and RAD 290 must be taken concurrently.

Fall D	Winter	Spring	Summer
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RAD 274 Radiation Biology 2 Credit Hours

Provides an overview of the principles of the interaction of radiation with living systems, including radiation effects on biological molecules and organisms and factors affecting biological response. Acute and chronic effects of radiation are discussed.

Prerequisites: RAD 206, RAD 209, RAD 212, and RAD 227

Note: RAD 166, RAD 267 and RAD 290 must be taken concurrently.

Fall D	Winter	Spring	Summer
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RAD 286 Registry Review 2 Credit Hours

A comprehensive review designed to prepare the radiographic technology student for the registry examination. The basic intent is to facilitate an orderly review based upon the topics itemized in the registry index. Test-taking strategies are also discussed.

Prerequisites: RAD 166, RAD 267, RAD 294

Note: RAD 298 and HCS 106 must be taken concurrently.

Fall D	Winter	Spring	Summer
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RAD 290 Clinical Education VI 3 Credit Hours

A structured clinical course emphasizing the radiographic procedures involving the face, skull, and sinuses.

Prerequisites: RAD 209

Note: RAD 166, RAD 267 and RAD 274 must be taken concurrently.

Fall	Winter D	Spring	Summer
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RAD 294 Clinical Education VII 3 Credit Hours

A continuation of the clinical component of the program, with emphasis on technical proficiency, speed, and quality.

Prerequisites: RAD 290

Fall	Winter	Spring D	Summer
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RAD 298 Clinical Education VIII 1 Credit Hour

A structured clinical experience continued radiography and in specialty rotations such as Ultrasound, C.T. Scan, Mobile, and Surgical Radiography.

Prerequisites: RAD 294

Note: HCS 106 and RAD 286 must be taken concurrently.

Fall	Winter	Spring	Summer D
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RELIGIOUS STUDIES

WR 090 Supplement to World Religion 1 Credit Hour

A supplemental course designed to be taken concurrently with World Religion 131. Emphasis is on notetaking, outlining, and textbook study as well as the vocabulary and content of the World Religion 131 course.

Suggested Prerequisites: WR 131

WR 130 Introduction to the Study of Religion 3 Credit Hours

Explores the religious impulse as reflected in non-traditional as well as traditional contexts. Topics include the nature of religious experience, the Divine, the Self, and the dilemmas of freedom and mortality. Contemporary issues reflecting ethical concerns, including liberation movements, the ecological crisis, and peace and justice issues, are examined. Readings are cross-disciplinary, drawing from both the humanities and behavioral sciences.

WR 131 Comparative Religion 3 Credit Hours

Introduces the beliefs, practices, and experiences of the major world religious traditions. In addition to examining the particulars of each faith, this course emphasizes current perspectives in religious studies that serve to clarify the nature and functions of religion as a force shaping the increasingly pluralistic modern world.

WR 232 Western Religions: Judaism, Christianity and Islam 3 Credit Hours

Students will explore the differences and commonalities among Judaism, Christianity and Islam. This class will help to sensitize students to the diverse ways that Western religious traditions pursue the basic questions of ultimate reality. The course will define religion, explore its function and purpose, and identify the origins of Western religious motifs still very much in evidence in the twentieth century.

WR 233 Eastern Religions 3 Credit Hours

This course introduces the beliefs, practices and experiences of major Eastern religions. This academic study of religion explores Eastern religious philosophies as a whole complex worldview, as well as investigates the unique beliefs and practices of several Eastern religions. This is accomplished by examining historical roots, developmental growth as well as modern versions of major Eastern religions enabling the student to understand the perspective of Eastern religious philosophies.

RESPIRATORY THERAPIST

RTH 100 Principles of Respiratory Care 3 Credit Hours

An in-depth study of the cardiopulmonary system from fetal development through old age in health and disease. Topics include respiratory care history, cardiopulmonary anatomy and physiology, the effects of aging on the pulmonary system, basic pulmonary assessment and an introduction to basic pulmonary diseases. Three hours of lecture per week.

Prerequisites: Acceptance into the Respiratory Therapist Program

Note: RTH 100 and RTH 119 must be taken at the same time. BIO 233 may be taken prior to or during the same semester as RTH 100.

Fall	Winter	Spring	Summer
D			

RTH 119 Introduction to Clinical Therapy 2 Credit Hours

Offers a structured laboratory/clinical experience that emphasizes basic patient assessment, pulse oximetry, basic gas laws, medical gas administration, oxygen therapy delivery systems, and lung expansion techniques. Two hours of lecture and three hours of lab/clinic per week.

Prerequisites: Acceptance into the Respiratory Therapist Program

Note: RTH 100 and RTH 119 must be taken at the same time. BIO 233 may be taken prior to or during the same semester as RTH 119.

Fall	Winter	Spring	Summer
D			

RTH 160 Respiratory Therapy Pharmacology 2 Credit Hours

This course focuses on the appropriate and effective administration of respiratory care medications, including an overview of pharmacology, terminology, routes, techniques of administration and calculation of dosages. The NAEPP Guidelines for Asthma Management are stressed. Two hours of lecture per week.

Prerequisites: RTH 100 and RTH 119

Note: RTH 160 and 175 must be taken at the same time.

Fall	Winter	Spring	Summer
	D		

RTH 175 Respiratory Care Procedures II 5 Credit Hours

This course provides instruction in therapeutic procedures utilized by the respiratory therapist. Course content includes airway care, emergency life support, bronchial hygiene, and lung expansion therapy. Students practice these procedures in a guided laboratory setting. Three hours of lecture and two hours of laboratory per week.

Prerequisites: RTH 100, RTH 119, and BIO 233

Note: RTH 175 and RTH 160 must be taken at the same time.

Fall	Winter	Spring	Summer
	D		

RTH 180 RT Clinical Sciences 3 Credit Hours

This course focuses on the clinical application of science to the practice of respiratory care. Topics include common microbial pathogens seen with pulmonary infection, infection control guidelines, protection of the respiratory therapist and disinfection and sterilization of respiratory care equipment. The course continues with the study of oxygenation, acid-base balance, and the physical principles of ventilation in health and disease. Emphasis is placed on blood gas interpretation, capnography, and puncture techniques.

Prerequisites: RTH 100 and RTH 119

Fall	Winter	Spring	Summer
	D		

RTH 194 Clinical Therapeutics 2 Credit Hours

Offers students experience in selected health care facilities for directed clinical practice with oxygen delivery systems, basic patient assessment techniques, and therapeutic treatment regimens. Six clinical hours per week.

Prerequisites: RTH 100, RTH 119, and BIO 233

Note: RTH 160 and RTH 175 must be taken at the same time as RTH 194.

Fall	Winter	Spring	Summer
	D		

RTH 210 Ventilator Management I 4 Credit Hours

A study of the theories, techniques, and equipment used to achieve adequate spontaneous and artificial ventilation in the adult patient. Two and one-half hours of lecture and one and one-half hours of laboratory per week.

Prerequisites: RTH 160, RTH 175, RTH 180, RTH 194, and BIO 234

Fall	Winter	Spring	Summer
		D	

RTH 216 Cardiopulmonary Testing 2 Credit Hours

This course discusses basic pulmonary function testing and electrocardiographic testing. Basic theory and techniques for testing are covered. Students are expected to perform and evaluate these tests for use by the physician. Two hours of lecture per week.

Prerequisites: BIO 234

Fall	Winter	Spring	Summer
D			

RTH 235 Neonatal and Pediatric Respiratory Care 3 Credit Hours

A study of the anatomy, physiology, and pathophysiology of the premature neonate through adolescence. This is followed by an extensive overview of respiratory therapeutics related to the care of the neonatal/pediatric patient. Two hours of lecture and two hours of laboratory per week.

Prerequisites: RTH 205 and RTH 291

Fall	Winter	Spring	Summer
D			

RTH 245 Applied Respiratory Care 2 Credit Hours

Emphasizes the assessment and management of patients with cardiopulmonary disease. Students apply the techniques and concepts learned in their first year to common disease states seen in the critical care areas. Two hours of lecture per week.

Prerequisites: RTH 210 and RTH 291

Note: RTH 245 must be taken concurrently with RTH 216 and RTH 292.

Fall D	Winter	Spring	Summer
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RTH 275 Therapeutic Management 1 Credit Hour

Provides the opportunity to apply in simulated settings concepts learned throughout the program. Students spend one hour per week working on computerized clinical case study simulations, selecting appropriate treatments and managing patients. Two hours of laboratory per week.

Prerequisites: RTH 216, RTH 235, RTH 245, and RTH 292

Fall	Winter D	Spring	Summer
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RTH 285 Advanced Respiratory Concepts 3 Credit Hours

A study of the current theory and techniques encountered by the respiratory therapist in a variety of clinical settings. Emphasis is placed on advanced ventilatory applications, cardiopulmonary monitoring, and the Respiratory Care Professional's dynamic role in the health care setting. Three hours of lecture per week.

Prerequisites: RTH 216, RTH 235, RTH 245, and RTH 292

Note: RTH 275 and RTH 285 must be taken at the same time.

Fall	Winter D	Spring	Summer
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RTH 291 Advanced Clinical Therapeutics 4 Credit Hours

Further develops the clinical skills related to airway maintenance, removal of bronchopulmonary secretions, CPR, and oxygenation. Students also evaluate, modify, and monitor patients' responses to respiratory treatment regimes. A ten-week directed clinical experience includes fifteen hours per week.

Prerequisites: RTH 160, RTH 175, RTH 180, and RTH 194

Fall	Winter	Spring D	Summer
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RTH 292 Clinical Practicum 5 Credit Hours

Further develops therapeutic clinical skills for adult critical care areas, pulmonary function testing labs, diagnostic labs and beginning neonatal critical care. Emphasis is on assessing needs, designing care plans, and implementing and evaluating the procedures especially employed for mechanical ventilatory support and systemic oxygenation. Fifteen hours per week of directed clinical experience.

Prerequisites: RTH 210 and RTH 291

Fall D	Winter	Spring	Summer
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RTH 294 Advanced Clinical Practicum 8 Credit Hours

Further develops the clinical skills and techniques used to manage patients requiring mechanical ventilatory support in the hospital, subacute and home care setting. Twenty-four hours per week of directed clinical experience.

Prerequisites: RTH 216, RTH 235, RTH 245, and RTH 292

Note: RTH 275 and 285 are to be taken at the same time as RTH 294.

Fall	Winter D	Spring	Summer
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SCIENCE

SCI 131 Revolutions in Science 3 Credit Hours

Explores the development of modern Western science from its origins in the ancient world to the present day. Students will develop an understanding of major scientific theories through the study of selected original writings in translation as well as modern commentaries.

Suggested Prerequisites: A previous college-level science course is recommended.

Note: Non-lab science class

Fall E	Winter E	Spring	Summer
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SCI 210 Introduction to Science for Elementary Education 4 Credit Hours

This is the first science course in a sequence intended for pre-service elementary school education majors. The course will introduce students interested in elementary school teaching to a broad overview of both science instruction and the process of science. Students will investigate, discuss, and design experiments using the group inquiry method of instruction.

Prerequisites: A grade of C or better in MATH 080, or a satisfactory score on the Math placement test.

Note: This course may have special transfer rights to certain schools of education. Consult with the Director of the Pre-Education Program for details.

Fall D	Winter D	Spring	Summer
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SCI 213 Learning by Inquiry: Life Science 4 Credit Hours

This course is designed to provide pre-service elementary and middle school teachers with the necessary tools, knowledge, and motivation to teach basic biological concepts. In this course students will integrate major biological themes and understand how the topics covered in the course fulfill the National Science Education Standards and the Michigan Curriculum Framework. Students will use inquiry-based learning.

Prerequisites: A grade of C or better in MATH 080 or a satisfactory score on the math placement test.

Note: This course may have special transfer rights to certain schools of education. Consult with the Director of the Pre-Education Program for details.

Fall D	Winter D	Spring	Summer
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SWC 131 Science In Western Culture 3 Credit Hours
 Considers science in its philosophical, religious, and methodological contexts throughout history, by studying examples from ancient Greek and Arabic thought, natural philosophy in the Middle Ages, the scientific revolution, and the rise of modern science. Emphasis is on understanding the nature of scientific enterprise and interactions between science and its cultural matrix. This course can be used toward fulfilling Group I (Humanities) graduation requirements.

SOCIAL SCIENCE

SSC 131 A Survey of the Social Sciences 3 Credit Hours
 Surveys the several disciplines found under the general heading of the social sciences: anthropology, economics, geography, ecology, demography, psychology, sociology, and political science. This course also presents the development of each discipline and its important concepts.

SSC 235 Topics in Social Science 3 Credit Hours
 Provides special study in an area of social science, organized by subject, field of inquiry, or other criteria. This course may be taken twice for credit, six hours maximum, but the two topics must be different. Specific topics and any prerequisites are listed in the current semester's class schedule or may be obtained through the Social Science Division office.

SOCIOLOGY

SOC 090 Supplement to Sociology 1 Credit Hour
 A supplemental course designed to be taken concurrently with Sociology 131. Special help is provided with the vocabulary and content of SOC 131, as well as with note-taking and study techniques.

Suggested Prerequisites: SOC 131

SOC 131 Introduction to Sociology 3 Credit Hours
 Introduces the sociological approach to understanding human behavior. Students investigate how a society's culture and social organization shape actions and influence everyday life. Connections between the individual and society are explored in relation to all aspects of social life, including family, work, social inequality, religion, politics, and the economy. This course provides the basis for further study in sociology and social work.

Note: This course meets the graduation requirement for General Education Outcome 1: American Society, Events, Institutions and Cultures.

SOC 132 Marriage and the Family 3 Credit Hours
 Makes the student more aware of the personal decisions one makes in life and of the cultural influences affecting decisions relating to family situations. Areas of discussion include definitions of marriage and the family, married partners as individuals, becoming partners, experiencing family commitment, changing commitments, and cross-cultural comparisons.

SOC 151 Contemporary Social Problems 3 Credit Hours
 Focuses on current social problems and issues facing American society. Students investigate a series of important problems, including poverty, urban decline, family instability, crime, and discrimination, by using a sociological perspective. The primary goals of this course are increasing student awareness of the causes of social problems and investigating possible solutions.

Prerequisites: This course meets the graduation requirement for General Education Outcome 1: American Society, Events, Institutions and Cultures.

SOC 152 Women, Men, and Society 3 Credit Hours
 Uses a sociological approach to investigate sex-related issues such as changing gender roles, sex discrimination, sexual harassment, homophobia, gender-related violence, reproductive rights, and child custody. Emphasis is on increasing student understanding of how and why the everyday experiences of women and men can differ significantly in such areas as employment, education, politics, law, medical care, sexuality, and domestic life.

SOC 251 Ethnic and Racial Diversity in Societies 3 Credit Hours

Introduces students to the sociological study of ethnic and racial groups. Students explore key concepts and issues in connection with definitions of race and ethnicity, immigration, patterns of group inequality and domination, discrimination and prejudice. Focuses on the diversity of U.S. society and explores the experiences of Native Americans and immigrant groups, including those from Africa, Asia, and Europe. Emphasis on current patterns and consequences of immigration will be studied. Ethnic and racial diversity in other societies will also be explored.

Prerequisites: SOC 131

SOC 254 Social Psychology 3 Credit Hours
 Introduces the social forces affecting people's lives and how people affect their group. This course examines three areas of behavior resulting from intentional influence, membership in a group, and social interaction. Self-perception, behavior and attitude, attraction, aggression, altruism, and group process are also explored. This course may be taken for credit in either psychology or sociology but not both. (See PSY 254.)

Prerequisites: SOC 131 AND PSY 131 or permission of the instructor

SPEECH COMMUNICATION

SPC 131 Fundamentals of Speaking 3 Credit Hours
 Designed to meet the needs of the beginning student. Emphasis is on the development of skill in oral communication through practice in extemporaneous speaking.

Fall	Winter	Spring	Summer
D/E/W	D/E/W	D/E	D/E

SPC 145 Interpersonal Communication 3 Credit Hours
 Explores the process of communication between individuals in relatively informal, face-to-face situations that occur in family, social, and work groups.

Fall	Winter	Spring	Summer
D/E	D/E		

SPC 232 Health Communication 3 Credit Hours

Surveys the interaction of health care and communication issues. This course examines communication theories as applied to health care issues and the role and effectiveness of persuasive and informational mass media campaigns in the health field. The focus is on ethical issues, decision-making skills, and such subjects as listening, interpersonal communication, message observation and analysis, and decision making.

Prerequisites: SPC 131

Fall Winter Spring Summer
E

SURGICAL TECHNOLOGY

SRG 101 Introduction to Surgical Technology 4 Credit Hours

The course introduces the fundamentals of operating room techniques, emphasizing principles and practices of asepsis and sterilization. Physical and psychosocial aspects of the patient are explored. Included are the role and responsibilities of the surgical technologist and other surgical team members; accountability and legal aspects; identification of common equipment, instruments, and supplies. Students practice scrubbing, gowning, and gloving. Selected laboratory practice and one OR observation are required.

Prerequisites: Acceptance into the SRG Program

Note: BIO 233, BIO 135, AH 100 must be taken concurrently.

Fall Winter Spring Summer
E

SRG 120 Surgical Procedures I 4 Credit Hours

This lecture/laboratory course is designed to continue to develop the concepts from SRG 101. It features the theory and practice for general, gynecology, genitourinary, orthopedic, otorhinolaryngology, and endoscopy surgical procedures. The course also emphasizes the scheme or steps as well as the instrumentation of these surgical interventions. Two OR observations are required.

Prerequisites: BIO 233, BIO 135, AH 100, SRG 101

Note: BIO 234, SRG 160, HCS 103, HCS 124, and ENG 131 must be taken concurrently.

Fall Winter Spring Summer
D

SRG 160 Surgical Pharmacology 3 Credit Hours

A study of medications used in the operating room with an emphasis on the common drugs used in the surgical area. This course examines the administration, actions, interactions, side-effects, and terminology of perioperative medications. Included are legal responsibilities of the surgical technologist and common calculations performed in a sterile field. The student must present two reports as well as complete a term paper.

Prerequisites: SRG 101, BIO 233, BIO 135, and AH 100

Suggested Prerequisites: SRG 120, BIO 234

Note: SRG 120 and BIO 234 must be taken concurrently.

Fall Winter Spring Summer
E

SRG 209 Clinical Externship I 5 Credit Hours

A practicum developing concepts learned in SRG 101. Students are assigned to an affiliated agency where they practice skills involving surgical techniques and principles. They actively participate as members of the surgical team, developing skills necessary to “scrub” and assisting in “circulating” during surgical procedures under supervision. Sixteen hours per week.

Prerequisites: SRG 101, SRG 120, SRG 160, BIO 233, and BIO 234

Suggested Prerequisites: SRG 220, SSC 131

Note: SRG 220 and SSC 131 must be taken concurrently.

Fall Winter Spring Summer
D

SRG 220 Surgical Procedures II 4 Credit Hours

A lecture/laboratory course designed to develop further the student’s knowledge of surgical specialties and clinical practice, including cardiovascular, thoracic, neurologic, oral, ophthalmic, reconstruction, pediatric, and geriatric procedures. The scheme or steps as well as the instrumentation of the common procedures performed are emphasized.

Prerequisites: SRG 101, SRG 120, SRG 160, BIO 233, and BIO 234

Note: SRG 209 must be taken concurrently.

Fall Winter Spring Summer
D

SRG 240 Issues in Surgical Technology 4 Credit Hours

Students will identify and discuss advanced surgical procedures focusing upon trauma, transplants, major orthopedic procedures, and the basic principles in the application of robotics in surgery. Electrical elements/concerns and applied physics in the operating room will be discussed. The course will also emphasize the elements of professional development including professional organizations, leadership, teamwork, certification and continuing education. Students will discuss the role of the AST and its impact upon careers in surgical technology. Employability skills will be reviewed and applied. Students will be introduced to techniques and exercises in preparation for the national CST exam. Written and oral presentations by the students are key elements of this course. All students will be required to successfully complete the national Program Assessment Exam (PAE).

Prerequisites: SRG 220 and SRG 209

Suggested Prerequisites: SRG 290

Note: SRG 290 must be taken concurrently.

Fall Winter Spring Summer
D

SRG 290 Clinical Externship II 8 Credit Hours

A practicum that further develops clinical proficiency. Students are assigned to an affiliated agency where they practice skills related to surgical techniques and principles. They participate as members of the surgical team, developing skills necessary to scrub and assisting in circulating during surgical procedures. Students scrub alone for some surgical procedures. Students must prepare a case study. Twenty-four hours per week.

Prerequisites: SRG 220, SRG 209

Suggested Prerequisites: SRG 240

Note: SRG 240 must be taken concurrently.

Fall Winter Spring Summer
D

TECHNICAL COOPERATIVE EDUCATION

ICO 191 Industrial Co-Op 2 Credit Hours

Offers practical work experience within the student's program of study through participation in a supervised cooperative education program. This course integrates work experience, classroom instruction, and related career issues.

Prerequisites: Permission of the Cooperative Educational Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

ICO 192 Industrial Co-Op (2) 2 Credit Hours

Offers practical work experience within the student's program of study through participation in a supervised cooperative education program. This course integrates work experience, classroom instruction, and related career issues.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

ICO 193 Industrial Co-Op 1 Credit Hour

Offers practical work experience within the student's program of study through participation in a supervised cooperative education program. This course integrates work experience, classroom instruction, and related career issues.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

ICO 291 Industrial Co-Op (3) 2 Credit Hours

Offers practical work experience within the student's program of study through participation in a supervised cooperative education program. This course integrates work experience, classroom instruction, and related career issues.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

ICO 292 Industrial Co-Op (4) 2 Credit Hours

Offers practical work experience within the student's program of study through participation in a supervised cooperative education program. This course integrates work experience, classroom instruction, and related career issues.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

ICO 293 Industrial Co-Op 1 Credit Hour

Offers practical work experience within the student's program of study through participation in a supervised cooperative education program. This course integrates work experience, classroom instruction, and related career issues.

Prerequisites: Permission of the Cooperative Education Specialist

Note: Co-op is available for the Fall, Winter, and Spring/Summer semesters (Spring/Summer is a full 15-week semester). Placements may be days, evenings, or weekends depending on employer needs.

TELECOMMUNICATION

TCM 131 Introduction to Telecommunication 3 Credit Hours

A survey course investigating the various electronic communication media, as well as the print media, from historical, economic, and social viewpoints.

Fall Winter Spring Summer
D D

TCM 132 Film History and Criticism 3 Credit Hours

An introduction to the film medium and the film experience as entertainment, artistic expression, and social communication, through examination of production techniques, critical theories, and historic examples.

Prerequisites: ENG 131

Fall Winter Spring Summer
D D

TCM 151 Digital Audio Editing 1 Credit Hour

An intensive workshop introduction to digital audio editing, using an industry standard software editing program on computers in the Telecommunication audio production labs. Both hardware and software issues will be covered, and several short editing exercises will be completed.

Fall Winter Spring Summer
D D

TCM 157 Digital Video Editing 1 Credit Hour

An intensive tutorial introduction to the key operating features and potential of an industry-standard software program in digital video editing, utilizing the facilities of the Telecommunication computer video lab. Both hardware and software issues will be covered, and several short editing exercises will be completed.

Fall Winter Spring Summer
D D

TCM 189 WHFR-FM Staff Training 1 Credit Hour

Provides an orientation to the non-commercial, educational radio station licensed to the college. Students learn essential station rules and procedures, operation of equipment, and basic performance skills. This course is open to all students but is required of those who wish to join the staff and assist in the operation of WHFR.

Fall	Winter	Spring	Summer
D/E	D/E		

TCM 235 Topics in Film Study 3 Credit Hours

Special study in an area of film study, organized by theme, genre, historical period, or other criteria. This course may be taken twice for credit, six hours maximum, but the topics must be different. Specific topics and any prerequisites are listed in the class schedule.

Fall	Winter	Spring	Summer
D	D		

TCM 241 Media Writing 3 Credit Hours

Offers an analysis of and practice with the forms and formats of mass media script writing: commercial, promotional, public service, interview, instructional, and dramatic.

Prerequisites: ENG 131

Fall	Winter	Spring	Summer
D	D		

TCM 243 Media Performance 3 Credit Hours

Offers study and practice in the skills required for successful communication from behind microphones and in front of cameras, with special attention on announcing, interviewing, and acting.

Fall	Winter	Spring	Summer
D	D		

TCM 251 Audio Production 3 Credit Hours

An introduction to the basic equipment and techniques of professional analog and digital sound recording, mixing, and editing through lecture, demonstration, and the completion of short production assignments typically found in radio broadcasting today from commercials to DJ shows. Though basic concepts will be learned, this course is not intended as experience in multi-track music production.

Suggested Prerequisites: TCM 151

Fall	Winter	Spring	Summer
D	D		

TCM 257 Video Production 3 Credit Hours

Introduces the basic concepts and skills of film and video production. The entire production process from script to editing is discussed and experienced with emphasis on key equipment and techniques. Differences between media are assessed and analyzed. Projects include individual and group work, both in the studio and on location.

Prerequisites: TCM 251

Fall	Winter	Spring	Summer
D	D		

TCM 261 Broadcast Journalism 3 Credit Hours

Offers study and experience in broadcast news program production from creation to presentation, utilizing, whenever possible, the HFCC FM radio station and cable television facilities. Reporting and writing skills are developed, along with production and performance skills.

Prerequisites: ENG 131

Fall	Winter	Spring	Summer
D	D		

TCM 291 Radio Practicum 3 Credit Hours

Offers direct experience in the operation of HFCC radio station WHFR-FM.

Prerequisites: TCM 189

Fall	Winter	Spring	Summer
D	D		

TCM 294 Internship 3 Credit Hours

Offers on-the-job experience with a telecommunication business, such as a radio or TV station, a cable TV studio, or advertising or public relations office. Minimum requirement of 150 hours of volunteer work. Positions vary from semester to semester. Student should contact the instructor for counseling and permission at least one month before the semester begins.

Prerequisites: Permission of the instructor

TCM 295 Directed Study 3 Credit Hours

Instructor-guided work on a student-initiated project in the Telecommunication field, either scholarly or creative or both.

Prerequisites: Permission of the instructor

THEATRE

STH 131 Theatre Appreciation 3 Credit Hours

A survey course consisting of lecture and discussion classes in the components, methods and history of theatrical production. Subject areas may include but are not limited to acting, directing, technical theater and history.

Fall	Winter	Spring	Summer
D/E	D/E	D	D

STH 132 Acting I 3 Credit Hours

An introduction to basic acting techniques, theories of acting, and rehearsal procedures. Emphasis is placed on modern and contemporary comedies and dramas. Students engage in relaxation, concentration, and vocal exercises. Attention is given to formal script analysis and breaking down dialogue and action into objective and intentions. Students will perform scenes from contemporary plays.

Fall	Winter	Spring	Summer
D/E	D/E		

STH 133 Technical Theatre 3 Credit Hours

Offers practical application of the fundamentals of set construction, rigging, painting, sound, lighting, and special effects.

Fall	Winter	Spring	Summer
D/E	D/E	D/E	D/E

STH 135 Introduction to Stage Makeup 3 Credit Hours

An analysis of the basic functions of stage makeup and a demonstration of techniques of makeup application. Students explore age, animal, fantasy, horror, and foam latex prosthetic makeup techniques. Students design and apply their own makeups as well as design and apply makeups for HFCC mainstage productions.

STH 138 Stage Costuming 3 Credit Hours

A course designed to introduce the history, design, and construction of costumes for the stage. Students will selectively study the history of stage costuming from the Greeks to the present day with an emphasis on line, form, production requirements, principles of stage costume design, and building techniques.

STH 140 One Act Play Production 3 Credit Hours

Offers lecture and practice in the organization and specific skills necessary for the public performance of one-act plays. Students are provided opportunities in the areas of acting, assistant directing, stage management, publicity, and house management.

Prerequisites: STH 132 or permission of the instructor

STH 142 Theatrical Production 3 Credit Hours

Offers lecture and practice in the organization and specific skills necessary for the performance of full-length comedy, drama, musical, or evening of one-act plays for the new Playwright's Workshop.

Fall	Winter	Spring	Summer
D/E	D/E		

STH 143 Creative Dramatics for Children 3 Credit Hours

Introduces the principles and practice of implementing and conducting theatre activities for young children.

STH 144 Improvisation for the Actor 3 Credit Hours

Introduces the principles and practice of improvisational techniques as applied to performance.

STH 145 Stage Combat 3 Credit Hours

Theory and practice in the skills necessary for basic theatrical fencing, broadsword fighting, falling, and hand to hand combat.

STH 149 Children's Theatre Production 3 Credit Hours

Offers lecture and practice in the organization of specific skills necessary for the public performance of children's plays. Students participate in HFCC's annual Children's Theatre presentation. Students are provided opportunities in the areas of acting, assistant directing, stage management, publicity, and house management.

STH 150 Stagecraft 3 Credit Hours

Basic survey of the major techniques and theories of scenography in the modern theatre, including but not limited to: scenery, tools, properties, rigging, blueprints, lighting, painting, costumes, sound production, the use of computers, and special effects. This course includes classroom lecture and demonstration.

STH 155 Theatre 3 Credit Hours

For students who participate in extra-curricular activities. They may, with the approval of the director of the activity, enroll for three hours of credit per semester.

Prerequisites: Permission of the director of the activity.

STH 232 Acting II 3 Credit Hours

An introduction to basic acting techniques, theories of acting, and rehearsal procedures. Emphasis is placed on modern and contemporary comedies and dramas. Students engage in relaxation, concentration, and vocal exercises. Attention is given to formal script analysis and breaking down dialogue and action into objective and intentions. Students will perform scenes from contemporary plays.

STH 233 Advanced Technical Theatre 3 Credit Hours

Includes participation in the technical aspects of the semester's production. Students are assigned to key technical positions in the areas of lighting, shifting, rigging, properties, painting, building, sound, makeup, costumes, and special effects.

STH 235 Topics in Theater 3 Credit Hours

Provides special study in the area of theater, organized by style, production approach, historical period, or other criteria. This course may be taken twice for credit, six hours maximum, but the two topics must be different. Specific topics and any prerequisites are listed in the current semester's class schedule or may be obtained through the departmental office.

STH 238 Theatre History 3 Credit Hours

A survey of theatrical production, including acting, directing, theatre architecture, artistic movements, and significant ideas that affect the development of theatre from the Greeks through the present. Emphasis is placed on individual research and projects.

STH 242 Advanced Theatrical Production 3 Credit Hours

Designed to allow students who have had STH 142 to further explore areas of practical theatre production.

Prerequisites: STH 142

STH 255 Lighting 3 Credit Hours

An examination of the processes, techniques and principles involved in lighting the stage, studio and location. Students learn the properties of light, color media, and stage lighting equipment. An opportunity to participate in the stage lighting of HFCC production is provided.

STH 256 Directing 3 Credit Hours

An introduction to directing for the stage, surveying the areas of composition, picturization, movement, rhythm, auditions, casting, rehearsals, and actor psychology.

STH 257 Pantomime & Physical Techniques For the Actor 3 Credit Hours

An exploration of the importance of the body in the acting process, with an emphasis on practical experience. Various technique and improvisational exercises will be used to develop a greater sensitivity to and accuracy with emotional expression and physical characterization in the variety of styles.

STH 259 Experimental Theatre Production 3 Credit Hours

Offers lecture and practice in the specific skills necessary for the production of an experimental play. Students are exposed to plays that approach the non-traditional theatrical experience including multimedia, impressionism, expressionism, surrealism, improvisation, performance art, and absurdism. Students are provided opportunities in the areas of acting, assistant directing, stage management, publicity and house management.

Prerequisites: STH 132 or permission of the instructor

STH 260 Acting III 3 Credit Hours

A class designed for students who wish to explore scene work in special areas of interest. Emphasis is placed on student research relevant to the particular scene under exploration. Models of professional performances are provided by video tape, and, when possible, attendance at live professional theatre in the area.

Prerequisites: STH 132 and STH 232

Fall	Winter	Spring	Summer
E			

STH 261 Acting IV 3 Credit Hours

A course for the individual interested in ideas and teaching techniques used when instructing exercise classes and personal training. The student learns what should be included in a total exercise program and how to develop appropriate exercises for different segments of the population. This course is designed to help students pass industry certification exams in personal training and group exercise.

Prerequisites: STH 132, STH 232, and STH 260

STH 281 Theatre Capstone 1 Credit Hour

Provides the required assessment of knowledge and skills for students in their last semester of course work for the Associate of Arts Degree in Theater.

TRADE AND APPRENTICE EDUCATION

Special Offerings

TADV 060 Basic Skills for the Skilled Trades 4 Credit Hours

Designed to provide a comprehensive review of mathematical and algebraic skills as well as knowledge of the industrial workplace in order to prepare the student for an employer-administered apprenticeship test. This review includes measuring devices, spatial relations, blueprint reading, mechanical aptitude, and manufacturing materials and processes.

Note: Summer semester for Trade and Apprentice Education is from May 8 through August 22, 2006.

Fall	Winter	Spring	Summer
E	D/E/W		E

TADV 070 Pre-Apprenticeship Math 2 Credit Hours

This course utilizes shop problems to help students relate math to job situations. Topics include addition, subtraction, multiplication and division of whole and mixed numbers, common and decimal fractions, graphs, and tables.

Note: Summer semester for Trade and Apprentice is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	E		E

TADV 090 Print Reading Fundamentals 2 Credit Hours

Designed to familiarize students with the fundamentals needed for presenting concepts and techniques to various segments of today's industry. Topics include the alphabet (use) of lines; the projection of various shapes and surfaces; the presentation of hidden details; and the methods, units of measurement, and techniques used for locating details in a variety of drawings.

Note: Summer semester for Trade and Apprentice is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

Electrical/Electronics

TAEL 102 DC and AC Electricity 3 Credit Hours

This is an introductory course in electricity, covering the fundamentals of both DC and AC circuits and circuit calculations. Included are electrical definitions, units of electrical measure, series and parallel resistive circuits, capacitance, and inductance. The use of meters and oscilloscopes will be included during lab experiences, along with an introduction to basic wiring and the troubleshooting of circuit faults.

Prerequisites: TAMA 110 - Prerequisite or Co-requisite

Note: TAEL 102 replaces TAEL 103. The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

TAEL 105 AC Theory and Equipment 4 Credit Hours

Covers advanced AC theory. The topics of right triangle trig and complex numbers are included in the class to be used for reactance and impedance calculations. Three-phase power applications with delta and wye distribution and calculations are included. The electrical equipment discussed in this class includes single- and three-phase transformers, induction heating equipment, and several types of AC lighting equipment.

Prerequisites: TAEL 102, TAMA 120 (Prerequisite or Co-requisite)

Note: Summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

Tael 106 Electronics Theory 4 Credit Hours

This is a laboratory-oriented course that stresses the fundamental theories of electronic components and elementary circuit applications. The use of test equipment, including the oscilloscope and meters, is an essential part of the course.

Prerequisites: Tael 105

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
	D/E		E

Tael 115 Digital Theory 2 Credit Hours

A theory and laboratory course covering the fundamental concepts of digital theory. Topics include gates, logic circuits, counters, timers, and display circuits.

Fall	Winter	Spring	Summer
	E		

Tael 145 DC and AC Motors 4 Credit Hours

Includes the fundamentals of both DC and AC motors. DC generators are included along with series, shunt, and compound DC motors. Basic DC starters and control circuits are covered. Both single-phase and three-phase AC induction motors are included along with synchronous, wound-rotor, and universal motors. AC alternators are compared to DC generators.

Prerequisites: Tael 105

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E			E

Tael 150 DC Motors and Controls 2 Credit Hours

Explains the theory of operation of DC motors and generators. DC motor starters and control circuits are covered. Laboratory experiences help the student understand the concepts presented in class. Maintenance and installation of DC machines is also a part of this course.

Prerequisites: Tael 102

Fall	Winter	Spring	Summer
	E		

Tael 200 Ladder Diagrams and Motor Controls 4 Credit Hours

Covers the fundamentals of electrical ladder diagrams and motor control circuits. Ladder logic, as well as labels, documentation, and symbology of electrical drawings, is presented along with the use of ladder diagrams as a troubleshooting tool. Students design and draw several control circuits for three-phase induction motors and wire these circuits in the motor control lab. Several single-phase control circuits are included in the laboratory exercises.

Prerequisites: Tael 145

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	D/E		E

Tael 205 Industrial Electronic Controls 2 Credit Hours

This course provides an overview of industrial electronic control circuits and electronic and electrical sensor circuits. This includes a review of semiconductor and digital theory, troubleshooting techniques, and electronic components including transistors, diodes, SCRs, DIACs, TRIACs, and various ICs. The control circuits discussed include three-phase and switching power supplies, DC motor drives, AC variable frequency motor drives, and resistance welding controllers.

Prerequisites: Tael 106

Fall	Winter	Spring	Summer
E			

Tael 245 Programmable Logic Controllers 4 Credit Hours

This is a laboratory-oriented course that emphasizes programming and industrial applications of programmable control equipment.

Prerequisites: Tael 200

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	E		E

Tael 260 Robotics and Automation 4 Credit Hours

This is a lab-oriented course utilizing actual machines that represent many operations in automated manufacturing. Students prepare programs to operate the machines using Allen Bradley PLC-5 processors.

Prerequisites: Tael 245

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	E		E

Tael 270 Industrial and Commercial Wiring 2 Credit Hours

Designed to acquaint the student with the materials and calculations related to lighting, motor distribution, and other circuit locations in general and hazardous locations as defined by the National Electrical Code.

Prerequisites: Tael 105

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	E		E

Tael 275 Residential Wiring 2 Credit Hours

Covers the fundamentals of residential wiring, especially the aspects of the National Electrical Code specifically applying to residential construction and repairs. Electrical supplies and hardware appropriate for residential applications are included, and residential wiring techniques are explained.

Prerequisites: Tael 105

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	E		E

Tael 278 NEC Review and License Test Prep 3 Credit Hours

This course teaches apprentice electricians and others the applications of the National Electrical Code as it relates to the electrician. Topics include the design of electrical power systems and the factors relating to a safe and reliable installation as required by the code. Testing strategies will be taught to prepare electrical apprentices to take the journeyman license test.

Prerequisites: Tael 270, Tael 275

Note: Tael 278 replaces Tael 265. The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	E		E

Tael 280 Low Voltage and Communication Wiring 2 Credit Hours

Designed to give students working knowledge and practical experience in installation and maintenance of signal/low voltage wiring and signal transmission, including PC board and fiber optic repair and maintenance. The laboratory consists of experiments designed to give the student practice in the use of test equipment, basic troubleshooting, installation procedures, and repair techniques. Safety is emphasized throughout the curriculum.

Prerequisites: Tael 105

Fall	Winter	Spring	Summer
	E		

Tael 285 Industrial Truck Controls 2 Credit Hours

Designed to explain the operation of SCR solid state truck controls to industrial truck apprentices. Topics include review of basic electrical theory, DC generators and motors, batteries and battery charges, silicon-controlled rectifier theory, SCR truck control operation, and troubleshooting.

Prerequisites: Tael 102

Tael 290 High Voltage Power Distribution 2 Credit Hours

Covers the generation, transmission, and distribution of primary electrical power. Topics include underground and overhead distribution systems, types of wire and cables, switching equipment, protective devices, test equipment, personal safety items, OSHA safety rules, and methods of providing protection when working on de-energized electrical equipment.

Prerequisites: Tael 105

Fall	Winter	Spring	Summer
E			

Tael 295 Microprocessors 2 Credit Hours

Covers the fundamentals of microprocessor circuits and microprocessor programming, including the interfacing of the microprocessor with the outside world through the handling of input and output data with a Peripheral Interface Adapter (PIA).

Prerequisites: Tael 105

Fall	Winter	Spring	Summer
	E		

Foundation of Apprenticeship

TAFD 112 Construction Blue Print Reading 2 Credit Hours

This course introduces students to the prints utilized in the construction trades, such as plumbing, electrical, carpentry, welding, and energy technology. Students will learn the fundamentals and languages required to read construction drawings. Topics will include measurement, lines, symbols, drawing views, working notes, and the importance of title blocks.

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	E		E

TAFD 115 Computer Applications for Skilled Trades 2 Credit Hours

An introductory course providing familiarity rather than proficiency and stressing industrial applications. This course explores software programming, storage/input/output devices, and controls as they apply to industry. Experiences and demonstrations in keyboarding, DOS, word processors, spreadsheets, databases, computer graphics, basic programming, and two dimensional computer-aided drafting are included.

Note: This course meets the graduation requirement for General Education Outcome 2: Computer Literacy.

The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

TAFD 120 Industrial Safety Awareness 2 Credit Hours

Presents a comprehensive approach to safety, designed to give the skilled tradesperson the knowledge of safety fundamentals and practices, from the causes of accidents to the study of safety hazards and rules associated with equipment and tools utilized in modern industrial facilities.

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

TAFD 130 Applied Industrial Applications-Physical Science 3 Credit Hours

Offers the apprentice an exposure to the applications of physics and chemistry found in the industrial workplace. Topics include the six elemental machines, applications of forces, motion, and work, as well as the chemistry of industrial materials and chemical interactions in the environment.

Prerequisites: TAMA 120

Fall	Winter	Spring	Summer
D/E	D/E		

TAFD 150 Applied Technology 3 Credit Hours

An introductory course, appropriate for all trades, using practical concepts and examples to provide knowledge of fluid power, electricity, mechanical power transfer, and rigging. Safety is stressed throughout.

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

Fluid Power

TAFP 150 Fluid Power Systems 4 Credit Hours

Provides an introduction to the principles of fluid power as they apply to industrial systems. Various hydraulic components are presented and studied in terms of their functions within fluid power systems. This course includes both lecture and laboratory work.

Prerequisites: TAMA 120

Note: During the summer semester, TAFP 150 meets twice a week for 15 sessions.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

TAFP 160 Pneumatic Power/Pneumatic Control 4 Credit Hours

Explores the principles of fluid power pneumatics as they apply to industrial systems. Various pneumatic components are presented and studied with respect to their functions within pneumatic power and control systems. This course includes both lecture and laboratory work.

Prerequisites: TAFP 150

Note: During the summer semester TAFP 160 will meet twice a week for 15 sessions.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

TAFP 260 Fluid Power Systems- Advanced 4 Credit Hours

Continues the exploration of the principles of fluid power as they apply to industrial systems. Various hydraulic components are presented and studied in greater depth with respect to their functions within fluid power systems. This course includes both lecture and laboratory work.

Prerequisites: TAFP 150

Fall	Winter	Spring	Summer
	D/E		

TAFP 270 Fluid Power Systems: Circuit Design/Troubleshooting 4 Credit Hours

Explores the principles of fluid power design and troubleshooting as they apply to industrial systems. Various hydraulic circuits are presented and studied with respect to their functions, efficiencies, and troubleshooting guidelines within fluid power systems. This course includes both lecture and laboratory work.

Prerequisites: TAFP 150

Fall	Winter	Spring	Summer
D/E			

TAFP 280 Applied Electrohydraulics 3 Credit Hours

Introduces basic electrohydraulic fundamentals, components, and procedures relative to troubleshooting, maintenance, and set-up of proportional and servo valves. The theory and practice of electrohydraulics are taught with hands-on laboratory experience emphasized.

Prerequisites: TAFP 150

Fall	Winter	Spring	Summer
	E		

Graphic Design Industrial Materials

TAGD 110 Basic Shape and Size Interpretation 3 Credit Hours

Designed to introduce the concepts of shape and size description of normal surfaced, inclined (single-angle) surfaced, and cylindrical objects. Students use traditional and computer-based drafting techniques. This course covers projection of three-dimensional objects into two-dimensional representations and also the reverse process. Sketching and modeling of objects is covered.

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

TAGD 120 Advanced Graphic Interpretation 3 Credit Hours

Designed to introduce the concepts of size and shape description of oblique surfaced objects. Students are introduced to sectioning and processes used in the manufacturing environment. Geometric and traditional tolerancing is studied. The work is accomplished using traditional and computer-based drafting techniques.

Prerequisites: TAGD 110

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D	E		D/E

TAGD 130 Assembly Detailing 2 Credit Hours

Designed to introduce the concepts of detailing of assembly drawings, including modeling of complex shapes and pictorial drawings of details. The students draw individual parts in their proper orientation. The work is accomplished using traditional and computer-based drafting techniques.

Prerequisites: TAGD 120

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	E		E

TAGD 140 Compound Angles and Advanced Projection 3 Credit Hours

Focuses on the mastery of solid trigonometric principles as they apply to the industrial workplace. Topics include solution of solid trigonometry problems using graphic and analytical solutions and problem-solving techniques.

Prerequisites: TAMA 200 and TAGD 120

Fall	Winter	Spring	Summer
	E		

TAGD 150 Tool, Jig, and Fixture Design 2 Credit Hours

Focuses on the mastery of tool-design principles as they apply to the industrial workplace. Topics include tolerances, fits, principles of tool design, template jigs and fixtures, plate and channel jigs, and materials joining fixtures. Economical design principles are discussed, and projects requiring team approaches are used.

Prerequisites: TAGD 130, TAGD 140

Fall E	Winter	Spring	Summer
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TAGD 155 Gage, Cam Layout and Fixture Design 2 Credit Hours

Focuses on the mastery of gage design principles as they apply to the industrial workplace. Topics include gage design theory, computer-aided manufacturing, cam layout procedures, and fixturing. Projects requiring team approaches are used.

Prerequisites: TAGD 150

Fall	Winter E	Spring	Summer
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TAGD 160 Press Working Fundamentals 2 Credit Hours

Designed to familiarize the apprentice with basic metal deformation theory, presses and ancillary equipment, die construction, and die component identification. The student is introduced to the various die types and draws the various detail components using both traditional and computer-aided drafting.

Prerequisites: TAGD 130

Fall E	Winter	Spring	Summer
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TAGD 165 Cutting and Forming Dies 3 Credit Hours

Designed to introduce the apprentice to basic die design criteria and methods. The student is introduced to the various die types and draws the various die assemblies using both traditional and computer-aided drafting.

Prerequisites: TAGD 160

Fall	Winter E	Spring	Summer
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TAGD 171 Descriptive Geometry: Lines and Planes 3 Credit Hours

Designed to familiarize the apprentice with basic descriptive geometry theory and practice. The student uses orthographic principles to find true views of lines and planes.

Prerequisites: TAGD 120

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall E	Winter	Spring	Summer E
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TAGD 172 Descriptive Geometry: Planes, Solids, and Developments 2 Credit Hours

Designed to familiarize the apprentice with basic descriptive geometry theory and practice. The student uses orthographic principles to find true views of planes and solids and their intersections.

Prerequisites: TAGD 171

Fall	Winter E	Spring	Summer
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TAGD 280 Panel Tipping 3 Credit Hours

Designed to develop the ability to convert vehicle body position drawings to required die positions in various die operations. In addition, the student learns various concepts involving strip stock development and part clearance-interference conditions. Problems include practical application of descriptive geometry.

Prerequisites: TAGD 172

Fall E	Winter	Spring	Summer
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Industrial Materials

TAIM 100 Industrial Materials 3 Credit Hours

Prepares students for the advance of technology beyond metallurgy in the structure of modern materials and substances. This course includes knowledgeable and practical applications of new materials as well as traditional ones. Topics include extraction of metals, identification of ferrous and non-ferrous metals, non-metals (e.g. plastics, elastomers, ceramics, wood, and paper), mechanical and physical properties of materials, non-destructive testing procedures, crystalline and crystalline structures of materials, materials forming operations, and heat treatment theory and practice.

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter D/E	Spring	Summer E
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TAIM 200 Industrial Applications of Strength of Materials 2 Credit Hours

An introduction to strength of material that covers force systems, vectors, free body diagrams, statically determinate and statically indeterminate numbers, centroids, moments of inertia, friction, stress-strain relationships, resolved stresses, physical properties, fatigue stress, stress at elevated temperature, stresses caused by thermal change, and stresses due to combined loading and temperature.

Prerequisites: TAMA 200

Fall E	Winter	Spring	Summer
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Mathematics

TAMA 110 Industrial Applications of Basic Math Principles 2 Credit Hours

Utilizes industrial shop problems to help students relate math to job situations. Topics include addition, subtraction, multiplication, and division of whole and mixed numbers and common and decimal fractions; percentages, averages, and estimates; graphs, tables, and statistical measure; powers and roots; linear, angular, and circular measure; surface area, volume, and cubic measure; ratios and proportion; and metrics and metric conversion.

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter D/E	Spring	Summer D
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TAMA 120 Industrial Applications of Algebraic Principles 3 Credit Hours

Focuses on mastery of the basic algebraic principles as they relate to the industrial environment. Topics include symbols, positive and negative numbers, equations, exponents, roots, and formulas. Practical shop problems are solved.

Prerequisites: TAMA 110

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter D/E	Spring	Summer D/E
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TAMA 130 Industrial Applications of Geometric Principles 2 Credit Hours

Covers the fundamental principles of plane geometry with emphasis on application to the industrial environment. Angular, circular, linear, area, and volume measurement are explored in relation to the types of geometric figures and configurations found in industry.

Prerequisites: TAMA 120

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter D/E	Spring	Summer D/E
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TAMA 200 Industrial Application of Trigonometric Principles 3 Credit Hours

Focuses on the mastery of trigonometric principles as they apply to the industrial workplace. Topics include trigonometric functions, solution of right triangles, solution of oblique triangles, and problem-solving techniques.

Prerequisites: TAMA 130

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter E	Spring	Summer E
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Materials Joining

TAMJ 110 Materials Joining and Fabrication Fundamentals 3 Credit Hours

Covers adhesion and cohesion fundamentals, equipment, and procedures relative to shielded metal arc welding, oxy-fuel soldering and brazing, gas metal arc welding, oxy-fuel cutting, resistance spot welding, torch plastic welding, and PVC pipe joining. Topics include oxy-fuel cutting, soldering and brazing theory and practice, AC and DC welding equipment and applications, flat and horizontal welding techniques, arc welding electrodes, and gas metal arc welding principles and practices. Theory and practice of resistance spot welding, torch plastic welding, and plastic pipe joining are covered. This course is an 85% hands-on laboratory experience.

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter D/E	Spring	Summer D/E
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TAMJ 115 Advanced Materials Joining and Fabrication 2 Credit Hours

Extends skill development of shielded metal arc and gas metal arc welding (SMAW & GMAW), and gas and electric arc cutting. This course continues to build on the structure of adhesion, cohesion, cutting theory, and the transfer of knowledge to shop applications for people who will use these processes in their work. It is an 85 % hands-on laboratory experience.

Prerequisites: TAMJ 110

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter D/E	Spring	Summer E
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TAMJ 120 Materials Joining and Fabrication: GTAW/GMAW Techniques 2 Credit Hours

Covers the theoretical knowledge as well as manipulative skills needed to utilize inert arc welding equipment. Topics include inert arc welding equipment; gas tungsten arc welding (GTAW); gas metal arc welding (GMAW); special welding processes; mechanical testing of welds; metal surfacing; and welding in flat, horizontal, and vertical positions. This course is a 90 % hands-on laboratory experience.

Prerequisites: TAMJ 110

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall E	Winter E	Spring	Summer E
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TAMJ 125 MJ & F: ASME Pipe and Pressure Vessel Welding 2 Credit Hours

Provides, in a preparatory fashion, the theoretical knowledge and the practice for skill development for people interested in becoming welders qualified by the American Society of Mechanical Engineers (ASME). Topics include procedures in setup, welding, electrodes, and the ASME test. This is a 95% hands-on laboratory course.

Prerequisites: TAMJ 115

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall E	Winter E	Spring	Summer E
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TAMJ 145 MJ & F: Advanced Gas Torch Techniques 2 Credit Hours

An advanced course designed to increase oxy-fuel gas torch techniques and procedures used in welding, brazing, and soldering. Topics include preparation of gray iron castings with process procedures for welding and brazing, welding of wire rope/cable, silver brazing of stainless steel, and oxy-acetylene welding of thin wall/ small diameter steel pipe and pressure vessels. This course is a 95% hands-on experience.

Prerequisites: TAMJ 115

Fall E	Winter E	Spring	Summer
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TAMJ 230 MJ & F: ASME Pipe and Pressure Vessel Certification 2 Credit Hours

Designed for people experienced in all-position shielded metal arc welding who wish to acquire American Society of Mechanical Engineers (ASME) qualification papers. All welding test procedures conform to the ASME standards. Submitting test specimens to the local materials laboratory, an optional segment of the course, requires an additional fee.

Prerequisites: TAMJ 125

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	E		E

TAMJ 235 MJ & F: GTAW and GMAW Certification 2 Credit Hours

Prepares students to become certified in all-position Gas Tungsten Arc Welding (GTAW) and/or Gas Metal Arc Welding (GMAW) in accordance with the standards of the American Society of Mechanical Engineers (ASME) or the American Welding Society (AWS). Submitting test specimens to a licensed local materials laboratory is optional and requires an additional fee. This is a 95% hands-on laboratory course.

Prerequisites: TAMJ 120, TAMJ 125

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
E	E		E

TAMJ 240 MJ & F: Tool and Die Welding 3 Credit Hours

A study of cast iron and alloy steels used in the tool and die industry, the effects of the alloys on tools and dies, and successful use of the welding process. Skill development in welding and repair of these cast irons and steels incorporate SMAW, GMAW, and GTAW processes. This is a 70% hands-on laboratory course.

Prerequisites: TAMJ 120

Fall	Winter	Spring	Summer
	E		

Manufacturing

TAMN 100 Shop Tools and Techniques 3 Credit Hours

Introduces the basic tools and safety and technical information required by the skilled trades. Topics covered include non-precision and precision measurement tools and methods, layout tools and techniques, hand and bench tools, drills and drilling machines, principles of metal cutting and metal cutting saws, and pedestal grinders. Manufacturing processes are discussed.

Prerequisites: TAMA 110, TAGD 110

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

TAMN 120 Machine Tool Applications 2 Credit Hours

Presents the mechanisms, operation, tooling, and accessories of the lathe and milling machine in a lecture/demonstration format. Topics covered include precision measurement and precision measuring devices, basic machine tool operations, the theory of metal cutting, cutting tools and cutting tool materials, and cutting fluids. Safety, as it relates to the shop environment, is stressed throughout the course.

Prerequisites: TAMA 120

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter	Spring	Summer
D/E	D/E		D/E

TAMN 125 Lathe, Shaper, and Mill with Laboratory 4 Credit Hours

An introduction to machines used in a modern machine shop. Technical knowledge and operating skills relating to shapers, lathes, and milling machines are emphasized along with safe working practices and inspection.

Prerequisites: TAMN 120

TAMN 130 Advanced Manufacturing Processes 2 Credit Hours

Explains the use of conventional abrasives and super abrasives, as well as traditional grinding machines. Advanced milling applications are covered utilizing the horizontal boring mill. The application of basic and advanced cutting tool materials is covered in depth. Some of the more popular non-traditional processes are also explained, including electrical discharge machining and wire cutting; electrochemical, abrasive flow, ultrasonic, and abrasive water jet machining; electromagnetic, electro spark, and powder metallurgy forming; and various laser applications. Additional topics include rapid prototype development and robotics/automation. Students use various software in the computer laboratory related to the above topics.

Prerequisites: TAMN 120

Fall	Winter	Spring	Summer
D/E	D/E		

TAMN 135 Jig Bore and Grinder Laboratory 4 Credit Hours

A continuation of TAMN 125 that includes layout and bench procedures along with more advanced operations of machines. Threading, taper turning, boring and safe working practices are emphasized.

Prerequisites: TAMN 130

TAMN 200 Numerical Control Fundamentals 2 Credit Hours

Covers the fundamentals of the principles of numerical control (NC) with emphasis on application to the industrial environment. Topics include the history of NC, how NC operates, and simple part programming. The primary NC machine features are explained. NC lathes, turning centers, and their respective tooling are discussed. On-line and off-line programming is demonstrated.

Prerequisites: TAMN 120

Fall	Winter	Spring	Summer
D/E			

TAMN 220 Advanced Computer Numerical Control Techniques 2 Credit Hours

Covers the fundamentals of computer numerical control (CNC) with emphasis on generic application to both vertical and horizontal milling machines. A review of the fundamentals of numerical control and programmer math is provided. Off-line computerized CNC software enables students to program CNC operations involving linear, circular, and helical interpolation. Canned cycles, auto routines, and various preparatory functions are used in programming. These programs are then utilized to machine functional work pieces on a fully operational CNC trainer.

Prerequisites: TAMA 200, TAMN 200

Fall	Winter D/E	Spring	Summer
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Maintenance Technology

TAMT 110 Mechanical Power Transmission 2 Credit Hours

Provides specialized instruction and discussion concerning installation and maintenance of mechanical transmission systems. Areas to be covered include bearings, couplings, belts, chains, shafts, pulleys, and speed reducers used in the modern factory by mechanical trades.

Prerequisites: TAMA 120

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter D/E	Spring D/E	Summer D/E
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TAMT 115 Maintenance Trades Print Reading 3 Credit Hours

Designed to meet the needs of apprentices and trainees in industrial plant maintenance trades. Topics include shape description; conventions and symbols; size description; notes and instruction associated with manufacturers and maintenance-related drawings, including castings, weldments, and machined parts; electrical/electronic schematic and ladder diagrams; piping and fluid power-related drawings and schematics; structural and architectural drawings; and sheet metal and plant layout.

Prerequisites: TAGD 110

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter D/E	Spring	Summer D/E
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TAMT 123 Maintenance Print Reading: Structural Steel and Conveyors 2 Credit Hours

Responds to a request by skilled trades for a course focusing on making a basic shop drawing of structural steel shapes and print reading of conveyor structures. This course provides an introduction to steel detail drawings and print reading techniques as they relate to conveyors.

Prerequisites: TAMA 120, TAGD 110

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall E	Winter	Spring	Summer E
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TAMT 126 Maintenance Print Reading: Print Layout 2 Credit Hours

Introduces the techniques and procedures of plant layout and material handling. The student is led through the analysis and development of information to produce a plant layout and to develop print reading skills with emphasis on reading industrial equipment drawings. Students practice making simple plant layout drawings for the production of a part using basic drafting skills.

Prerequisites: TAGD 110

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall	Winter E	Spring	Summer E
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TAMT 200 Predictive Maintenance-Shaft Alignment 2 Credit Hours

Provides specialized instruction in the practices and equipment used in shaft alignment, the end-to-end and parallel alignments of machines. Also studied are machine failures due to rotating shaft misalignment and vibration created from shaft center lines not being in the same plane. Areas covered include inefficiencies and increased wear due to misalignment, shaft alignment methods, soft foot, thermal growth, graphing methods, and the use of computers for math calculations. Rim and Face, Reverse Dial Indicator, and Visible Laser equipment is used. This course is a 40% hands-on laboratory experience.

Prerequisites: TAMT 110, TAMA 130

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall E	Winter E	Spring	Summer E
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TAMT 210 Predictive Maintenance-Vibration Analysis 2 Credit Hours

Provides specialized instruction in understanding machinery, vibration in rotating equipment, the most cost-effective method to reduce maintenance costs and extend machinery life. Through demonstrations and case histories, students develop a method of thinking required to sort through various symptoms to determine the root cause of vibration.

Prerequisites: TAMT 110, TAMA 130

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall E	Winter E	Spring	Summer E
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TAMT 220 Advanced Rigging 2 Credit Hours

Provides a study of safe rigging practices and equipment used by mechanical trades people. Topics of study include fiber and wire rope, block and tackle, lift and rigging chain, proof test, safe working load, design factor, sling geometry, fittings, and lifting and moving equipment. This course is a 40% hands-on laboratory or experience.

Prerequisites: TAMA 130

Note: The summer semester for Trade and Apprentice Education is from May 8 to August 22, 2006.

Fall D/E	Winter D/E	Spring	Summer E
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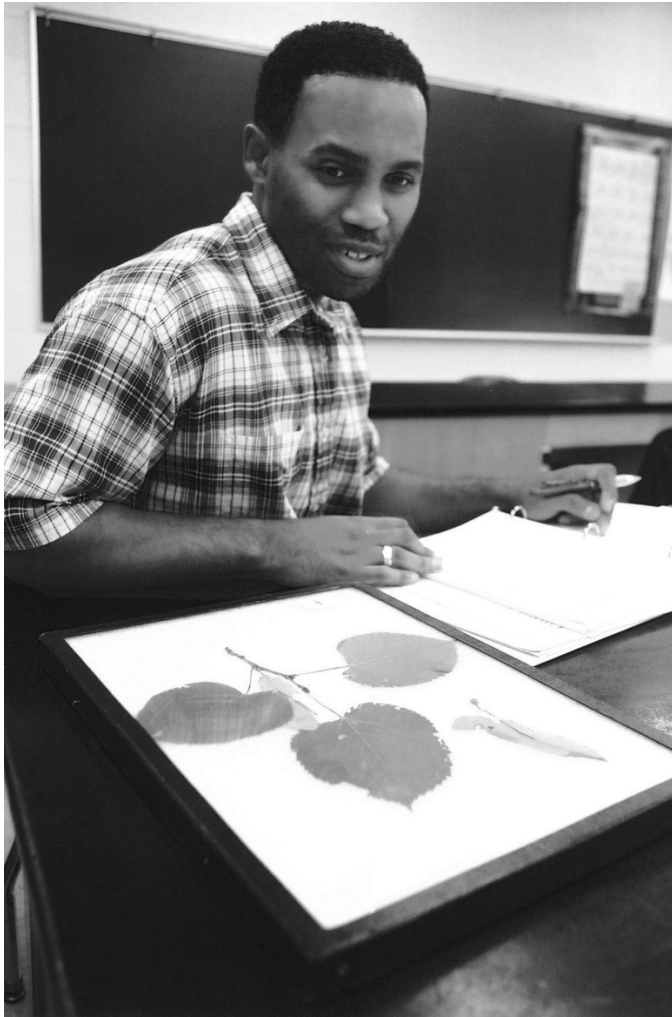
We Can Help You

HFCC Has High-Quality Education

Mission

We of Henry Ford Community College are dedicated to the education and enrichment of our students and community. As a comprehensive community college with a diverse student population, we value teaching and learning. To prepare our students for a rapidly changing world and workplace, we are committed to providing knowledge, communication skills, and cultural opportunities. We foster critical thinking, creativity, integrity, and self-esteem.

Ours is a tradition of building futures. We measure our success by the success of our students in a democratic, diverse, and increasingly technological nation.



Purpose

Henry Ford Community College is a comprehensive, public, non-residential community college which meets the diversified post-secondary educational needs of the community by:

1. Providing the first and second years of college-level education for students who wish to transfer to other educational institutions.
2. Providing one- to two-year career programs for students preparing for employment.
3. Providing courses and programs for the general education and for the social, cultural, and personal development of individuals.
4. Providing courses and programs for those individuals who need or desire additional technical knowledge and skills, job upgrading, or retraining.
5. Providing opportunities both for students needing or desiring more advanced intellectual challenges commensurate with their abilities and for students needing or desiring to improve basic skills.
6. Providing counseling, guidance, and evaluation services for current students and for individuals considering further education and training.
7. Providing educationally related services such as speakers, resource personnel, resource materials, the use of College facilities, and special institutes or programs to organizations and individuals within the community.
8. Providing ongoing research, development, and evaluation to improve curriculum and teaching methods.
9. Providing the above without regard to age, sex, race, national origin, religion, marital status, or handicap while stressing the importance of students becoming effective members of society and active participants in the democratic way of life.

General Education

Henry Ford Community College defines General Education as courses and/or learning experiences that enable students to attain the knowledge and skills needed by every college graduate. General Education establishes a foundation of skills and understandings to enable success in employment and further education. In line with its belief that General Education competence should be defined by the College to meet the needs of the external communities in which its graduates must function, HFCC has collected and restated expectations identified by employers, alumni, and four-year colleges. The General Education Outcomes reflect those expectations.

GENERAL EDUCATION OUTCOMES

All associate degree recipients from Henry Ford Community College will be able to demonstrate knowledge and skills appropriate to the following outcomes.

General Education Outcome #1

American Society, Events, Institutions and Cultures

Students will be able to demonstrate an understanding of American society, with emphasis on: major ideas and events that have influenced American society, OR social and political institutions that shape American society, OR diverse populations and cultures that compose American society.

General Education Outcome #2

Computer Literacy

Students will be able to utilize a computer and its software to accomplish practical tasks, including word processing and Internet usage.

Computer literacy is defined to include the following competencies:

- log into and out of the HFCC network, utilize Academic Computing Services (ACS) and WebAdvisor
- operate basic PC hardware, including common input, output and storage devices
- utilize an operating system to perform basic tasks, such as finding, saving, copying and printing files
- send and receive e-mail, including attachments
- utilize basic word processing
- utilize a browser for Internet access, identify appropriate search terms and use a search engine effectively

General Education Outcome #3

Critical Thinking

Demonstrate critical thinking and problem solving skills in addressing a problem or situation described verbally, graphically, symbolically, or numerically.

General Education Outcome #4

Information Literacy

Identify, locate, evaluate, and effectively use information to solve problems.

General Education Outcome #5

Written Communication

Demonstrate proficiency in reading and writing in Standard English at the College level.

General Education Outcome #6

Wellness (applies only to Associate of Arts and Associate of General Studies graduates)

Demonstrate the knowledge and skills necessary to establish a positive pattern of life-long wellness choices.

Accreditation

Henry Ford Community College is accredited by The Higher Learning Commission, A Commission of the North Central Association of Colleges and Schools, 30 North LaSalle St., Suite 2400, Chicago, IL 60602-2504. Phone: 1-312-263-0456. Web Address: www.ncahigherlearningcommission.org HFCC is also accredited by the Michigan Commission on College Accreditation.

In addition to general institutional accreditation, the associate in science degree program in Nursing is approved by the Michigan Board of Nursing and accredited by the National League for Nursing, Accrediting Commission, 61 Broadway, New York, NY 10016. Phone: 1-212-363-5555.

The Culinary Arts program is fully accredited by the Accrediting Commission of the American Culinary Federation (180 Center Place Way, St. Augustine, FL 32095, 1-800-624-9458, www.acfchefs.org). The Hospitality Studies programs are accredited by the Educational Foundation of the National Restaurant Association, 175 W. Jackson Blvd, Suite 1500, Chicago, IL 60604-2814. Phone: 1-800-765-2122.

The Health Information Technology Program is accredited through the Commission on Accreditation of Allied Health Education Programs (CAAHER, 35 East Wacker Drive, Suite 1970, Chicago, IL 60601. Phone: 312-553-9355) in cooperation with the American Health Information Management Association (AHIMA, 233 N. Michigan Avenue, Suite 2150, Chicago, IL 60601. Phone: 312-233-1100).

The Commission on Accreditation for Health Informatics and Information Management Education is the accrediting body for degree-granting programs in health informatics and information management. CAHIIM serves the public interest by establishing quality standards for the educational preparation of future health information management (HIM) professionals. When a program is accredited by CAHIIM, it means that it has voluntarily undergone a rigorous review process and has been determined to meet or exceed the standards set by the sponsoring professional organization—the American Health Information Management Association

(AHIMA)—in cooperation with the Commission. Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), Accreditation Services, c/o AHIMA, 233 N. Michigan Ave, Suite 2150, Chicago, IL 60601-5800. Phone: 312-233-1100.

The Medical Assistant program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), www.caahep.org, upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistant's Endowment (AAMAE). Commission on Accreditation of Allied Health Education Programs, 35 East Wacker Drive, Suite 1970, Chicago, IL 60601-2208. Phone: 312-553-9355.

The Paramedic Program has been awarded the highest level of approval through the Michigan Department of Community Health, Bureau of Health Systems- Emergency Medical Services Section, 525 W. Ottawa St, Lansing, MI 48909. Phone: 517-241-4917.

The Pharmacy Technician Program is fully accredited through the American Society of Health-System Pharmacists, 7272 Wisconsin Avenue, Bethesda, Maryland 20814. Phone: 301-657-3000.

The Physical Therapist Assistant Program is fully accredited through the Commission on Accreditation in Physical Therapy Education. Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 N. Fairfax St., Alexandria, VA 22314. Phone: 703-838-8910.

The Radiographer Program is accredited through the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Dr, Suite 2850, Chicago, IL 60606-3182. Phone: 312-704-5300.

The Respiratory Therapist Program is accredited through the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation for Respiratory Care (CoARC), 1248 Harwood Rd, Bedford, TX 76021. Phone: 800-874-5615.

The Surgical Technologist Program is accredited through the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Accreditation Review Committee on Education in Surgical Technology (ARC-ST), 6 West Dry Creek Circle, Suite 210, Littleton, CO 80120-8031. Phone: 303-694-9262.

The College is a member of the Michigan Community College Association and the American Association of Community Colleges. Approval by the recognized accreditation agencies assures the student that work in the institution will be recognized by other reputable colleges and universities.

Prospective students may request documentation verifying the College's accreditation. Those who wish to review such documentation for vocational programs should contact the office of the Vice President/Dean of Career Education.

Those who wish to review such documentation for academic programs should contact the office of the Vice President/Dean of Academic Education.

Points of Pride

Henry Ford Community College has a vital role in providing educational opportunities to Southeastern Michigan. We have much to offer and many successes. Listed below are just a few of the many successes our students, faculty and staff have had recently.

Henry Ford II Honors Program Student Awarded \$90,000 Scholarship

Henry Ford II Honors Program graduate Ardeta Gjickola was awarded a Jack Kent Cooke Scholarship worth \$90,000 over a three-year period for continued studies after transferring from HFCC. Gjickola is one of only 25 community college students in the nation to win this distinguished scholarship which is comparative to the Rhodes and Marshall scholarships at the graduate school level. Gjickola was selected out of 791 nominees from 519 community colleges across the country. Gjickola will be studying Cell and Molecular Biology at the University of Michigan, Ann Arbor.

Nursing Program Out-numbers Others in State

HFCC currently has the largest nursing program in the state of Michigan, with 500 students enrolled. The Nursing Program was one of the original seven two-year registered nursing programs established nationally in 1953 through a grant from Columbia University.

Humanities Endowment Brings Teachers From All Over the Nation to HFCC

HFCC received a National Endowment for the Humanities Award to conduct a Landmarks of American History Workshop in the summer of 2005 for K-12 school teachers nationwide.

Henry Ford II Honors Program Student Chosen for Research Experience

Henry Ford II Honors Program student Esther Kelley was accepted to the University of Rochester, New York for a 2005 summer internship program. Esther is the first of HFCC's science students to be accepted into a Research Experience for Undergraduates program. Esther was one of a dozen students chosen out of several hundred of the best undergraduate students from mainly research-oriented schools. This is a great accomplishment for a community college student.

Safety and Education First - Public Safety Pathway Program Wins Awards and Offers High School Students A Chance at College Level Courses

The EMS Program and Tech Prep Office received a commendation from the Department of Labor and Economic Growth for their Public Safety Pathway Program in 2005. The program will be used as a model for other programs in the state.

Alumna Receives Nightingale Award

Henry Ford II Honors Program Alumna Carol Tea Nini was recently awarded the Nightingale Award for Nursing in Education and Research for 2005.

Doctors, Paramedics and Nurses Learn New Information at HFCC Conference

Health Careers hosted a major conference in 2005 for the Michigan Region II South, Bio-Defense Network for 200 participants including doctors, paramedics and nurses. The conference was on Emergency Readiness for the Pediatric Patient. It is noteworthy that one of the main education tracks for this conference is in Pediatric Education for Pre-hospital Professionals; Henry Ford Community College's EMS program was the first college in Michigan to offer this newly revised curriculum.

Varsity Basketball Team Slam Dunks a Trip to Final Four

The 2004-2005 Varsity Men's Basketball Team reached the Final Four in both State and Regional Competition with a final record of 19-10.

Big Band Rocks Every Performance

The Big Band has won all major awards in 16 out of 17 performances at jazz festivals. HFCC's Big Band has received awards at every jazz festival in which it has performed or competed in the past 20 years.

Henry Ford II Honors Program Student Receives Transfer Scholarship

Henry Ford II Honors Program student Jen Cline was awarded the Dean's Scholarship, a renewable scholarship valued at \$12,000/year, at Drexel University in Philadelphia. The scholarship is the largest scholarship awarded to transfer students. Jen was also accepted into the Pennoni Honors College to study Social Work in 2005.

Grants Allow For Quality Education and Training Programs

HFCC continues to offer quality education and training programs to students through the acquisition of \$2.76 million in competitive grants from state and federal

sources. During the 2004 fiscal year, HFCC's federal grants included an Eisenhower Grant for the Pre-Education Program, a National Science Foundation grant, a Health and Human Services grant and Corporate Training grants. HFCC also receives state administered federal grants such as Perkins to aid in helping students achieve their educational goals.

Theater Production of "the Tempest" Best in American College and University Theater

HFCC's theater production of William Shakespeare's "the Tempest" was selected for performance at the Kennedy Center's American College Theater Festival in 2004. The Kennedy Center's American College Theater Festival honors the best in American College and University Theater. The production utilizes video and digital technology to create 3D stereoscopic scenery that is viewed by audiences wearing polarized glasses.

Pre-Education Program Cited Exemplary

The Pre-Education Program has been cited by the National Science Foundation as a "Two-Year College with Exemplary Activities in Mathematics and Science Teacher Preparation" in 2004.

Varsity Volleyball Member Honored For Athletic and Academic Achievements

Student and Varsity Volleyball team member Deana Hunter was named to the 2004 National Junior College Athletic Association Academic All-American Team for maintaining a grade point average higher than 3.6 on a 4-point scale.

Manufacturing Productivity Systems Faculty Chosen For National Office

Ken Wright, lead faculty for Manufacturing Productivity Systems, is President of the National HAAS Technical Education Council. Mr. Wright's term of office is two years. The National HAAS Technical Education Council is made up of 35 two- and four-year institutions located throughout the United States. Its mission is to promote high-quality manufacturing education.

Project Connects Henry Ford II Honors Program Student, Faculty, and Ford Engineers

Henry Ford II Honors Program Student Shannon Moore presented a paper at the Fifteenth Annual Argonne Symposium for Undergraduates in Science, Engineering and Mathematics. Shannon's work on road salt and its affect on the Rouge River was conducted as a Henry Ford II Honors Directed Study project during Fall 2004 semester under the supervision of Linda Brandt, Biology Department Instructor. Shannon's work was originally inspired by the Ford Salt Project, officially titled, "The Henry Ford Technical Leadership Program" a collaborative effort between HFCC

and Ford engineers. Early discussions led to a decision to focus on road salt and the Rouge River. HFCC Instructors Mike Daher and Rick Bailey organized the Ford project.

Architecture/Construction Technology Student Beautifies Michigan and Wins Award

Nancy Giordano, an Architecture Construction Technology student, was the winner of the 2004 Michigan Department of Transportation's Metro Co-op Engineer Design Contest. Her winning design for a landscaping bed at the intersection of Nine Mile Road and Southfield Road was implemented in spring of 2005. Giordano's two semesters of co-op were arranged through the HFCC Co-Op Program with the Traffic and Safety Metro Region of the Michigan Department of Transportation.

Student Political Issues Convention Brings Elite Officials to Campus and Real World Political Experience for Students

HFCC hosted the Michigan Student Political Issues Convention on September 24, 2004. Hundreds of students representing eight area colleges and universities participated in the development of a student political agenda that was the basis of student-led "Candidate Job Interviews" for candidates running for the Michigan State House of Representatives. These activities were part of a larger national student political issues week, September 20-26, 2004 with schools from 9 states participating. HFCC was the coordinating institution for the National Student Political Issues Week and the subsequent National Student Political agenda. An honorary steering committee for electoral elites from across Michigan supported this project. Among these elites were Governor Jennifer Granholm, State Attorney General Michael Cox, and Wayne County Executive Robert Ficano.

Students, Staff, Faculty and Alumni Unify to Raise Money for a Good Cause

HFCC student clubs and supporters formed a team of 15 student club members, staff, faculty, and alumni who raised \$3,261.00 for the American Cancer Society in 2004. To raise money, volunteers hosted games for children, sold luminaries and collected donations from family and friends. The team participated in the Relay for Life for the American Cancer Society in Taylor, MI and won a plaque for best team spirit on the day they donated their earnings. In the course of the last three years student groups have raised more than \$5,000 for the American Cancer Society.

Center for Lifelong Learning and M-TEC Help Teachers Meet the No Child Left Behind Standards

The Center for Lifelong Learning and M-TEC received the 2003-2004 Focused Student Achievement Award for Community/School Partnerships from Wayne RESA for

developing and delivering a preparation program for more than 700 Wayne County School District paraprofessionals. The "Get Ready" program has helped prepare paraprofessionals and school districts to meet the required No Child Left Behind standards.

Student Support Services

Assessment Office

The Assessment Office is located on the main floor of the Learning Resource Center, LRC-117, adjacent to the Counseling Office. The Assessment Office provides placement testing and orientation for all students in English, Math and Chemistry. Placement testing can be taken on a walk-in basis Monday through Thursday from 8 a.m. to 6:30 p.m. and Friday from 8 a.m. – 4:30 p.m. For more information, please contact the Assessment Office at 313-317-6503 or visit www.hfcc.edu/courseplacement.

Assisted Learning Services

The Assisted Learning Services (ALS) office is located in the Learning Resource Center, first floor, room 125. The following services are offered:

Tutorial

This free service is available to all students who are experiencing difficulty in a class. To request tutoring, students must complete a Tutorial Request Form, available in the ALS office, have the instructor sign it, and return it to the ALS office. Students will then be notified of the days, times, and location of the tutorial service.

Accommodations

Students who have a documented disability may be eligible for support services. These services include:

- extended test time
- reader for tests
- writer for tests
- classroom adaptations
- note taker
- use of a tape recorder
- an interpreter

In order to receive any accommodation, the student must make an appointment with the ALS counselor and provide documentation about the disability. Students can call 313-845-9617 to schedule an appointment.

The ALS office is open Monday, Thursday, and Friday from 8 a.m. to 4:30 p.m. and Tuesday and Wednesday from 8 a.m. to 6:30 p.m. You can contact the office by calling 313 845-9617 or visit www.hfcc.edu/als.

Child Development Center

The Child Development Center is a licensed childcare program for children 2 1/2 to 12 years. The Center is operated in a partnership with the Adult and Community Education Department of Dearborn Public Schools. Developmental Preschool and Montessori Preschool options are available during the day.

The services of the center are available to:

- HFCC students
- HFCC staff members
- the community at large

The Center accommodates children:

- all-day
- part-time
- evening

Children participate in a learning environment while attending the Center. The Center is open Monday through Thursday from 7 a.m. - 10 p.m. and Friday from 7 a.m. - 6 p.m. during the Fall and Winter semesters. Various summer programs are also available on campus and at other Dearborn School locations. Current fees and other information can be found in the current class schedule, by calling 313-317-6527 or visit www.hfcc.edu/children.

Cooperative Education

The Cooperative Education Program, or “co-op,” is an excellent opportunity for students enrolled in Business or Technology Division programs to receive academic credit for paid work experience in their field of study. Students work full- or part-time in on-campus or off-campus positions directly related to their educational and career goals.

Co-op is an academic partnership in which the college and the employer join to provide the student with a method of learning which integrates work experience and classroom instruction. Students are employed in practical, paid positions directly related to their educational and career goals. Through the integration of academic study and work experience, students enhance their academic knowledge, personal development, and professional preparation.

Students who participate in co-op will

- enhance their marketability for a permanent job after graduation
- gain valuable work experience and technical expertise
- receive academic credit toward graduation (in most curricula)
- earn money to defray college expenses
- develop self-confidence, responsibility and professional competence
- integrate work experience with classroom instruction

The opportunity to participate in cooperative education is dependent on the availability of appropriate jobs in business and industry.

Eligibility Requirements

Students must meet eligibility requirements to participate in the co-op program. These include:

- completion of 50% of core course work (Requirement varies by course of study)
- minimum 2.5 grade point average in core course work
- minimum cumulative grade point average of 2.0

Students from the following programs may be eligible for participation in the co-op program:

Business/Economics Division

- Accounting
- Administrative & Information Management*
- Business
- Business Administration
- Computer Software Applications
- Legal Assistant
- Management
- Office Administration

Technology Division

- Architecture/Construction Technology*
- Automotive Technology
- Computer Information Systems
- Electronics/Robotics Technology*
- Hospitality Studies*
- Industrial Drafting & CAD Technology
- Manufacturing Productivity Systems

Art Department

- Graphic Design

Energy Technology Department

- Heating & Cooling
- Multi-Skilled Maintenance Engineering Technology
- Power Building Engineer

*Students in this program must participate in co-op as a graduation requirement.

All Technology and Business students who are interested in off-campus positions should visit the Co-op Office in the Technology Building, Room T-112, or contact Nancy Stupsker at 313-845-6359.

Technology students interested in on-campus positions should visit the Co-op Office in the Technology Building, Room T-112, or contact Nancy Stupsker at 313-845-6359.

Business students seeking on-campus positions should visit the satellite Co-op Office in the Liberal Arts Building, L-329, or contact Kathy Daniels at **313-845-9703**.

Focus On Women Program

Focus On Women programs and services are designed to help students, both women and men, maximize their opportunities at Henry Ford Community College and achieve their educational goals. FOW offers counseling, support groups, seminars, and special events celebrating the achievements of women on campus and in the community. “Back-to-School” appointments and career counseling are available for prospective students who have concerns about entering or reentering college. Appointments are available with the Director, Peggy Holcomb, a Licensed Professional Counselor. Her direct number is **313-845-9757**.

A vocational education grant can supplement other sources of financial aid to help pay for tuition, books and/or childcare for students who qualify and are enrolled in approved, vocational programs. The grant is available to qualifying single parents, homemakers, and students enrolled in programs non-traditional for their gender, as well as for individuals with a disability, academically disadvantaged, limited English proficiency, and economically disadvantaged.

Focus on Women is located in the Assisted Learning Services Office next to the Counseling Office. Hours are 8:00 a.m. 4:30 p.m., Monday through Friday, except during the summer when the hours are limited. For further information or assistance, visit the office, call **313-845-9629** or visit www.hfcc.edu/fow. All students are welcome.

Health Insurance for Students

Emergency care in case of illness or injury is provided by the College. Students needing emergency hospital care are sent by local ambulance to nearby hospitals. Ambulance service and medical care are at the student's expense.

Hospitalization insurance for sickness and accidents is available to any student attending day or night classes regardless of the number of semester hours the student is taking. The deadline for attaining insurance is one month from the first day of enrollment each semester. The policy protects the student twenty-four hours a day for twelve months. Athletic activities are included in the coverage except for interscholastic sports. Claims are paid regardless of other health and accident insurance carried by the student or family.

Insurance applications are available at the Welcome Center North in the Learning Resources Center throughout the year.

Henry Ford II Honors Program

HFCC students may be eligible for the College's Henry Ford II Honors Program, a structured, academically rigorous program of core courses in English composition and the humanities. The program prepares students to gain admission to transfer institutions of their choice, while allowing them to excel in critical thinking and research skills.

During the first year, Honors students are matched with a faculty mentor who will work with them one-on-one throughout the program. Students also enroll in a unique Honors Colloquium and Honors English classes, and attend a Transfer Workshop to help prepare for the process of transferring to another institution of higher learning.

In the second year, students work on in-depth research projects under the guidance of faculty through the innovative Honors Directed Studies. In this setting, highly motivated Honors faculty members engage students one-on-one as they research topics covering various academic disciplines. Students are encouraged to select topics that can be presented, published, exhibited, performed, or broadcast. Second-year students also enroll in the capstone course, Honors 251 “Great Works,” where they discuss and debate some of the great books and ideas of the Western canon.

For more information or to obtain an application form, contact Nabeel Abraham, Ph.D., Henry Ford II Honors Program Director, Room 150, Learning Technology Building, at **313-845-6460** or by e-mail at nabraham@hfcc.edu.

Job Placement

The HFCC Job Placement Office provides

- students and recent graduates with assistance in searching for employment;
- pending or recent graduates of career education programs with assistance in finding entry-level positions;
- assistance to currently enrolled students who need part- or full-time employment to help pay for college expenses.

Job search assistance includes

- referrals to available positions;
- furnishing your resume to potential employers;
- opportunities to interview with potential employers on campus;
- networking and similar contacts with employers.

The Job Placement Office posts listings of part- and full-time employment opportunities on the Job Placement Office's Web site at hfcc.edu/careers and on bulletin boards located in the Health Careers Education Center, Liberal Arts Building, Technology Building and the Dearborn Heights Center.

Students or graduates who require job search assistance can register with the Job Placement Office, T-112, Technology Building. Office hours are 8:30 a.m. to 4 p.m., Monday-Friday.

Learning Laboratory

The Learning Laboratory provides academic support for students in their writing, reading, and math classes. In addition, students have an opportunity to improve their understanding of their basic skills through one-on-one tutoring, computer programs, and additional support materials, such as a wide range of take-home handouts. Instructors are available six days a week (Monday through Saturday) and evenings (Monday through Thursday). Students also may use the lab to resolve writing and mathematical problems they may be experiencing in their other course work at the College.

Those students wishing a more concentrated tutorial program are able to sign up for English 083 (one hour reading course), English 084 (two hour reading course), and English 086 (one hour writing course). These courses are designed to prepare students for their next level English course.

The Learning Laboratory is open Monday through Friday from 7:30 a.m. to 4:30 p.m. and Monday through Thursday from 6 p.m. to 8:40 p.m. In addition, the lab is open from 9:40 a.m. to 1:40 p.m. on Saturdays. For more information, please contact the Learning Lab at **313-845-9643**.

Partners Plus

In an effort to support under-represented students, Henry Ford Community College and the University of Michigan-Dearborn formed a partnership in 1993 to help provide a seamless transfer process for HFCC students to the University of Michigan-Dearborn. The Partners Plus program provides students with detailed academic advising on specific University of Michigan-Dearborn degree programs, professional development workshops, annual retreats with an award ceremony, mentoring, job opportunities, and in some cases financial assistance. Partners Plus serves more than 400 students each academic year and has successfully transferred many HFCC students into four year degree programs.

See how you can better achieve your educational goal. Contact Partners Plus at **313-845-9690** or by e-mail partnersplus@hfcc.edu and visit www.partnersplus.umd.umich.edu.

University Transfer, Advising and Career Counseling Center

The University Transfer, Advising, and Career Counseling Center is located in the Learning Resources Center (LRC 117). The following services are offered:

University Transfer

This service assists students with the selection of courses taught at HFCC which will transfer to other colleges and universities. The following resources are available:

- curriculum transfer guides for Michigan colleges and universities
- articulation agreement guides for students following specific programs at HFCC
- equivalency guides, which are alphabetical listings of HFCC classes and their transferability to other colleges and universities

Advising

This service provides advice to students regarding the implementation of their educational goals. Counselors advise students on:

- selection of courses related to an educational program/curriculum/degree
- selection of an appropriate schedule/times for classes
- time management or balance of number of courses with life style
- study skills planning and development

Career Counseling

This service assists students in the life long process of choosing, planning, and preparing for appropriate careers. The counselors who provide this service are Licensed Professional Counselors (LPC) by the State of Michigan, with a minimum of a master's degree in guidance and counseling. Career planning services include:

- selection of a career path and a plan to implement this path through formal education, training and practical experience
- assessment of interests, values, and skills through standardized assessments and self-assessment
- assistance and support during career/life transitions
- change of self-defeating behaviors
- stress/anxiety reduction
- coping with change

The University Transfer, Advising, and Career Counseling Center, in the Learning Resources Center, is open Monday through Thursday from 8 a.m. to 6:30 p.m. and 8 a.m. to 4:30 p.m. on Friday.

For counselor availability or more information, please contact the University Transfer, Advising and Career Counseling Center at 313-845-9611 or 313-845-9612 or visit www.hfcc.edu/counsel.

Campus Life, Student Activities and Community Services

Athletics

Intercollegiate

Henry Ford Community College is a member of the Michigan Community College Athletic Association (Eastern Collegiate Conference). The nickname is the Hawks. Varsity teams participate in the following sports at the conference, state, regional, and national levels:

Men

- baseball
- basketball
- golf

Women

- basketball
- softball
- volleyball

The Michigan Community College Athletic Association and the National Junior College Athletic Association regulate athletic competition and set eligibility standards for all member colleges.

Intramural

The major purpose of a college intramural program is to provide an opportunity for participation in recreational activities for all students. All currently enrolled students are encouraged to participate.

Intramural sports contribute to health, fitness, strength, and endurance, as well as to the development of wholesome recreational skills and constructive attitudes toward recreation, health, and social relationships that carry into adult life.

For more information call 313-845-9647 or visit www.hfcc.edu/sports.

Center for Lifelong Learning

The Center for Lifelong Learning (CL2) offers the classes you want and the convenience you need. CL2 meets the educational needs of community members for continuing education in a convenient, non-traditional format. CL2 provides a wide range of high-quality, non-degree

professional development and personal enrichment classes. Working with individuals in both the college and the community, CL2 develops programs that are offered throughout the year to adults seeking new skills and knowledge in either an informal classroom setting or online.

Professional CEU programs include Property Assessment Administration (formerly offered for credit), Real Estate Appraisal, and SB-CEU's for K-12 Educators and Nurses. Other programs include:

- Art
- Music
- Leadership Skills
- Business and Finance
- Computers and Technology
- Physical Fitness and Nutrition
- Family and Community Issues
- Travel

CL2 classes may be offered for continuing education units (CEU's).

Please call 313-317-1500 or visit www.hfcc.edu/cl2 to see how we can improve your future. Or, visit our conveniently located office at the Dearborn Heights Center, 22586 Ann Arbor Trail, Dearborn Heights, MI 48127.

College Store

The College Store carries textbooks, computer software, supplies, clothing, and miscellaneous items. Staff members are available to answer questions and give assistance. The College Store accepts cash, personal checks, VISA/MC/and Discover, as well as HFCC Gift Certificates and financial aid. Students using financial aid, loans, or scholarships for College Store purchases must present a current student schedule or award letter and picture ID for each purchase. Orders are also accepted on-line.

Store Hours

Fall and Winter Semesters

Monday-Thursday 8:00 a.m. – 6:30 p.m.
Friday 8:00 a.m. – 4:30 p.m.

Spring/Summer Hours

Monday-Thursday 8:00 a.m. - 6:30 p.m.

College Store Return Procedure (Contact College Store for complete details)

Should it be necessary to make an adjustment, the following conditions must be met:

1. Students must have their cash register receipts. Purchases made with a charge card will be issued a charge credit. Refunds of merchandise/books originally purchased with a check may require a 10-day waiting period.

2. Students have until the last day of the second week of classes to make a return on new or used textbooks. Books from classes dropped after the first two weeks are not eligible for return. For a full refund on new textbooks, books must be in perfect condition (as determined by a staff member) - free from any writing, stains, markings, or damage to the cover or binding.
3. Textbook sales are final after the end of the second week of classes.
4. Refunds on supplies or clothing will be made only if the item is returned unused, within one week of purchase. Blister-packed items and boxed items must be returned in their original package with the packaging in resalable condition.

Book Buy Back Procedure

Book buy back is held only during the week of final exams for fall and winter semesters. Spring/summer term buy back dates vary. The College Store does not purchase books from students at any other time. Not all books can be bought back due to overstocks and edition and title changes. Workbooks are not purchased during buy back.

For more information, please contact the College Store at 313-845-9603 or visit collegestore.hfcc.edu.

Corporate Training Division

The Corporate Training Division expands workforce skills, retrains employees in new work fields or new technologies, and supports economic development through the provision of educational services to business and industry. The division responds to business and industry requests by designing learner-centered educational offerings that are affordable, flexible, and customer-specific. These work-based educational programs are financed by contract with the employer or through private or public sources.

Training can be offered in credit or non-credit forms, or through seminars granting continuing educational units (CEU's). Work and learning skills assessment and the development of multi-agency learner support systems are some of the comprehensive services available through our office. Classes are taught at either College or company facilities. The use of work specific tools and equipment is encouraged in training and education projects. Corporate Training also co-manages an advanced CAD/CAM/CAE training facility.

Employers are invited to contact the Corporate Training Division at 313-845-9670 or visit www.hfcc.edu/corporatetraining. Contact the division to see how it can support your employee development goals. The division can help you meet the learning and work skill goals of your organization.

Culture and Community

When it comes to cultural enrichment, the best choices are at Henry Ford Community College. HFCC students can attend or participate in the many excellent art exhibitions, plays, concerts, and dance performances on campus, or become involved in the college's diverse student clubs and organizations. And the surrounding community offers even greater educational and leisure opportunities.

On campus, choose from clubs that match your hobbies, cultural heritage, or religious or social interests. Through these activities, hundreds of HFCC students promote education, discussion, cultural awareness and service opportunities every year. Among the many clubs at HFCC are the African-American Association, Community Service Club, Future Teachers Association, Math Club, Philosophy Club, Phi Theta Kappa, Science Association, Society of Manufacturing Engineers, Student Nurses Association, and Women Tech Club.

HFCC students enjoy a variety of ethnic experiences all in one day, with the annual Globefest, sponsored by the Council of American Cultures. This celebration of diversity offers dance, music, performances and food representing many cultures such as Arabic, Polish, Vietnamese, Mexican and Italian.

HFCC also features the award-winning student radio station WHFR-FM 89.3 and *The Mirror News* student newspaper, both of which promote cultural events and provide endless opportunities for students to become part of the thriving campus community.

The Student Bulletin offers HFCC students even more information about local and campus events, as well as volunteer opportunities for activities like the annual Dr. Martin Luther King, Jr. Community Service Day.

HFCC students can enjoy the cultural opportunities in the nearby city of Dearborn, one of the area's most diverse communities. Check out the ensemble of social and dining establishments, or visit The Henry Ford, featuring the renowned Henry Ford Museum and Greenfield Village.

Just minutes away, Dearborn's Ford Community and Performing Arts Center offers an eclectic range of events, including classic rock, pop, symphony and theatrical performances. The center also offers activities for every taste, including an indoor aquatics area, outdoor fishing pond, jogging track, café, baseball and soccer fields, and cultural arts exhibits.

The choices for cultural enrichment become almost limitless when students drive a short distance to the City of Detroit and the surrounding areas. The choices match everyone's tastes, from cultural attractions such as the Detroit Institute of Arts and the Fox Theater, to world-class sporting events such as Detroit Pistons basketball and Detroit Red Wings hockey, to unique dining experiences such as the Hard Rock Café.

English Language Institute (ELI)

The English Language Institute curriculum, through year-round instruction, helps to expedite the learning and language development of foreign students by offering them five (four during spring/summer terms) four-hour days of intensive language study or a three-hour evening session, four days a week. The program helps second language speakers of English increase their English language proficiency for academic and professional purposes. The Institute helps students increase the test scores they need for admission to colleges, professional schools, business schools, law schools, and medical schools.

The ELI offers credit and non-credit courses that range from beginning to upper-level developmental reading, writing, and listening. However, students must be proficient in their native language. TOEFL preparation, pronunciation, and conversation, and assisted tutoring classes are also offered. Credit courses are ELI 050, ELI 060 and ELI 090.

The ELI also offers ELI 010 Pharmacy College Admission Test preparation with a focus only on the verbal portion of the test and ELI 012, a developmental course designed to improve the English business communication skills of non-native speakers.

The ELI is located on the first floor of the Liberal Arts Building L-142, HFCC's main campus. Day-time office hours are 8 a.m. to 4:30 p.m. Monday through Friday, and evening hours are 6 – 9 p.m. Monday through Thursday. For information call 313-317-1556 or visit www.hfcc.edu/eli.

**All students in the Language Institute will qualify for a Certificate of Attendance awarded for completion of all required hours of study and a Certificate of Achievement to verify academic achievement at each level of study completed.*

Fifty-One O One Restaurant

For an innovative dining experience, the best choice is HFCC's Fifty-One O One restaurant, an integral part of the college's Hospitality Studies program. Completely operated by the program's students and staff, this restaurant — conveniently located in the Student and Culinary Arts Center — allows hospitality students to perfect their craft, while guests enjoy the fruits of these educational labors.

Students working in Fifty-One O One are tomorrow's hotel and restaurant managers, chefs, dining room personnel, and food service industry professionals. As part of their studies, they rotate through the various stations in the kitchen and dining rooms.

Meanwhile, guests choose from a full range of menu items, including appetizers, specialty salads and sandwiches, entrees, daily specials and desserts, all of which are prepared in various Culinary Arts classes.

And the choices are abundant, with savory specials like chicken paprikash, seafood crepes, turkey Marsala, and vegetable noodle florentine. It's an unusually delicious educational experience for both students and guests.

The Fifty-One O One is open during the fall and winter semesters. Lunch is served on Tuesdays, Wednesdays and Thursday. Dinner is served on Wednesday evening. During the spring semester the program offers various international buffets. In addition, throughout the year the program offers special events such as Oktoberfest, Holiday Buffet, Bake Sales, and spring scholarship dinner. Call for reservations, 313-206-5101. For more information, visit www.hfcc.edu/5101.

Food Service

With the renovated Student and Culinary Arts Center, a number of dining options are available. The Skylight Café food court features several different stations:

- Corner Deli
- Maggie's Specials
- Main Course
- Boulevard Grill
- Magic Oven
- Sweet Endings

The Skylight Café is open Monday through Thursday from 7:30 a.m. to 7 p.m. and 7:30 a.m. until 2 p.m. on Friday. Learn more at www.hfcc.edu/skylight

HFCC's restaurant, the Fifty-One O One, operated by the Hospitality Studies Program, offers a wide menu and is open for lunch on Tuesdays, Wednesdays, and Thursdays, and dinner on Wednesdays during the fall and winter semesters. Visit www.hfcc.edu/5101 for more information.

In addition, vending machines are located in the Fine Arts, Health Careers, Liberal Arts, and Technology buildings.

Library

The Fred K. Eshleman Library is located in the south half of the Learning Resources Center. This modern facility offers seating for over 560, including seven group-study rooms. The Web-based catalog allows users to search the Library's collection of over 100,000 items, including 87,000 books, 600 periodical titles, and an extensive collection of government documents. Access to a range of full-text indexes is available at ten reference workstations. Go to www.hfcc.edu/library to access the library's home page.

Check-out is speedy and efficient at the circulation counter. A library card is required and is issued free to library users. Those with questions about book loans should call 313-845-6375.

The Media Center on the second floor houses over 40 PC's. Access to the Internet, e-mail, and a wide variety of software is available. Other media, such as video tapes, audio tapes,

slides, CD-ROMS, or laser disks used to support classroom instruction are found here. Only currently registered students may use the Media Center, and a library card is required. Those with questions may call **313-845-6386**.

Help is always available from the librarians, in person or by phone at **313-845-6377**.

During the fall and winter semesters the Library is open six days a week for 71 hours. The hours vary during the spring and summer semesters and between semesters. For current Library hours or more information please call **313-845-9606** or visit www.hfcc.edu/library.

Michigan Technical Education Center (M-TEC)

The Michigan Technical Education Center (M-TEC) at HFCC, located at 3601 Schaefer Road, offers state-of-the-art classrooms, conferencing and technical lab facilities to the Wayne and Monroe County regions.

The College's primary economic development resource offers support for workforce skills growth, retrains employees in new fields or new technologies, and supports economic prosperity through innovative, customized educational services. The M-TEC staff responds to requests from business and industry by designing learner-centered educational offerings that are affordable, flexible, and customer-specific. These work-based educational programs are financed by contracts with employers or through public or private grants.

The M-TEC offers in-house program development, training, and evaluation services. This includes WorkKeys services and PLATO Learning technology. It also houses an authorized Pearson Vue Testing Center that provides IT certification tests in CISCO, CATIA, Microsoft Business Solutions, and more. With HFCC faculty the M-TEC also offers College Level Examination Placement (CLEP) services.

As a state-of-the-art business training facility, the M-TEC offers a 100+ person capacity auditorium with live video conferencing and video streaming capability; a High Bay area that enables equipment-specific training; multiple meeting/training rooms and computer labs which can be flexibly arranged and configured. M-TEC staff members are on-hand to meet each customer's specific needs and create a productive setting for professional development. Hours of building operation are suited to business scheduling and there is free, convenient lighted parking.

Employers are invited to contact the M-TEC at **313-317-6600** or visit www.hfcc.edu/mtec to explore how Henry Ford Community College can meet the skill development needs of their companies.

Performances and Exhibitions

College shouldn't be all about classes. It's also about expanding your horizons, having fun and expressing your individuality. HFCC students can do all of these things—and gain practical experience—by joining one of the celebrated Art, Dance, Music and Theater programs. All students can participate in these activities.

HFCC offers many choices to match student interests. You can take part in performances, concerts, plays, and shows, some of which include travel opportunities or the chance to compete for awards. Among some of the remarkable program highlights are:

- **Art:** The Sisson Art Gallery hosts four exhibitions per year, including a show that exclusively features student works.
- **Dance:** The HFCC Full Circle Dance Company has attended the American College Dance Festival, at a different host college, for the last 10 years. This student company benefits from exposure to guest dance artists and choreographers. These professionals represent several categories of dance, including Flamenco, Jazz, Ballet, Modern, Classical Indian, Ballroom and Folk, and donate their talents by teaching master classes and composing dances for the Full Circle Dance Company.
- **Music:** The HFCC Big Band has earned awards at every Jazz Festival in which it has performed or competed over the past 20 years. It is the only jazz ensemble to perform 21 consecutive years at the Ford Detroit Jazz Festival. It also performed at the 2005 Presidential Inauguration in Washington, D.C.
- **Theater:** Student productions not only win awards, they set trends. The HFCC Virtual Theatre Production of William Shakespeare's "The Tempest" was the first of its kind in the United States. In 2004, this 3-D stereoscopic play was chosen a regional winner at the Kennedy Center's American College Theater Festival, where it was presented to more than 1,600 theater professionals. In the 30-year history of the festival, which honors the best in American College and University Theater, only three winning productions have been from community colleges and none from Michigan until HFCC earned its honors.

HFCC's diverse fine arts programs also benefit students, community members and others who attend the performances—a contribution that has not gone unnoticed. In 2002, The Dearborn Community Arts Council granted HFCC The Organization Award, part of the Mayor's Arts Awards, an annual honor that recognized the college's contribution to the advancement of the fine and performing arts in the City of Dearborn.

Student Activities and Clubs

There are many student clubs on campus and lots of activities. There are academic, cultural, faith-based, honor society, political/social activism, and recreational clubs. The Student Activities Office (SAO) assists students with club formation, event planning, fund-raising ideas, and the promotion of events. SAO holds regular meetings to inform clubs of opportunities and College policies and procedures. Students are encouraged to form new clubs or take part in existing clubs. Several requirements must be met before a student group is recognized as a registered HFCC student club. The Student Activities Office provides assistance to students who are interested in forming a club.

These are the current HFCC Student Clubs:

- Accounting Club
- African American Association
- All Around Art Association
- Arab Student Union
- Astronomy Club
- Campus Crusade for Christ
- Community Service Club
- Criminal Justice Club
- Diversity Club
- Future Teachers Association
- Gay - Straight Pride Alliance
- HFCC Pom Squad
- HFCC Team Ceramics Club
- Ice Carving Club
- (IMAN) Islamic Monitor Action Network
- Legal Assistance Association Network
- Math Club
- Mirror News Student Newspaper
- Multicultural Club
- Muslim Student Association
- One Step Ahead
- Phi Theta Kappa (Alpha Xi Mu)
- Philosophy Club
- Science Association
- Society of Manufacturing Engineers
- Sociology Club
- Student Nurses Association
- Students United for Peace and Justice
- Women-Tech Club

See the current list and find out more information about each club at www.hfcc.edu/clubs.

The Student Clubs are organized by the Student Activities Office. The contacts are:

Cassandra Fluker, *Student Activities Officer/Mirror News Faculty Liaison* crfluker@hfcc.edu

Michele Featherston, *Student Activities Secretary*
mfeather@hfcc.edu 313-845-9865 Fax: 313-317-6551

Student Activities Office

The mission of the Student Activities Office is to complement formal classroom instruction at Henry Ford Community College and to enhance the overall educational experience of students. The office is based on the philosophy that co-curricular involvement offers students the opportunity to develop leadership skills, communication skills, techniques of organization, an understanding of self, as well as an understanding of others.

Utilizing the services and programs that are available at Henry Ford Community College, students become more knowledgeable about their environment and will begin to fully develop their potential.

For more information, please contact the Student Activities Office at 313-845-9865 or visit www.hfcc.edu/sa.

In addition to support for student clubs, the Student Activities Office conducts the following activities or events.

Student Bulletin

The Student Bulletin is a SAO publication that is designed to inform the HFCC campus community about current events, student clubs, and volunteer opportunities. For more information, contact the Student Bulletin Editor, Michele Featherston, at 313-845-9865.

Voter's Registration

SAO provides on-campus Voter's Registration and conducts periodic Voter's Registration Drives. Forms are available at the Student Activities Office, Welcome Centers, Office of Financial Aid, and the Registrar's Office. SAO provides the service of mailing completed Voter's Registration forms to city election clerks.

Dr. Martin Luther King Jr. Community Service Day

The Student Activities Office coordinates volunteer activities to commemorate the birthday of Dr. Martin Luther King, Jr. Students, faculty, and staff members are encouraged to participate. Various activities such as renovation, educational, and social projects are available. This is a day of community service, reflection, and education.

Special Events and Activities

The Student Activities Office works with students, faculty, and staff to plan and implement special events and activities at the College. These events and activities provide socialization, educational information, and promote involvement at HFCC.

Volunteer Opportunities

The Student Activities Office provides information on volunteer activities, on-campus as well as in the community. Many worthwhile opportunities are available.

Student Newspaper

The Mirror News is a student-run newspaper that is published bi-weekly during the fall and winter semesters. The paper provides an opportunity for students who are interested in writing, editing, photography, desktop publishing, advertising, and business management. *The Mirror News* publishes information on all aspects of the College community, from classes to cultural events, as well as creative works and editorials. The student Editor-in-Chief recruits the newspaper's staff each semester. Currently enrolled students are encouraged to join. *The Mirror News* can be reached at 313-845-9639.

WHFR-FM 89.3

WHFR-FM 89.3 is more than just HFCC's award-winning broadcast radio station. It's the hub of telecommunications, where students gain real-world experience at an independent, noncommercial station.

These are not textbook lessons. Instead, students learn about radio equipment and production standards while putting together radio shows. Not surprisingly, *The Detroit News* named WHFR the "Best Campus Radio Station" in its "Michigan's Best 2003" poll.

Beyond campus, the station serves residents of Dearborn and surrounding communities with an eclectic mix of music rarely heard on Detroit-area radio stations. The WHFR playlist offers an unusual blend of Alternative/Modern Rock, Big Band, Blues, Hip Hop, Jazz, Space Rock, Urban and World music. The station plays more than 60 hours of classical music weekly through a satellite feed from Public Radio International (PRI).

Students learn the importance of community-focused programming at WHFR. The station hosts a weekly public affairs show and several music shows that highlight new releases, independent labels and local artists. Staff members also participate in initiatives such as the annual charity-bowling event, which pits WHFR disc jockeys against competitors from other schools to raise money for local organizations. Visit whfr.hfcc.net for more information.

Special Opportunities for High School Students

Dual Enrollment

Through HFCC's Dual Enrollment Program, students in high school can choose to enroll in both high school and college courses—which are paid for by the student's school district or charter school—while earning high school and/or college credit. Eligible classes include any college course(s) that the school district will allow the student to take.

Hundreds of students take advantage of Dual Enrollment at HFCC every year. Dual Enrollment students have great academic success. A recent HFCC study showed that Dual Enrollment students averaged nearly a 3.5 grade-point average in their college classes.

To take classes through Dual Enrollment, students follow an easy process. Please see page ii for complete information.

Advancement Plus

Another option for current high school students is the Advancement Plus program. This outstanding program allows high school students to take college classes and earn college credit while still in high school. Tuition and fees are paid by the student's parent/guardian.

Advancement Plus has allowed students to obtain enough credits to equal the first year or more of college in many cases. Students leave high school and enter college (many choose to attend HFCC) as sophomores, instead of freshmen.

To take classes through Advancement Plus, students follow an easy process. Please see page ii for complete information.

Henry Ford II Honors Program

Qualified high school students may choose to apply to Henry Ford II Honors Program, a structured, academically rigorous program of core courses in English composition, science, and the humanities. Designed to prepare students to gain admission to transfer institutions of their choice, the program also focuses on honing critical thinking and library research skills.

The program has achieved immense success. Graduates of HFCC's Henry Ford II Honors Program have gained admission to nationally known universities, such as:

- The University of Michigan
- Michigan State University
- Wayne State University
- New York University
- The State University of New York

High school students interested in the Henry Ford II Honors Program should have a 3.5 cumulative grade-point average in high school or an ACT score of 24 or higher.

Honors students also apply and are awarded scholarships when they transfer to a four-year college. Among the many prestigious transfer scholarships awarded to past HFCC Honors graduates are

- Presidential Scholarship at Wayne State University
- Regents Scholarship at Eastern Michigan
- Jesuit Founders' Scholarship at The University of Detroit Mercy
- Phi Theta Kappa Transfer Scholarship at The University of Michigan

For more information or to obtain an application form, contact Nabeel Abraham, Ph.D., Henry Ford II Honors Program Director, Room 150, Administration Building, at 313-845-6460 or by e-mail at nabraham@hfcc.edu. Visit www.hfcc.edu/honors for more information.

Advanced Placement/CLEP

HFCC accepts credit from Advanced Placement or CLEP examinations. Transfer students from other colleges who have taken Advanced Placement (AP) or College-Level Examination Program (CLEP) tests may be awarded credit at Henry Ford Community College.

Eligibility for AP/CLEP credit will be determined upon receipt of a transfer student's transcript. Henry Ford Community College will evaluate the course work, post credit equivalents as transfer credit on the student's HFCC transcript, and mail the student the results of the evaluation.

The scores required for AP credit are listed on page 315. CLEP credit is listed on page 314.

Career Pathways

Today's high school students can choose from more than 12,000 careers, according to the U.S. Bureau of Labor Statistics. That much choice can become confusing. Fortunately for HFCC students, the College makes the transition from high school to college easy.

The Career Pathways System can help you make the adjustment to college and to find a career. Career Pathways is six broad groupings of careers that share similar characteristics and whose employment requirements call for common interests, strengths, and competencies.

- **Arts and Communications:** Careers related to the humanities as well as the performing, visual, literary, and media arts.
- **Business, Management, Marketing, and Technology:** Careers related to accounting, business administration, finance, information processing, marketing, and all other aspects of business.
- **Engineering/Manufacturing and Industrial Technology:** Careers related to technologies necessary to design, develop, install, or maintain physical systems.
- **Health Sciences:** Careers related to the promotion of health and the treatment of injuries, conditions, and diseases.
- **Human Services:** Careers in child care, civil service, education, hospitality, and the social services.
- **Natural Resources and Agriscience:** Careers related to natural resources, agriculture, and the environment.

Using the Career Pathways System, HFCC students assess their interests and aptitudes, and then choose an appropriate Career Pathway that incorporates these qualities. Through the specific courses in their degree program, students then

gain a greater context of how their chosen career area fits into one of the six broad industry sectors, which eases the transition from college to the world of work.

For more information, visit www.hfcc.edu/careerpathways.

Tech Prep

Tech Prep is a federally funded grant program that helps connect high school students and their educators to HFCC. Through this program, students from Wayne and Monroe counties are eligible to earn free college credit at HFCC while still in high school.

The program is designed for students who have an interest in career fields that require at least a two-year college education; who would like to gain skills that increase their employability by pursuing a vocational certificate or apprenticeship program, and who are enrolled in a general education program.

Tech Prep courses benefit students by

- teaching them technical skills that will help them navigate the rapidly evolving worlds of business and industry
- honing the ability to work as team members and share productive ideas with others
- reducing their need for introductory course work at the community college level
- preparing them for trade and apprenticeship positions
- helping to bridge the gap between their current education/training and future professional demands

Scholarships

To help finance their HFCC degree, incoming students can apply for private scholarships made possible by generous alumni, friends of the College, local businesses, faculty, staff, and the Board of Trustees. Such awards are available for a variety of programs and support students from diverse backgrounds and interests. A complete list is available at www.hfcc.edu/scholarships or see page 363.

The image shows a 'HENRY FORD COMMUNITY COLLEGE SCHOLARSHIP APPLICATION' form. It includes fields for name, address, email, phone, and social security number. There are also checkboxes for 'Student ID#', 'Are you an immigrant?', and 'Are you a minority?'. A section for 'Name the scholarships you were then able to for which you are applying' has options A, B, C, D, E, and F. A section for 'List activities in which you have participated actively in the College and/or in the Community' is also present. The form concludes with a statement of intent to receive a scholarship and a signature line. At the bottom, it states 'APPLICATION DEADLINE: Application MUST BE RETURNED WITH ALL Supporting Documentation ON or BEFORE MAY 1st' and provides the address: 'HFCC Foundation Office, ASCC Bldg, Room 126, 1301 University Rd, Dearborn, MI 48124'.

Special Opportunities for Transfer Students from Other Colleges

Henry Ford Community College welcomes transfer students from other colleges. Thousands of students transfer to HFCC because

- HFCC is much more affordable than four-year colleges
- High-quality HFCC certificate and associate's degree programs help students find employment
- They desire to achieve an academic credential, such as a certificate or associate's degree, much faster than a bachelor's degree at a four-year college
- They need to take courses to satisfy degree requirements at a four-year college
- They had poor academic performance at a four-year college

Whatever the reason for transferring, Henry Ford Community College provides what all students need to succeed.

Advanced Placement/CLEP

HFCC accepts credit from Advanced Placement or CLEP examinations. Transfer students from other colleges who have taken Advanced Placement (AP) or College-Level Examination Program (CLEP) tests may be awarded credit at Henry Ford Community College.

Eligibility for AP/CLEP credit will be determined upon receipt of a transfer student's transcript. Henry Ford Community College will evaluate the course work, post credit equivalents as transfer credit on the student's HFCC transcript, and mail the student the results of the evaluation.

The scores required for AP credit are listed on page 315. CLEP credit is listed on page 314.

Henry Ford II Honors Program

Students transferring to HFCC from other colleges may be eligible for HFCC's Henry Ford II Honors Program, a structured, academically rigorous program of core courses in English composition, science, and the humanities. The program, which is designed to prepare students for transfer to the institution of their choice, also helps refine students' critical thinking and library research skills.

To become eligible for admission to the Henry Ford II Honors Program, transfer students must have completed 12 or more hours in 100-level or higher courses as a full-time student or 15 hours in 100-level or higher courses as a part-time student prior to application, and must be taking at least six credit hours per semester. Applications are accepted at any time, but students transferring from other colleges must apply first to Henry Ford Community College before applying to the Henry Ford II Honors Program.

Henry Ford II Honors students also attend the Transfer Workshop, a comprehensive program that reviews what public and private institutions look for in transfer applicants and outlines how students can increase their chances of admission to the transfer institution of their choice. Students are also matched with a faculty mentor, who will provide personal guidance in applying to transfer institutions and locating available transfer scholarships.

Past Henry Ford II Honors graduates have earned prestigious transfer scholarships such as:

- Presidential Scholarship at Wayne State University
- Regents Scholarship at Eastern Michigan
- Jesuit Founders' Scholarship at The University of Detroit Mercy
- Phi Theta Kappa Transfer Scholarship at The University of Michigan

For more information or to obtain an application form, contact Nabeel Abraham, Ph.D., Honors Program Director, Room 150, Administration Building, at 313-845-6460 or by e-mail at nabraham@hfcc.edu.

Scholarships

To help finance their HFCC degree, transfer students can apply for private scholarships made possible by generous alumni, friends of the College, local businesses, faculty, staff, and the Board of Trustees. Such awards are available for a variety of programs and support students from diverse backgrounds and interests. A complete list is available at www.hfcc.edu/scholarships or see page 363.

Special Opportunities for Nontraditional Students

Students returning to college after an absence may be thinking about how they will balance education plans with personal and professional commitments. HFCC helps to make this transition as smooth as possible by offering classes during the day, evening, weekends and online to give students maximum flexibility.

The College also offers a wide variety of valuable student support services that address the specific needs of returning students.

- **Assisted Learning Services:** Assisted Learning Services assists physically challenged, learning disabled, or academically disadvantaged students at Henry Ford Community College to overcome barriers to education through supportive services. In addition, the Assisted Learning Services Department also provides tutoring services to the general student population.

- **Child Development Center:** Family commitments can often interfere with a school schedule. At HFCC, students can enroll their children (ages 2 1/2 through 12) in our state-licensed Child Development Center, which offers day and evening care.
- **Counseling Services:** A successful college career requires a comprehensive support network that addresses short-term educational goals, career plans and the inevitable personal issues that arise. At the University Transfer, Advising and Career Counseling Center, experienced counselors are ready to help students understand the transfer process, plan schedules, set career development goals, and cope with the potential anxiety of balancing college, work and home life.

- **Focus on Women:** Like the University Transfer, Advising and Career Counseling Center, the Focus on Women program offers both women and men extensive resources, including personal, academic and career counseling; financial assistance programs for students who meet specific requirements; and seminars to help students in personal and academic areas.

For a full listing of support services available to all HFCC students, please see the Student Support Services section on page 302.

**HENRY FORD COMMUNITY COLLEGE
Office of the Registrar**

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

CLEP EXAMINATION	MINIMUM SCORE	HFCC COURSE EQUIVALENT	CREDIT HOURS
Composition & Literature			
English Composition	47	ENG 131	3
Foreign Language			
College Spanish (Level 1)	41	SPN 131	4
Mathematics			
College Algebra-Trigonometry	45	MATH 175	5
Calculus with Elementary Functions	47	MATH 180	5
Social Sciences and History			
American Government	50	POLS 131	3
American History I	50	HIST 151	3
American History II	50	HIST 152	3
Introductory Psychology	50	PSY 131	3
Human Growth and Development	50	PSY 253	3
Introductory Sociology	50	SOC 131	3
Principles of Accounting	50	BAC 131	4
Western Civilization	50	HIST 111	3
Western Civilization II	50	HIST 112	3

**COURSES AND CREDIT HOURS OFFERED
BY
HENRY FORD COMMUNITY COLLEGE**

Through the College Entrance Examination Board Advanced Placement (AP) Program

AP SUBJECT	SCORE REQUIRED	CREDITS	EQUIVALENT HFCC COURSES
ART	3 or above	3 semester hours	ART 121, 122, 123, 124, 125, 126, 127, 128, 129, or 130
BIOLOGY	3 or above	4 semester hours	BIO 131
CHEMISTRY	3 or above 5	4 or 5 semester hours 10 semester hours	CHEM 131 or CHEM 141 CHEM 141 and 142
COMPUTER	3 4 or 5	3 semester hours 6 semester hours	CIS 100 CIS 125
ENGLISH LANG/COMP or LIT COMP	3 or above	3 semester hours	ENG 131
FRENCH	3 4 or 5	4 semester hours 8 semester hours	FRE 131 FRE 131 and FRE 132
GERMAN	3 4 or 5	4 semester hours 8 semester hours	GER 131 GER 131 and GER 132
SPANISH	3 4 or 5	4 semester hours 8 semester hours	SPN 131 SPN 131 and SPN 132
AMERICAN HISTORY	3 or above	3 semester hours	HIST 151 or HIST 152
MATH (AB)	3 or above	5 semester hours	MATH 180
MATH (BC)	3 or above	10 semester hours	MATH 180 and MATH 183
MUSIC Appreciation Literature	3 or above	2 semester hours 3 semester hours	MUS 131 MUS 132
MUSIC Theory Sight Singing	3 or above	4 semester hours 2 semester hours	MUS 135 MUS 141
POLITICAL SCIENCE U.S. Government & Politics	3 or above	3 semester hours	POLS 131
PSYCHOLOGY Introduction to Psychology	3 or above	3 semester hours	PSY 131

Online Learning

HFCC offers high-quality online classes in many of its academic programs. These courses provide convenience and flexibility to busy students, often allowing them to complete a degree faster.

Students taking online courses use the UCompass Educator system. Here are frequently asked questions about online classes at HFCC:

What is UCompass Educator?

UCompass Educator is HFCC's online classroom system. Only students enrolled in online courses or courses that use UCompass Educator as a supplement to traditional classroom instruction have access to UCompass. Your UCompass account is available on the first day of classes at <http://henryford.ucompass.com>.

How do I know if I'm ready for an online course?

You must have a basic working knowledge of your computer, the Internet and word processing applications. Take the survey at <http://henryford.ucompass.com>. Click "Is Online Learning for You?" to assess your skills.

What equipment do I need to take an online course?

You must have access to:

- A PC computer system with a minimum 65 megabytes RAM and a color monitor
- Macintosh equivalents would be OS 9.1 or higher
- A CD-ROM or CD/DVD
- A 56k or higher modem, DSL or cable modem
- An Internet Service Provider (ISP) and personal e-mail account
- Web Browser
- Internet Explorer 5.0+ , Netscape Navigator 4.7+, Mozilla Firefox
- Microsoft Windows 98 or higher, XP or Windows NT
- Office 97, 2000 or XP
- Office 98 or higher for Mac

Visit <http://henryford.ucompass.com> and click "Computer Requirements" to identify the components of your computer and determine its readiness. Links for the latest upgrades are available on this site.

How do I find out about which online classes are being offered?

Online course offerings continue to expand each semester. See the *Schedule of Classes* or the HFCC Web site at www.hfcc.edu for current course offerings.

The Schedule of Classes indicates that my course is 95% (or another percentage) online. What does that mean?

The percent indicates how much of the class is online. For example, a class that is 95-percent online might require students to come to campus for a midterm and a final exam. A class that is 50% - 75% online may require students to come to campus every other week. Please contact the instructor for additional specific information.

OK, I'm registered for an online course. What should I do now?

Contact your instructor via e-mail as soon as you have registered for your online course. This provides your instructor with the means to communicate with you directly. Your instructor will then send you information about your course. *It is your responsibility to contact your instructor via e-mail as soon as you have registered for your online course.*

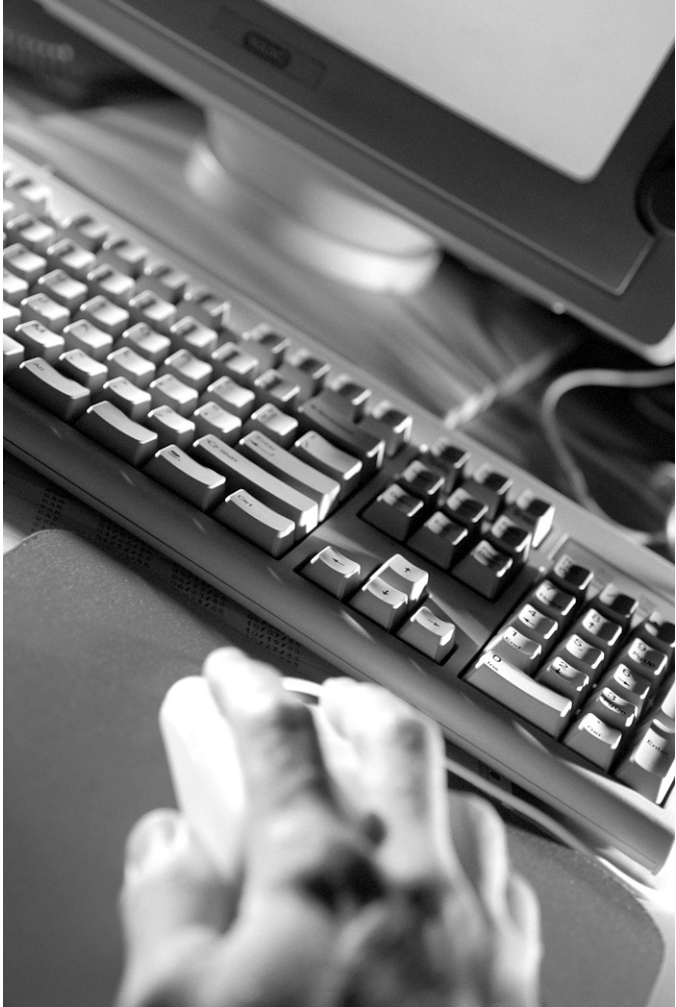


How do I contact my instructor?

Use the e-mail address provided in the class schedule, or from www.hfcc.edu, click the "For Faculty & Staff" link, and then click the "Faculty & Staff Directory" link.

How do I get to my online course?

Your UCompass online course is located at <http://henryford.ucompass.com>, or from the HFCC Web site, www.hfcc.edu, click the "Current Students" link, then the UCompass link on the left-page menu. Sometimes instructors use sites other than Ucompass for their online materials. If your course does not utilize the UCompass Educator System, your instructor will tell you how to access your course.



4. Scroll down the portal main page until you see the “Change Your Novell Password” section.
5. Type in your Current Password and the New Password (twice) and click “OK.” Follow the prompts and make certain you carefully read any messages or instructions that appear.
6. When completed, you can logout of the portal by clicking the “Logout” link located at the top right of the screen.

For more information on changing your Novell Network and UCompass password, visit <https://dvc.hfcc.net/helpdesk/000367.htm>.

Where do I go for help with UCompass Educator?

For help with UCompass, contact the HFCC Office of Instructional Technology.

Phone: 313-845-9663, extension 4 or 5

E-mail: support@henryford.ucompass.com

What is my UCompass Educator ID?

Your Ucompass ID is the same as your WebAdvisor ID.

What is my UCompass Educator password?

Your UCompass password is the four-digit month and date of your birth, i.e. June 5 = 0605.

How do I change my UCompass Educator Password?

The Novell network (see page xii) and UCompass use exactly the same account and password. When you change the Novell network password, the UCompass password changes as well. To change your Novell network and UCompass password, follow these instructions:

1. Point your browser at <http://myportal.hfcc.edu>.
2. You will get a Security Error message. Click “OK” to accept the certificate.
3. Put your account and password into the Portal login screen and click “Login.”

Information & Policies

Academic Dishonesty

Policy on Academic Dishonesty (Cheating)

Henry Ford Community College considers academic dishonesty to be a serious offense. It is the policy of the College that determination of and appropriate action in respect to academic dishonesty by a student shall be a matter of individual judgment by the instructor. The instructor may administer a penalty up to and including failure in the particular course. It is the professional obligation of the faculty to enforce academic integrity in their courses.

Academic dishonesty is any activity intended to improve a student's grade fraudulently.* It includes, but is not limited to, the following:

1. Unauthorized acquisition of tests or alteration of grades (such as the stealing of tests, test keys, or grade books from faculty offices or elsewhere, or the purchasing of tests or grade books);
2. Unauthorized use of notes, books, or other prohibited materials during an examination;
3. Open cheating on an examination (such as copying from another student's paper);
4. Permitting another person to take a test in the student's place or receiving unauthorized assistance with any work for which academic credit is received;
5. Providing unauthorized assistance with any work for which academic credit is received;
6. Revision of graded work in an attempt to receive additional credit fraudulently;
7. Plagiarism (using another person's work without acknowledgment);
8. Use of cell and video phones to cheat;
9. Any other conduct intended to obtain academic credit fraudulently or dishonestly.

If an instructor fails a student in a course for academic dishonesty, the instructor must immediately notify in writing the student and the registrar of the infraction, retaining copies of both notifications.

The registrar maintains a record of all such violations. If a student fails two classes as a result of academic dishonesty, he or she is dismissed from the College for two academic years. In addition, a notation of the reason for academic dismissal is placed on the student's transcript. The notation may be expunged at the discretion of the appropriate vice president

if the student petitions for its removal after at least two years have elapsed since the disciplinary action.

If a student believes that the accusation is false, he or she may appeal through the Student Complaint Procedure. If the appeal reaches the Student Complaint Board, the Board may consider only whether the charge is justified. The Board may not set aside or change the penalty given by the instructor unless the charge of academic dishonesty is set aside.

**Any action that violates the Student Conduct Policy and Due Process Procedure is also subject to review under that policy.*

Academic Policies

Academic Forgiveness Policy

The purpose of academic forgiveness at Henry Ford Community College is to allow a student who has not performed well academically to have a maximum of twelve hours of E grades removed from his or her grade-point average.

To apply for academic forgiveness, a currently enrolled student must file an application in the Office of Registration and Records. Guidelines for the policy are as follows:

1. Five or more years must elapse between the academic forgiveness and the last failing grade for which forgiveness is requested.
2. The student must have earned at Henry Ford Community College at least six credit hours in courses numbered 100 or above and have a cumulative grade-point average of at least 2.00 since the failing grades were received.
3. Forgiven grades, to a maximum of twelve credit hours, will no longer be calculated into the student's grade-point average.
4. Forgiven grades remain on the transcript and a special notation is added explaining academic forgiveness.
5. Academic forgiveness can be granted only once to any student.
6. Academic forgiveness, when granted, applies to Henry Ford Community College courses. There is no guarantee, expressed or implied, that the academic forgiveness will be recognized by any other college or university.

Advanced Standing - Career Education

Entry into a program of study with advanced standing permits the selection of advanced courses only and does

not grant college credit for those basic courses that may be waived. In all cases, the number of credit hours required to earn an associate degree remains as stated in the catalog.

Requests for advanced standing should be directed to the Office of Admissions, Registration and Records or the department or division chairperson at least six weeks prior to the time of enrollment if an advanced class is desired.

Those persons eligible to request advanced standing are:

- A high school graduate who has completed specialized high school preparation in the specific area in which advanced standing is being requested. A minimum overall average of 3.0 is required in the specialized area.
- An individual with extensive business or industrial experience in a particular technology whose experience has been attested to by the individual's employer.

The department or division chairperson may require the applicant to submit examples of work and take a proficiency examination in the field of specialization.

Upon the granting of advanced standing, the department or division chairperson will provide a statement of eligibility for entrance to the next sequential class.

Auditing a Course

A student who desires to attend a course regularly but does not wish to receive a grade or credit may take the course as an audit. A record will be kept of the course audited.

After enrolling in the course, the student must apply for audit status at the Office of Admissions, Records and Registration during the first two weeks of classes. Change of status from audit to credit or from credit to audit is not permitted after the first week of class.

A student will receive a mark of audit only if the audit status is specified on the final class roster sheet from the Office of Admissions, Records and Registration.

Class Load

Full-time student status is defined as 12 to 17 semester hours of credit. The average full-time student usually carries 15 hours of credit. Students are limited to 18 hours unless special permission is granted by the Director of Admissions, Records and Registration or one of the Vice President/Deans. Students are expected to carry at least a 3.0 average with a minimum of 12 hours already completed at Henry Ford Community College in order to petition to carry more than 18 semester hours.

Students in most academic courses are expected to spend the equivalent of two hours of preparation for each hour of class.

Students who are on college parallel programs should choose their college courses carefully, preferably in consultation with a counselor, so that credits will not be lost in the transfer.

Transfer equivalent sheets are available in the University Transfer, Advising and Career Counseling Center for most programs in Michigan colleges.

Dean's List

Students earning twelve credits or more in a semester and maintaining at least a 3.50 grade-point average will be included on the semester's Dean's list.

After completion of 12 credits at HFCC, students attending part-time are eligible for the Dean's List if they complete at least 6 credits and maintain a 3.5 GPA. (Note: All course work must be at the non-developmental level).

Incomplete Work

A student may receive an "Incomplete" grade if some part of the course work remains unfinished, provided the student's standing in the course has been satisfactory. A student performing unsatisfactorily in a course may have a final mark of "E" recorded if some part of the course work remains unfinished. A student who receives an "Incomplete" must make up all class work by the mid-semester date of the following semester. If the work is not made up, the "Incomplete" grade will be changed to DR.

Marking System

You will be able to access your grades using one of the following options:

ON THE INTERNET: To check grades on the Internet, you will need to access www.hfcc.edu, and then click on "Current Students," and then click on "Grades."

USING TREG: Students can call 313-317-4100 and follow the prompt for grades.

The following grades, shown here with their values in honor points per semester hour of credit, are used:

A = 4 points	Superior achievement as demonstrated by the ability to master materials of the course.
B = 3 points	Highly satisfactory work in the required areas of the course.
C = 2 points	Proficiency in most of the course requirements.
D = 1 point	Some proficiency in the course requirements, accompanied by unacceptable deficiencies. The student is neither fully qualified to take an advanced course nor to continue the sequence.
E = 0 points	Course requirements not met.
I = 0 points	Incomplete.

DR = 0 points	Dropped without prejudice.
S = 0 points	Satisfactory completion of course requirements. The College considers an S grade to be the equivalent of a C grade or better.
U = 0 points	Unsatisfactory completion of course requirements.
R = 0 points	Repeated course
AU = 0 points	Audit.
NG = 0 points	No grade reported.

Official Evaluation of Credits

All transfer students, as part of their admission to the College, have their previous college course work evaluated. College credit evaluated as transferable to Henry Ford Community College will be posted to the student's official academic record. Each transfer student is notified regarding the disposition of his or her transfer credit.

Courses that have been completed with a C (2.00) grade or better at institutions accredited by one of the six regional accrediting associations in the United States will be accepted on a credit-hour basis. Courses submitted for transfer must be of college-level work. Credit for developmental courses will not be given. Grades and honor-point averages are not transferable.

Credits from non-accredited institutions may be granted by the Director of Admissions, Records and Registration upon the recommendation of the appropriate division or department.

Probation and Dismissal Policy

A student whose cumulative grade-point average is below the following levels is placed on academic probation:

1.50	for	5-11	credits attempted
1.75	for	12-19	credits attempted
1.85	for	20-28	credits attempted
2.00	for	29-and more	credits attempted - also subject to dismissal

Students are notified of their probationary status by letter directing them to meet with a counselor, who assists them in developing an appropriate educational plan before being permitted to register for the next semester.

Based on their assessment of each student's needs, counselors may require enrollment in specific developmental courses before releasing students to register. Students may appeal such counselors' decisions, in writing, to the Scholastic Review Board.

Returning probationary students who have not enrolled for one or more semesters are permitted to register only after meeting with a counselor.

Students on probation who have attempted more than 28 hours are dismissed from the College for one full semester (fall or winter) unless they maintain a per semester grade-point average of 2.0 or above. Students on probation, who are placed on academic dismissal, if currently attending classes, are permitted to complete the semester but cannot pre-enroll for the following semester. Dismissals may be appealed, in writing, to the Scholastic Review Board. Students are notified in writing of appeal procedures.

Students' appeal letters may be directed to the Scholastic Review Board in care of the Office of Admissions, Records and Registration. Students who are not on academic probation but whose cumulative grade-point average is below 2.0 are sent a letter encouraging them to see a counselor.

Repeated Courses

A course taken at HFCC for which a grade has been recorded may be repeated if currently offered. The higher or last grade earned becomes the officially recorded grade reflected in the student's cumulative grade point average. On the transcript the symbol "R" will be denoted next to the original grade earned to indicate that the course has been repeated. Contact the Office of Registration and Records if the "R" symbol does not appear next to the lower grade earned.

Transcripts of Credit

An official transcript of credits attempted may be requested by the student in writing in the Office of Admissions, Records and Registration. Official transcripts are sent directly to a receiving institution and are not issued to the student. A student copy of the transcript may be issued to a student but will not carry the official College seal.

Please refer to the current class schedule for appropriate transcript fees.

Admission Policy and Procedures

Henry Ford Community College welcomes applicants with high school diplomas, General Education Development (GED) certificates, and college credits and/or degrees. Applicants may enroll in one course, a series of courses, or a program leading to a certificate or degree. Whatever the motivation, it is important that the applicant have a successful experience. The following information should be helpful in completing the appropriate application procedure.

Regular admission is permissible as follows:

High School Graduates

U.S. Citizens, Legal Permanent Residents, and individuals who are present in (or who will be admitted to) the United States in a status which allows them to enroll at the College, can be granted regular admission if the applicant has either graduated from a regionally accredited or state-approved

U.S. high school or holds a General Education Development (GED) certificate, or has graduated from a non-U.S. high school and demonstrates sufficient proficiency in the English language through passing the ESL COMPASS Test that the College is satisfied that he or she can function successfully at the College and benefit from the academic program.

Non-High School Graduates:

Non-High School Graduates can be granted regular admission provided the applicant has received a score on a basic skills test that the College determines is sufficiently high to place him or her in college-level English composition, and provided his or her high-school cohort class has graduated.

Home-School Applicants:

An individual who was home schooled can be granted regular admission if he or she meets both of the following conditions:

1. A parent or guardian certifies that the student has completed his or her high school education; and
2. A qualified, independent third-party evaluator, either representing the school district in which the student resides or another entity approved by the College, verifies that the student's home school education has met acceptable academic standards.

Other General Requirements:

In order to be granted admission, all students must meet the prerequisites and co-requisites required for course enrollment. Additionally, with regard to any applicant, the College must be satisfied that the student is sufficiently mature and responsible that he or she can function successfully at the College and benefit from the academic program. This generally means that the student is at or beyond 12th grade age.

The President and his or her designees are authorized to inspect and verify all admission applications, transcripts, records, documents, and other credentials that may be submitted by student applicants in order to ascertain their accuracy, completeness, and authenticity. The College can reject or dismiss any individual whose application contains any misrepresentation, omission or incorrect statement of fact, or who the College believes poses a risk to the health or safety of themselves, other students, faculty, or staff.

Application Procedures

1. All degree or certificate seeking students attending Henry Ford Community College for the first time must obtain and complete an application for admission and pay the application fee, which is non-refundable. Applications are available in area high schools, by calling the College's Welcome Center at 1-800-585-HFCC or visit www.hfcc.edu/apply.
2. Applicants who are high school graduates or recipients of the General Education Development (GED) certificate must submit their educational records.

Those records will be used to assist in the advising process. An individual whose high school class has graduated may apply for admission without a high school diploma or GED if the College determines that his or her score on a basic skills test is high enough to exempt him or her from developmental work in reading and writing. Applicants with sufficiently high scores will be allowed to enroll in any classes offered by the College, provided they satisfy the course prerequisites.

3. Current high school seniors need to submit transcripts, which will be used to assist in the advising process.
4. Students who have attended other colleges or universities should have official copies of their transcripts sent to the Office of Admissions, Records and Registration, Henry Ford Community College, 5101 Evergreen, Dearborn, MI 48128. The official transcripts will be evaluated for transferable college credit.
5. Applicants who have graduated from a non-U.S. high school must submit officially translated documents demonstrating to the College's satisfaction that the applicant has earned at least the equivalent of a U.S. high school diploma. Such applicants must also present documents or transcripts which demonstrate to the College's satisfaction average or above average grades. Students from countries where English is not the primary language will need to demonstrate proficiency in the English language that the College is satisfied that they can function successfully at the College and benefit from the academic program. Translated documents and transcripts should be sent to the Office for International Students, Henry Ford Community College, 5101 Evergreen, Dearborn, MI 48128-1495

Special and Provisional Admission

Non-Degree Seeking Students

Students may be admitted to the College by Special Admission for Non-Degree-Seeking Students in order to take a course for enrichment or personal development but not to pursue a degree or certificate. Students eligible for Special Admission include those who are high school graduates, hold GED certificates, or have attended another college. Students admitted under this category must satisfy all prerequisites for courses they take, and they are not eligible for financial aid. If, after completing fifteen (15) semester hours of credit, the non-degree student wishes to seek a degree from Henry Ford Community College, he or she may be required to submit educational documents for review and evaluation to verify academic status. Courses taken under a non-degree status may or may not be acceptable for meeting program or degree requirements.

Guest Students

A guest student is one who currently attends another college or university and wishes to take one or more courses at Henry Ford Community College. The guest student must submit an authorized guest application from his or her home institution.

Dual Enrollment Students

Henry Ford Community College is a participant in the Dual Enrollment Program, in which students attend both high school and college courses. Students must submit a special Dual Enrollment Application for each semester in which they plan to enroll in both Henry Ford Community College courses and courses in high school. The application, which is available at the high school, must be signed by his or her high school counselor or principal. The signature of a parent is not required from an applicant who can demonstrate emancipated legal status. Dual Enrollment students desiring placement in a math class, Chemistry 141, English 081, English 093, or English 131 are required to take appropriate placement tests. There is no application fee. Tuition and fees are paid by the school district in which the Dual Enrollment student resides.

Advancement Plus Students

Henry Ford Community College offers the Advancement Plus Program for academically qualified high school students. This program provides a parallel route for high school students to enhance their present curriculum, enrich their academic experience, and earn college credit while attending high school.

The Advancement Plus Program is available to all students who are identified by their high school counselors or principals as having above-average academic status. The counselors or principals, in cooperation with the students, develop the students' program of study. To qualify for the Advancement Plus Program, a student needs to complete an Advancement Plus application, available at the high school, and obtain the required signatures.

Tuition and fees are paid by the student's parent/guardian.

Home-schooled students need the approval of the HFCC Counseling Director. Interested students may contact the Director at **313-845-9612**.

Students desiring placement in Math 115 or above, Chemistry 141, English 081, English 093, or English 131 are required to take the appropriate tests.

International Students

The College is authorized by the Department of Homeland Security to issue the Certificate of Eligibility for Non-Immigrant (F-1) Students, also known as the I-20 Form. The College's admission of international students will be governed by all applicable state and federal regulations. International students must complete their financial arrangements before coming to the United States.

Department of Homeland Security regulations limit employment of students holding an F-1 visa. The College will issue an I-20 Form only to students who can demonstrate the financial ability to meet college and living expenses. International students who obtain the F-1 visa and have sufficient finances may be granted regular admission to the College.

The following information must be provided:

1. Completed Henry Ford Community College application.
2. Completed Henry Ford Community College Supplementary Student Information Form.
3. Official translated transcript(s) from all previous colleges or universities attended.
4. A notarized copy and translation (if not in English) of secondary school records, examinations, and certificates. (Above average scores are necessary).
5. A score of 550 on the TOEFL (Test of English as a Foreign Language), 80 on the MELAB (Michigan English Language Assessment Battery), or a satisfactory score on the Henry Ford Community College ESL (English as a Second Language) Placement Test. (Applicants educated in Canada, England, Scotland, Wales, Ireland, Australia, or New Zealand need not submit the above test scores). However, upon arrival at Henry Ford Community College, all degree-seeking students are required to take the appropriate assessment tests.
6. Proof of financial responsibility by submitting one of the following documents:
 - a. Notarized Affidavit of Support (I-134) and bank statement
The above information should be directed to the International Office.
 - b. Government sponsor
The above information should be directed to the International Office.

Non-U.S. High School Graduates

Applicants who have graduated from non-U.S. high schools are required to demonstrate sufficient proficiency in the English language that the College is satisfied that they can function successfully at the College and benefit from the academic program. Such proficiency can be demonstrated by taking and achieving a score deemed sufficient by the College on the English as a Second Language (ESL) Placement Test. After submitting translated documents showing acceptable grades and the equivalent of a U.S. high school diploma, the applicant may receive an authorization to take the ESL Placement Test by calling the Assessment Office at **313-845-6399**. Graduates of non-U. S. high schools where English is

the primary language such as Canada, England, Scotland, Wales, Ireland, Australia, and New Zealand, may be required to take the ASSET or COMPASS Basic Skills Placement Test in lieu of the ESL Test.

Dearborn Senior Citizen Students

Dearborn Public School District residents who meet course prerequisites and who are age 60 and older are eligible to take credit courses at the College tuition-free provided they pay uniform fees and specified course fees. Interested individuals should visit the Enrollment Development Office or call 313-845-6397 to express their interest in the program. Enrollment Development Office personnel will assist with the application and registration process.

Affirmative Action Policy

Henry Ford Community College is an affirmative action, equal opportunity institution.

Students who have complaints of an equal opportunity nature (discrimination or harassment on the basis of age, race, ethnicity, gender, sexual orientation, creed, ancestry, disability, height, weight, national origin, religion, or marital status) shall consult either the Affirmative Action Officer or the Vice President/Dean of Student Services, who will provide a copy of the Discrimination and Harassment Complaint Procedure and review with the student an appropriate procedure to follow.

Dropped Classes Repeat Policy

Students are allowed to transfer in courses completed at other colleges for which they originally received a grade of DR from Henry Ford Community College. When transferring courses from another institution, the original HFCC grade remains on the student's transcript.

Dropping/Adding Classes

Changes in a student's class schedule may be made in the Office of Admissions, Registration and Records after the student has officially enrolled in any course. Membership in a class does not cease until the student has officially dropped the class.

Schedule adjustments may be made during the add and drop period up until the 10% date without academic penalty. The student's transcript will not record any such changes made before the 10% date. A student may officially drop a class without penalty until 60% of the class is completed. A DR will be recorded on the student's transcript. If a student stops attending a class without officially withdrawing from the class, the instructor may record either an E or DR grade.

Students considering withdrawing from classes during the semester are encouraged to first consult with a College counselor and/or Financial Aid if appropriate.

Fees

Course Fees

Course fees are charged for supplemental material used in some classes and for rent and maintenance of specialized laboratory equipment. The fees charged are published in the schedule of classes each semester. Course fees are paid at the time of enrollment.

Application Fee

An application fee is charged to all individuals who apply for admission to a degree-seeking program at Henry Ford Community College. The fee is currently \$30 and is subject to change without notice. Students applying for a nondegree program are not charged an application fee.

Registration Fee

A mandatory registration fee is charged to all individuals who register at Henry Ford Community College. This fee is intended to offset partially the cost of registration. Students who register for classes and neglect to pay this fee are invoiced. Students who pay the fee are not given a refund of this fee even if they receive a full refund of other fees.

Student Identification

For the purpose of College identification, students should retain their paid class schedule issued at the time of enrollment.

Class Offerings

The College makes every attempt to offer an adequate number of class sections each semester. However, students may find some classes filled to maximum enrollment. Classes with inadequate registration may be cancelled. The College reserves the right to make changes to semester schedule or program without notice.

Graduation Expenses

Students wishing to earn an Associate Degree from Henry Ford Community College are responsible for a graduation application fee. Please refer to the current schedule of classes for the applicable fee. Participation in the graduation ceremony requires the purchase of a cap and gown from the College Store.

Tuition Expenses

A student living at home should expect to incur expenses for tuition, service fee, registration fee, laboratory fees, and books. Tuition expenses may be found in the current Class Schedule.

NOTE: ALL TUITION FEES AND EXPENSES ARE SUBJECT TO CHANGE WITHOUT NOTICE

General Regulations

Admissions with Advanced Standing

A student intending to enter from another college or university must submit an application and official transcript of all college work completed along with the application fee.

After the official transcripts have been received, the Office of Admissions, Registration and Records will evaluate them for advanced standing and notify the student of the courses and credits accepted. Courses accepted for transfer must have been completed with at least a C (2.00) grade.

Until complete transcripts have been received indicating that the transfer student is in good standing, he or she may be admitted on a provisional basis.

Alcoholic Beverages and Illegal Drugs

As a public institution, Henry Ford Community College operates under the guidelines of Federal Public Act 101-226, entitled Drug Free Schools and Campuses, passed in 1990. This law states that students must be informed of the College's rules and sanctions relative to drugs and must be informed of health risks related to the use of drugs and of counseling assistance available at the College.

College Rules

Use, possession, or distribution of alcoholic beverages and drugs is forbidden on campus. Persons appearing on campus while under the influence of alcoholic beverages, narcotics, and other dangerous drugs, except as expressly permitted by law, will be subject to disciplinary and/or legal action.

Possession, consumption, sale, or purchase of any controlled substance which is illegal under state or federal law is prohibited on the campus of Henry Ford Community College.

College Sanctions

Disciplinary action may consist of payment of fines, verbal reprimand, restitution of damages, restriction of privileges, disciplinary probation, suspension, dismissal, and/or notation on the student's record of dismissal or suspension.

Information is available in the University Transfer, Advising, and Career Counseling Center located in the Learning Resources Center. Anyone with questions should call 313-845-9611 or 845-9612.

Athletic Aid Disclosure

The Athletics Department has information on the number of students, categorized by race and gender, the number of students by race and gender that receive athletically related aid, the completion/graduation rate and drop out rate, and completion/graduation and transfer rates for students receiving athletically-related aid. The department also has information on the amounts of revenues derived from and expenses made on behalf of intercollegiate athletics activities.

Information is available giving participation figures, coaching and staff information, revenue, and financial support for College teams.

Attendance

No system of "cuts" operates at Henry Ford Community College. Students are expected to attend all the sessions of the classes for which they are enrolled. Penalties may be imposed, at the discretion of the individual instructor, whenever the quality of the student's work has been affected by absence or tardiness.

Students, as a matter of courtesy, should explain the reason for an absence to their instructors. Lack of attendance may affect the student's final grade.

Absences in connection with participation in authorized college activities must be considered in the total picture of absences for all purposes, and it is the responsibility of the student to make up work missed.

Students are required to be present at the final examination. In case of absence, it is the student's responsibility to contact the instructor in regard to makeup.

Campus Attire

Students are expected to use good judgment, good taste, and decency with regard to their selection of dress.

Computer Systems Use Policy

Henry Ford Community College's computers, peripherals, software, networks, supplies, e-mail systems, and Internet connections ("HFCC's Systems") are intended to carry out the legitimate operational functions of HFCC and not for purposes unrelated to college business. It is not the intent or purpose of this policy to dampen or restrict freedom of inquiry or freedom of criticism.

HFCC prohibits the removal, relocation, or alteration of equipment or software without written authorization.

It is the policy of HFCC to prohibit the use of HFCC's Systems for purposes of

- harassment of persons or organizations on or off campus for any reason;
- sending or receiving material of a profane, pornographic, or threatening nature;
- sabotage, misuse, or abuse of equipment, software, or data on or off campus, including unauthorized alteration of HFCC's Systems and computer files through the willful or negligent introduction of viruses or by mechanical or electronic tampering;
- unauthorized production or reproduction of programs, or multiple copies of material in any form for the purpose of resale or redistribution in violation of the intellectual property rights of HFCC or any other person;

- plagiarizing, altering, or tampering with the work of others;
- gaming, solicitation, or any activity deemed illegal or contrary to HFCC policies;
- theft of intellectual or other property, including copyright infringement;
- intentionally preventing an electronic communication from being received by the intended recipient without authorization from the originating sender;
- intentionally causing an electronic communication to be viewable or heard by persons other than the named recipient without authorization from the originating sender, or the named recipient, except where the recipient of electronic communications reports a violation of this policy.

It is the desire of HFCC to ensure that HFCC Systems are put to the best and most efficient use. HFCC therefore requires that

- students, faculty, and staff receive appropriate training in hardware, software, and networks use, or demonstrate acceptable levels of proficiency prior to access;
- students, faculty, and staff be mindful of the time spent (as in “surfing the net” or “chatting”) on HFCC’s Systems, or material consumed (such as having large or vague searches printed);
- students, faculty, and staff exercise reasonable care in protecting their log-on names and passwords, and not permit unauthorized persons to access HFCC’s Systems;
- students, faculty, and staff should not use HFCC’s Systems to store messages and files because it would place an undue burden on limited system resources.

Users of HFCC’s Systems are reminded that e-mail is like any other form of written communication. It is subject to the same legal restrictions and potential liabilities as a paper document. E-mail may be subpoenaed, and is subject to the “Freedom of Information Act.” In view of this, HFCC’s Systems should not be considered appropriate for transmission of confidential or proprietary information. From the standpoint of the creator of a message, the message should be viewed as “business correspondence” or as an academic paper which has a likelihood of becoming a published document. HFCC does not monitor or permanently store messages. However, unlike a written document that can entirely be erased or destroyed by the writer, user deletion of messages renders electronic space in the system available for other messages but does not immediately erase the messages from the system. Therefore, users of HFCC’s Systems should not expect privacy. Nevertheless, it is incumbent upon all users of HFCC’s Systems to treat misdirected e-mail communications with reasonable care to avoid undue disclosure of the messages of others.

Penalties for violation of this policy will vary depending on the nature and degree of the specific violation. Penalties

range from reprimand through expulsion for students or termination for employees in accordance with the provisions of any College Collective Bargaining Agreement, to the extent such Agreement applies to the employees. If violations of law are involved, users may incur civil liability to HFCC or third parties, and may also be subject to prosecution.

This policy incorporates, by reference, other HFCC policies and/or procedures related to computers and intellectual property, including the written guidelines and materials that were provided at the time the privilege of access to HFCC’s Systems was granted to each user.

Evening, Weekend, and Online Classes

Evening, weekend, and online classes paralleling those offered during the day are available in most fields of study as well as specialized courses designed to meet the needs of the community.

General Policy on Institutional Response to AIDS

Henry Ford Community College is committed to providing quality educational opportunities in an environment that is safe and conducive to learning for students and employees. Thus, all confirmed cases of Acquired Immune Deficiency Syndrome (AIDS), AIDS-Related Complex (ARC), or a positive Human Immuno-deficiency Virus (HIV) infection will be addressed on an individual basis for both students and employees, while maintaining the dignity and rights of the individual and the College community.

Health Insurance Portability and Accountability Act of 1996 (HIPAA)

Henry Ford Community College (the College) sponsors group health plans. Members of the District’s workforce may have access to the individually identifiable health information of plan participants on behalf of the plans themselves or on behalf of the College, for administrative functions of the plans.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) and its implementing regulations restrict the College’s ability to use and disclose protected health information (PHI).

Protected Health Information. Protected health information means information that is created or received by the plans and relates to the past, present, or future physical or mental health or condition of a participant; the provision of health care to a participant; or the past, present, or future payment for the provision of health care to a participant; and that which identifies the participant or for which there is a reasonable basis to believe the information can be used to identify the participant. Protected health information includes information of persons living or deceased.

It is the College's policy to comply fully with HIPAA's requirements. To that end, all members of the College's workforce who have access to PHI must comply with this Privacy Policy. For purposes of this Policy, the College's workforce includes individuals who would be considered part of the workforce under HIPAA, such as employees, volunteers, trainees, and other persons whose work performance is under the direct control of the College, whether or not they are paid by the College. The term "employee" includes all of these types of workers.

No third-party rights (including but not limited to rights of plan participants, beneficiaries, covered dependents, or business associates) are intended to be created by this Policy. The College reserves the right to amend or change this Policy at any time (even retroactively) without notice. To the extent this Policy establishes requirements and obligations above and beyond those required by HIPAA, the Policy shall be aspirational and shall not be binding upon the College. This Policy does not address requirements under other federal laws or under state laws.

The complete policy is available at the HFCC Human Resources Office.

Parking Regulations

Students are responsible for observing all campus parking rules and regulations. Failure to adhere to these regulations may result in their cars being ticketed and towed away or other disciplinary action.

Privacy Practices for Any Media

Access to Student Educational Records

Pursuant to the Family Educational Rights and Privacy Act of 1974 (FERPA), as amended, any person who is or has been in attendance at Henry Ford Community College shall have the right to inspect and review any and all educational records directly related to that person after a request for access to such records has been made in accordance with the approved College procedure for such access. Requests to review general College educational records are to be made at the Admissions, Registration, and Records Office. Requests for information regarding records maintained by a department should be made to the departmental director.

Specifically, the student has the right to

1. inspect all of his or her education records maintained by Henry Ford Community College;
2. prevent the disclosure of personally identifiable information to third parties unless exempted by the Act;
3. request an amendment to any educational record;
4. request a hearing to present evidence that a record should be amended;

5. file a complaint with the FERPA Office, Department of Education, 400 Maryland Avenue S.W., Washington, D.C. 20202, regarding Henry Ford Community College failing to comply;
6. obtain from the Admissions, Registration, and Records Office a copy of the Henry Ford Community College policy regarding FERPA.

Educational records are those records that are directly related to a student and maintained by an education agency or by a party acting for the agency or institution. The term does not include records of instructional, supervisory, and administrative personnel and educational personnel ancillary to those persons that are kept in the sole possession of the maker of the record, and are not accessible or revealed to any other person, except a temporary substitute for the maker of the record.

Privacy Practices (for students and employees)

HFCC Privacy Practices satisfy, but are not limited to, the following government laws, acts, and guidelines:

- Carl D. Perkins Vocational and Technical Education Act - Source: Section 113 and the Workforce Investment Act of 1998, Section 122
- Family Education Rights and Privacy Act (FERPA) - Source: Federal Register, Vol. 53, No. 69, April 11, 1988
- Health Insurance Portability and Accountability Act of 1996 (HIPAA)
- Michigan Social Security Privacy Act – Source: Michigan Act 454 of 2004
- Solomon Amendment – Source: Federal law 10 USC Sec. 983

Privacy is a primary concern of Henry Ford Community College.

The College's goal is to provide the highest level of service, confidentiality, and security.

HFCC Privacy Practices cover all personally identifiable information collected and stored by the College.

Personnel Files (Operations, Policy 3000)

It is necessary for the orderly operation of the College to prepare a personnel information system for the retention of appropriate papers bearing upon an employee's duties and responsibilities to the College and the College's responsibilities to the employee.

The Board of Trustees requires that sufficient records exist to ensure an employee's qualifications for the job held; compliance with federal, state, and local benefit programs; conformance with College rules; and evidence of completed evaluation. Such records will be kept in compliance with laws of the State of Michigan.

The Director of Human Resources maintains an employee personnel information system.

A single central file shall be maintained, and subsidiary records shall be maintained for ease in data gathering only. These records shall be maintained or destroyed consistent with the federal and state laws.

A copying cost may be charged for each copy given to the employee upon his or her written request at the rate determined by the College.

In accordance with Michigan law, the employee shall have access to his or her file upon request.

Personnel records shall not be available to Board members, except as necessary to conduct disciplinary hearings, and shall be available to school administrators as may be required in the performance of their jobs.

Personnel wishing to review their own records shall

1. request access in writing
2. review the record in the presence of the administrator designated to maintain said records or designee
3. make no alteration or addition to the record nor remove any material therefrom

Personal Information

All requests for information by HFCC are made with the goal of providing better service.

HFCC will not give or sell any personal information to any outside agency or company for any use (e.g., marketing or solicitation), with the exception of Solomon Act requests (see below).

HFCC internal practices help protect privacy by limiting employee access to personal information. The College will not keep a permanent record of credit card information.

Beginning May 2002, the College began keeping the most recently supplied e-mail address as part of student and employee files. This is in response to students requesting information via e-mail.

Social Security Number Privacy

It may be necessary for HFCC to use a student's or employee's social security number. Uses include employee tax reporting and student federal financial aid. In accordance with the Michigan Social Security Privacy Act, HFCC respects student and employee privacy and will keep all social security numbers confidential to the extent practicable in accordance with this policy and the law.

Only HFCC employees who have job duties that require use of social security numbers will have access to them. Since all students and employees are issued a unique HFCC (HANK) ID number, HFCC employees never use social security

numbers to identify students or employees unless permitted by law. Although students and employees may voluntarily identify themselves by their social security numbers, HFCC prefers the use of the HANK ID number. HFCC prints social security numbers only when required by regulations. Should it be necessary to dispose of any document containing a social security number, that document will be shredded prior to disposal.

HFCC prohibits the unlawful disclosure of social security numbers. Any employee found to be in violation of this rule will be subject to discipline up to and including discharge.

Perkins Act

In order to improve the instruction offered at HFCC and to meet the requirements of the Carl D. Perkins Vocational and Technical Education Act, Section 113 and the Workforce Investment Act of 1998, Section 122, HFCC will use student social security numbers to compile summary reports. At no time will the student's personal information be released for other purposes.

Section 113 of the Carl D. Perkins and Technical Education Act, 20 USC 2323, and Section 122 of the Workforce Investment Act of 1998, 29 USC 2842, requires HFCC and the State of Michigan to assess the effectiveness of vocational and technical education programs aimed at training, placement, and retention of students in employment. Although these laws require that performance reports be based on wage record information, neither law requires students to give their social security numbers to the College.

HFCC may use student social security numbers in order to gain access to individual wage records and compile required WIA and Perkins Act reports. These reports will assist the College to improve vocational and technical education programs. By improving programs, the College will be better able to serve both employers and employees. Student wage record information is confidentially maintained, based on social security number, by the State of Michigan.

Neither the College nor the State of Michigan will disclose student SSN or wage record data to any unauthorized person or entity unless legally permitted to do so. Any personally identifying wage record data will be destroyed by the College as soon as all required statistical analyses have been performed, or when the information is no longer needed, whichever date comes first.

Solomon Amendment

The Solomon Amendment is part of the federal law that requires public education institutions to release student names and addresses to the United States military upon request. HFCC risks loss of student federal financial aid for failure to respond to these requests.

HFCC Online Student and Employee systems

MyHFCC WebAdvisor and Online Forms

When using MyHFCC WebAdvisor or filling out online forms at HFCC, students will be asked to provide personal information such as name, address, telephone number, and HANK ID number. Each WebAdvisor function and online form has mandatory fields that represent the minimum information needed to complete a transaction. Alternative methods of service, such as touch-tone registration and on-campus help are available to students who may be uncomfortable providing this information over the internet.

HFCC's Secure Internet Site

MyHFCC WebAdvisor and all online forms are designed to give students and employees control over the privacy of their information. HFCC offers industry-standard security measures available through internet browsers called Secure Sockets Layer (SSL) encryption.

For positive identification, MyHFCC WebAdvisor and all websites containing online forms are registered with site identification authorities to enable internet browsers to confirm the HFCC Web Server's identity before any transmission is sent. With this technology, the identity of the HFCC site is automatically confirmed behind the scenes prior to the transmission of any form. In addition, if data does not properly reach HFCC, the internet browser will notify the sender (prior to sending any personal information) that the potential receiving site looks suspicious and should be avoided.

Data encryption is available for security-enabled internet browsers. Information sent by students to the College is encrypted, making it extremely difficult to read even if it is wrongfully intercepted.

Cookies

A cookie is a software application that is stored on an individual's computer hard drive. HFCC uses cookie technology to gather information about which pages of the HFCC website are used most often for the purpose of improving service to website visitors. HFCC does not use cookie technology to learn the identity of visitors. Website usage patterns are kept confidential and HFCC does not share or sell any of the information.

Student Right to Know & Campus Security Act

The College publishes annually a brochure titled "Guide to Campus Safety Services." This brochure, available at Campus Safety Offices, includes information about safety procedures on campus, data on instances of crime on campus, the student conduct code, and directions for reporting emergencies. Information is also available in a separate publication regarding the graduation rates of the College's students. That publication is available in the Vice President/Dean of Student Services Office.

Veteran Services

Services for military veterans include personal counseling; assistance in filing for V.A. educational benefits; and information regarding a wide range of veteran benefits, such as disability compensation, vocational rehabilitation, tutorial assistance, benefits for dependents of veterans, and general information relating to current and pending veteran legislation. Veterans desiring assistance should contact the Office of Admissions, Registration and Records at **313-845-6403**.

Graduation

Applying for Graduation

Graduation applications are accepted until the last day of the term a student anticipates completing degree or certificate requirements. Students that miss this deadline will be considered for graduation in the next term in which they apply for graduation regardless of the need to take classes. However, it is in the student's best interest to monitor progress towards graduation by following this timeline:

- As a new student or when changing their educational goal, meet with a counselor / academic advisor to set their educational goal and select the corresponding academic program (degree and/or certificate) at HFCC.
- Use the Program Evaluation feature in myHFCC WebAdvisor to monitor progress towards completion of the academic program.
- Apply for graduation when registering for the last term in which the academic program will be complete.

Graduation Applications are available in the Office of Admission, Registration and Records or online at: http://www.hfcc.edu/current_students/graduation_requirement.asp

There is a graduation application fee.

Commencement

Commencement is the ceremony attended by graduates to receive recognition of their accomplishments. HFCC holds one commencement ceremony each year in May. Students who have applied for graduation by FEBRUARY 1, 2006 will be mailed an invitation to participate in the May 2006 ceremony. All other graduates will be invited to attend the next May commencement.

Program Evaluation/Degree Audit

After completing the Graduation Application each student will receive a Program Evaluation (Degree Audit) review from the Office of Admissions, Registration and Records via US Mail. This Program Evaluation is the same as the one found in the student's myHFCC WebAdvisor account. Students are encouraged to use this WebAdvisor feature throughout their time at the College.

Students who do not meet graduation requirements in the term they apply will be reviewed for graduation in the next two subsequent terms. After this students must reapply for graduation and pay the graduation application fee again. If a student receives a graduation denial letter, an appeal may be made to the Office of Admissions, Registration and Records.

Current Degrees and Certificates

In order to improve programs, HFCC may occasionally change the requirements for a degree. If degree requirements have changed, students may elect to

- graduate under the current program/degree requirements (year of graduation)
OR
- graduate under previous degree/program requirements within three (3) years of any degree/program change.

Requirements For Graduation – Associate Degrees

These are the requirements for all associate's degrees.

- General Requirements (section A)
- General Education Requirements (section B)
- Specific Degree Requirements (section C)

Henry Ford Community College awards the following Associate's Degrees:

- Associate in Applied Science – area of concentration
- Associate in Arts
- Associate in Business
- Associate in General Studies
- Associate in Science

Section A -

General Requirements for all Associate Degrees

1. Earn a minimum of 60 semester hours of credit with a 2.00 cumulative grade point average (GPA) or higher.
2. Complete General Education and Degree Specific Graduation Requirements. See Sections B and C.
3. Complete all required and elective courses for the program found in the Program of Study section of this catalog. (The same information is available in myHFCC WebAdvisor under Program Evaluation.)
4. A maximum of six credit hours in developmental courses (numbered 099 or lower) may be used as elective credit. Developmental courses do not meet General Education, Specific Degree Requirements, or Department / Division Requirements.
5. Complete a minimum of 20 semester hours of credit at HFCC. The balance of credit may be transferred in from other sources (usually accredited colleges). Students must work with the HFCC University Transfer, Advising, and Career Counseling Office and/

or the Admissions, Registration, and Records Office to establish an official record of transfer credit at the College.

6. A maximum of 40 semester hours of credit from any HFCC associate degree may be applied toward meeting the requirements of another degree. In other words, to earn a second associate degree at HFCC an additional 20 semester hours of credit must be earned or all second degree requirements must be met, whichever is greater. The same rule applies for all subsequent degrees.
7. A maximum of six semester hours of credit may be transferred after leaving HFCC to complete degree requirements. All degree requirements must be met. A minimum of 20 semester hours of credit must be earned at HFCC.
8. A student holding a bachelor's degree from a regionally accredited college or university will be given transfer credit equivalencies that meet the General Education Requirements for graduation.
9. All financial obligations to the College have been met.

Section B - General Education Graduation Requirements

All students receiving the Associate's Degree are required to meet General Education Outcomes identified on page 299. Students must earn a passing grade in at least one of the courses listed for each General Education Outcome.

Specific programs may recommend that students take certain General Education courses for the purpose of transfer to other colleges and/or universities.

Courses required in the curriculum for some programs may also fulfill general education requirements. Consult the list of required courses for your program to ensure that you enroll appropriately.

Students who enroll for the first time at HFCC in Fall 2005 or later are required to meet General Education Option 1 for graduation. Students first enrolled before Fall 2005 may choose to meet either General Education Option 1 or Option 2. All students applying to graduate after May 2008 must meet General Education Option 1.

General Education Graduation Requirements for all Associate Degrees					
Option 1 – select <u>one</u> from each group		Option 2 – select <u>one</u> from each group			
Required for First-Time Students in Fall 2005 or later Optional for First-Time Students before Fall 2005		Optional for First-Time Students before Fall 2005			
American Society, Events, Institutions & Cultures		American Social/Political Institutions			
ENG 235	Amer Literature Before 1900	3 cr	POLS 131	Intro to Amer Govt and Pol Science	3 cr
ENG 236	Amer Autobiographies	3 cr	SSC 131	Survey of Social Sciences	3 cr
CRJ 131	Intro to Criminal Justice	3 cr			
POLS 131	Intro to Amer Govt and Pol Science	3 cr			
SOC 131	Intro to Sociology	3 cr			
Written Communication & Information Literacy		English Language Proficiency			
ENG 131	Composition I and	3 cr	ENG 131	Composition I and	3 cr
ENG 132	Composition II	3 cr	ENG 132	Composition II	3 cr
OR		OR			
ENG 131	Composition I and	3 cr	ENG 131	Composition I and	3 cr
ENG 135	Business and Technical Writing	3 cr	ENG 135	Business and Technical Writing	3 cr
Computer Literacy		Computer Literacy			
ACT 112	Computers in Architecture	1 cr	ACT 112	Computers in Architecture	1 cr
AH 125	Survey of Computer Med Info Sys	3 cr	AH 125	Survey of Computer Med Info Sys	3 cr
ART 275	Advanced Projects (Graphic Design)	3 cr	ART 275	Advanced Projects (Graphic Design)	3 cr
BCA 140	Microcomputer Apps for Business	3 cr	BCA 140	Microcomputer Apps for Business	3 cr
CIS 100	Intro to Information Technology	3 cr	CIS 100	Intro to Information Technology	3 cr
CIS 221	Instructional Tech for Elem Educa	3 cr	CIS 221	Instructional Tech for Elem Educa	3 cr
CIS 223	Instructional Tech for Sec Educa	3 cr	CIS 223	Instructional Tech for Sec Educa	3 cr
HCS 131	Computers and Health Care	3 cr	HCS 131	Computers and Health Care	3 cr
HIT 161	Medical Information Processing	2 cr	HIT 161	Medical Information Processing	2 cr
MFMT 103	Industrial Computer Orientation	2 cr	MFMT 103	Industrial Computer Orientation	2 cr
TAFD 115	Computer Apps for Skilled Trades	2 cr	TAFD 115	Computer Apps for Skilled Trades	2 cr
CLT 100	Computer Literacy Test	0 cr	CLT 100	Computer Literacy Test	0 cr
Degree Specific Graduation Requirements					
Wellness (applies only to Associate in Arts and Associate in General Studies degrees only)		Physical Education (applies to all Associate degrees)			
COUN 114	Stress Management	2 cr	2 credit hours in any HPE or HPEA courses		
HPE 117/217	Strngth Trng & Phys Cond I & II	2 cr	(This requirement may be waived for students age 21 or older at initial enrollment or for students with 24 months of active service in the US armed forces. See Counseling Office for more details.)		
HPE 126	Aerobic Dance	2 cr			
HPE 140	Lifetime Wellness	2 cr			
HPE 142	Advanced First Aid	3 cr			
HPE 153	Nutrition	2 cr			
HPE 155	Relaxation Tech for Stress Mgmt	1 cr			
Humanities, Science and Mathematics, and Social Science Applies to the Associate in Arts and Associate in Science degrees only. See Section C - Specific Graduation Requirements by degree on page 36.		Humanities, Science and Mathematics, and Social Science Applies to the Associate in Arts and Associate in Science degrees only. See Section C - Specific Graduation Requirements by degree on page 36.			

Section C - Specific Degree Requirements

For a degree, in addition to the General Requirements and the General Education Requirements, the following specific degree requirements must be met to achieve an Associate Degree.

Associate in Arts Degree

Programs leading to the Associate in Arts degree are intended for students who plan to transfer to a four-year college or university to complete a bachelor's degree. The programs include:

- Art Foundations
- Ceramics
- Child Development
- Criminal Justice – Corrections/Probation and Parole
- Criminal Justice – Law Enforcement
- Education Studies
- Fitness Leadership
- Graphic Design
- Interior Design
- Liberal Arts
- Music
- Telecommunications
- Theater

The requirements of the Associate in Arts degree include:

1. General Education Requirements	Credits
American Society	3
Written Communication & Information Literacy	6
Computer Literacy	0-3
2. Degree Specific Graduation Requirements	
<i>Wellness/Physical Education</i>	2-3
<i>Humanities</i>	8
Art, Dance, English (except ENG 131, 132 135), Foreign Language, Journalism, Music, Philosophy, Science in Western Culture, Telecommunications, Speech, Theater, World Religion	
<i>Science and Mathematics</i>	8
Astronomy, Atmospheric Studies, Biology, Chemistry, Geology, Mathematics, Physical Science, Physics	
<i>Social Science</i>	8
Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, Social Science, Sociology	

3. Program Requirements and Electives

See specific program requirements.

Total Credits 60 or more

NOTE: Courses that meet the General Education requirement on American Society also fulfill the Group Requirement in Social Science.

Associate in Science Degree

Programs leading to the Associate in Science degree are intended for students who plan to transfer to a four-year college or university to complete a bachelor's degree. The programs include:

- Environmental Studies
- Pre-Engineering
- Pre-Pharmacy
- Preprofessional Biology
- Preprofessional Chemistry

The requirements of the Associate in Science degree include:

1. General Education Requirements	Credits
American Society	3
Written Communication & Information Literacy	6
Computer Literacy	0-3
2. Degree Specific Graduation Requirements	
<i>Humanities</i>	3
Art, Dance, English (except ENG 131, 132 135), Foreign Language, Journalism, Music, Philosophy, Science in Western Culture, Telecommunications, Speech, Theater, World Religion	
<i>Science and Mathematics</i>	24
Astronomy, Atmospheric Studies, Biology, Chemistry, Geology, Physical Science, Physics, Mathematics (minimum 2 lab courses required)	
<i>Social Science</i>	3
Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, Social Science, Sociology	
3. Program Requirements and Electives	
See specific program requirements.	
Total Credits	<u>60 or more</u>

NOTE: Courses that meet the General Education requirement on American Society also fulfill the Group Requirement in Social Science.

Associate in Applied Science Degree

Programs leading to the Associate in Applied Science degree are intended to prepare students for specific occupational careers in a wide range of fields. The programs include:

- Architecture/Construction Technology
- Automotive Service (ASSET)
- Automotive Technology
- Building Construction Trades
- Computer Information Systems
- Computer Numerical Control
- Culinary Arts
- Electrical Technology
- Energy Technology
- Firefighter/Paramedic
- Hotel-Restaurant Management
- Industrial Drafting & CAD Technology
- Manufacturing Productivity Systems
- Manufacturing Trades
- Network Administration
- Networking
- Nursing
- Paramedic
- Physical Therapist Assistant
- Plant Maintenance Trades
- Radiographer
- Radiologic Technologist
- Respiratory Therapist
- Surgical Technologist

The requirements of the Associate in Applied Science degree include:

1. General Education Requirements	Credits
American Society	3
Written Communication & Information Literacy	6
Computer Literacy	0-3
2. Program Requirements and Electives	
<i>See specific program requirements.</i>	
Total Credits	60 or more

Associate in Business Degree

Programs leading to the Associate in Business degree are intended to prepare students for various occupational careers in business. The programs include:

- Accounting
- Administrative Information Management
- Business Administration
- Business, General
- Legal Assistant Management

The requirements of the Associate in Business degree include:

1. General Education Requirements	Credits
American Society	3
Written Communication & Information Literacy	6
Computer Literacy	3
2. Program Requirements and Electives	
<i>See specific program requirements.</i>	
Total Credits	60 or more

Associate in General Studies Degree

The Associate in General Studies degree provides students with the opportunity to explore a wide range of different course from both academic and career programs.

The requirements of the Associate in General Studies degree include:

1. General Education Requirements	Credits
American Society	3
Written Communication & Information Literacy	6
Computer Literacy	0-3
2. Degree Specific Graduation Requirements	
<i>Wellness/Physical Education</i>	2-3
<i>Humanities</i>	one course
Art, Dance, English (except ENG 131, 132 135), Foreign Language, Journalism, Music, Philosophy, Science in Western Culture, Telecommunications, Speech, Theater, World Religion	
<i>Science and Mathematics</i>	one course
Astronomy, Atmospheric Studies, Biology, Chemistry, Geology, Physical Science, Physics, Mathematics	
<i>Career Education</i>	one course
Business and Economics, Health Careers, Nursing, Technology, Trade and Apprentice	
3. Electives	42 or more
Total Credits	60 or more

Trade and Apprentice Education and an Associate in Applied Science Degree

Trade and Apprentice Education students who have completed their apprenticeship requirements may earn an Associate in Applied Science Degree in Plant Maintenance Trades or Manufacturing Trades upon satisfactory completion of the General College Requirements.

Graduation With Honors

Students with a cumulative grade-point average of 3.90-4.00 graduate SUMMA CUM LAUDE.

Students with a cumulative grade-point average of 3.70-3.89 graduate MAGNA CUM LAUDE.

Students with a cumulative grade-point average of 3.50-3.69 graduate CUM LAUDE.

Requirements For Certificate Of Achievement Programs

Programs leading to a Certificate of Achievement are available. These programs are highly specialized and intended to provide skills that will increase students' opportunities for employment or promotion. There are three types of certificates: Basic, Complex, and Advanced.

Level 1 Basic Skills Certificate

The learning domain must be limited to a single technology or skill area, and the certification candidate should be able to

- accomplish basic tasks in the domain without assistance
- solve common problems within the domain
- assist in more advanced tasks
- describe the technical structure of the domain

At HFCC, the following academic conditions apply to Level 1 Certificate:

- The certificate includes a maximum of 18 credit hours.
- Twenty-five percent of coursework may be transferred in with written approval of the appropriate Associate Dean.
- A cumulative GPA of 2.0 is required of all certificate coursework.

Level 2 Complex Skills Certificate

The learning domain must encompass either multiple technologies/skill areas or a complex single technology, and the certification candidate should be able to

- serve as a resource for others
- solve moderately complex problems without assistance
- perform advanced tasks within the domain

At HFCC, the following academic conditions would apply to a Level 2 certificate:

- The certificate includes 12-48 credit hours.
- Twenty-five percent of coursework may be transferred in with written approval of the appropriate Associate Dean.
- A cumulative GPA of 2.0 is required of all certificate coursework.

Level 3 Advanced Skills Certificate

The domain must encompass multiple technologies or skill areas, and the certification candidate should be able to

- troubleshoot complex problems
- confidently traverse the scope of the domain, from the most basic material to complex issues involving interfaces outside the domain
- present "significant experience"
- complete a hands-on assessment/lab exam/project

At HFCC, the following academic conditions would apply to a Level 3 certificate:

- Certificate candidate would be required to have a related Associate degree or higher, or a minimum of two years of recent, verifiable work.
- The certificate includes 5-30 credit hours.
- Twenty-five percent of coursework may be transferred in with written approval of the appropriate Associate Dean.
- A cumulative GPA of 2.0 is required of all certificate coursework.

Continuing Education Units

Continuing Education Units are awarded in recognition of completion of certain non-credit courses and programs. CEU credits do not apply to certificate or degree requirements. Information regarding CEU credits is available from the Center for Lifelong Learning.

The HFCC Guarantees

The Henry Ford Community College Guarantees for transfer credit of academic and career courses, job competency and tuition freeze are listed below and the next column.

Transfer Credit Guarantee

Henry Ford Community College will refund the tuition of any HFCC graduate for any course passed at HFCC with at least a C grade* if that earned course credit does not transfer to a college or university within two years of having taken the course. Such classes must be listed as transferable on the transfer institution's official curriculum guide sheets on file in the office of the HFCC University Transfer, Advising and Career Counseling Center.

*A grade of C minus may not qualify. Also, developmental courses do not generally transfer.

Placement of Occupational Graduates Guarantee

Any graduate of an associate degree program in occupational studies judged by his or her employer as lacking in technical job skills normally expected of a job-entry-level employee will be provided further skill training of up to 16 semester credit hours by HFCC without charge.**

**See Special Conditions listed below.

Occupational Studies-Special Conditions.

The Degree

The graduate must have earned an associate degree beginning June 1986 or thereafter in a college-recognized specialty area (i.e., Computer Information Systems, Hospitality Studies, Administrative and Information Management), as evidenced by the area of concentration designated on the student's transcript.

The Employment

The employment must be full-time and the job must be certified by the Job Placement office as directly related to the graduate's program of study.

The initial date of employment of the graduate must be within one year of the commencement date. The Guarantee does not apply to graduates initially hired 30 days prior to the commencement date.

The employer must certify in writing that the employee is lacking the job-entry-level skills identified in writing at the time of initial employment, and must specify the area(s) of skills deficiency within 90 days of the graduate's initial employment.

Affective behaviors such as attitude, judgment, and interpersonal relations will be considered "technical job skills" for purposes of the guarantee provided that formal instruction in appropriate affective behaviors is included within the specialty area.

Retraining

Skill retraining will be limited to 16 credit hours and to enrollment in courses regularly offered by HFCC.

The skill retraining must be completed in one academic year.

The employer, the graduate, and College counselor, with the advice of appropriate teaching faculty, will develop an educational plan which specifies the courses constituting the 16 credit hours of further retraining.

The graduate must meet all prerequisites, corequisites, and other admission requirements for "retraining courses."

The failure, withdrawal, or audit of a "retraining" course or courses is creditable to the 16 credit hour limit.

The graduate or the employer will bear the cost of books, supplies, uniforms, transportation, insurance, and other related costs. The College will waive tuition and fees.

Tuition Freeze Guarantee

Henry Ford Community College guarantees that tuition rates will be frozen for students who graduate from HFCC within four years. Any tuition increase levied by the College during those four years will be refunded to the student upon graduation.

To qualify for the tuition freeze program, a student must complete all course work at HFCC, graduate within four successive years of enrollment, and apply for a tuition rebate after graduation. Students who receive financial aid, except for loans, are not eligible for the program.

General Guidelines

1. A student must earn his or her degree within four successive years of initial enrollment at HFCC.
2. Any refund is based solely on the amount of tuition increase imposed after the initial semester of a student's four successive years at HFCC.
3. A tuition refund cannot be claimed for any semester during which a student received financial aid, except for loans, or direct sponsorship for tuition.
4. All course work for a degree must be completed at HFCC. Transfer students do not qualify.
5. The refund applies only to the first 60 to 62 credit hours needed to complete a degree program.
6. Only one refund per student is allowed.
7. Application for a refund must be made within one year of the student's graduation date.

Further information regarding the Tuition Freeze Guarantee may be obtained in the Office of Admissions, Registration and Records.

Late Registration in Developmental Classes

The College is concerned about student success and has found that late registration in developmental sections results in a high drop and failure rate. Therefore, for any section with a course number that begins with zero, for example, ENG 078, the registration and add period will end the day before the section starts.

Residency Regulations

For tuition purposes, a resident student is one who has resided continuously in the Dearborn Public School District for at least six months immediately preceding the first day of classes, with the following exceptions:

1. The legal residence of an unmarried minor is that of the parent or legal guardian regardless of where the student may be living.
2. An international student on any status other than permanent immigrant is not a resident regardless of where the student may be living.

Students may be asked for two items of documentation to prove residency before completing each enrollment and may be asked for further documentation at any time while in attendance. Acceptable items of documentation are any of the following:

- valid driver's license
- automobile registration
- insurance certification
- voter's registration
- lease agreement
- tax receipt
- income tax statement
- michigan identification card

If a student has been mistakenly enrolled as a resident, the student will be required to pay all tuition that should have been computed according to non-resident status. Any student fraudulently enrolling as a resident is also subject to any of the following:

- a late payment penalty
- suspension from classes
- permanent dismissal

Smoke-Free Campus

All HFCC buildings are completely smoke-free.

Student Complaint Policy

During their course of study at Henry Ford Community College, students may encounter problems requiring review by academic and administrative personnel. It is the policy of Henry Ford Community College to provide an equitable system for the speedy and amicable resolution of problems between students and College faculty and administrators.

Complaints against faculty may include issues such as final course grades, classroom assignments, and various services. Complaints against administrators may include matters such as policies, regulations, and services.

Due process is dependent upon timeliness. A formal complaint which is not initiated by the end of the semester succeeding the semester in which the issue arose will be dismissed. Once the formal complaint process is initiated, the four stages of the complaint process should be completed within twenty academic working days for each stage (spring and summer terms and regularly scheduled College recesses may be exempt depending upon the availability of the persons involved). These guidelines apply to all student complaints covered by this policy.

Certain types of complaints require the student to file grievances with specialized decision-making bodies. The College publishes these and makes them available to students. However, such specialized policies and procedures shall not

be interpreted so as to deny a student due process under the Student Complaint Policy. Also, this policy shall not be construed or applied so as to restrict academic freedom.

Copies of the Student Complaint Policy and Procedures are available in any of the vice presidents' offices.



Student Conduct Policy and Due Process Procedure

Preamble

Henry Ford Community College is a comprehensive community college dedicated to maintaining a teaching-learning environment that fosters critical thinking, creativity, personal integrity, and self-esteem. We value the diversity of our educational community and of the communities we serve. The purpose of this document is to define a collegiate standard of behavior and to explain the actions to be taken if a student disregards this standard.

Rights and Responsibilities

Students have the rights and accept the responsibilities of participating in an educational environment when they enroll at HFCC. Each student is expected to respect the rights of others and to help create an environment where diversity of people and ideas is valued. A collegiate community should be free from intimidation, discrimination, and harassment, as well as safe from violence. Students are also expected to know and obey federal and state laws and local ordinances, as well as be responsible for following College policies.

Students at HFCC have the same rights under the constitutions of our nation and state as other citizens. These

rights include freedom of expression, press, religion, and assembly. Freedom of expression, for example, includes the expression of reasoned dissent and the voicing of unpopular views. With every freedom goes the responsibility of according the same right to others. All students have the right to be treated fairly and to have access to College policies. Students are entitled to appropriate due process should they be accused of behavior that is in violation of laws or College policy.

I. General

1. The purpose of this policy, Student Conduct Policy and Due Process Procedure, is to help protect the safety and well-being of the campus community and to assist the College in providing an environment that supports the educational process. The responsibility for maintaining such an environment is shared by all members of the College community.
2. This policy deals with non-academic behavior, such as criminal behavior and disorderly conduct. Academic behavior, such as cheating, is dealt with in the Student Handbook and the Faculty Handbook.
3. The Student Conduct Policy may be amended with the approval of the College Organization. The Due Process Procedure may be amended with the approval of the Senate, the Vice President/Dean of Student Services, and the President of the College.
4. The College's Board of Trustees retains the ultimate right to make and enforce rules relating to student conduct and discipline.



II. Student Code of Conduct

1. Students at HFCC are expected to show respect for order, law, the personal rights of others, and the educational mission of the College, as well as to maintain standards of personal integrity.
2. Behavior or situations that violate these standards include, but are not limited to
 - Interference with normal College or College-sponsored activities including, but not limited to: interference with teaching, College administration, and College Board meetings;
 - Failure to comply with the directions of College personnel, including Campus Safety, or with the orders of any College board, such as the Student Council Advisory Board and the Student Newspaper Board;
 - Violation of legal standards of decency;
 - Discriminating against or harassing an individual or group in any College related activity, opportunity or organization on the basis of race, color, ethnicity, gender, religion, sexual orientation, creed, national origin, ancestry, age, disability, height, weight, or marital status, or retaliating against any such individual or group for having complained about such behavior;
 - Disrupting a class, a class related activity, or a College sponsored or related event;
 - Physical assault;
 - Stalking;
 - Threats of injury or harm;
 - Arson;
 - Theft;
 - Gambling;
 - Damage to College, student, faculty, or employee property;
 - Computer or technology abuse or tampering;
 - Possession of firearms or dangerous weapons;
 - Possession, use, manufacture, sale of, or being under the influence of alcohol or any controlled substance, without a physician's prescription, or possessing drug paraphernalia while on campus.

The complete text of this policy is available in the Office of the Vice President/Dean of Student Services, 430A Administrative Services and Conference Center.

Tuition Refund Policy

Refunds on tuition and fees (except the registration fee) may be obtained on any or all classes dropped according to the following schedule:

100%	Before Classes Begin
100%	1st Week of Classes
50%	2nd Week of Classes

Fall 2005	
September 1	Last Day for a 100% Refund
September 8	Last Day for a 50% Refund
Winter 2006	
January 13	Last Day for 100% Refund
January 20	Last Day for a 50% Refund

After the second week, a refund is permitted by exception only and application is made through the Office of the Director of Admissions, Registration and Records by the student. Courses of other than fifteen weeks have varying refund schedules. Further information may be obtained in the Office of the Director of Admissions, Registration and Records.

No tuition refunds are given after the end of the second week of classes and no exceptions are made for students who enter late. Courses of other than fifteen-week duration have differing refund schedules. Details may be obtained in the Office of Admissions, Registration and Records.

Students receiving federal financial aid have additional refund options available to them. They should review the brochure Financial Aid Information Guide and Consumer Information Supplement, available in the Financial Aid Office.

Spring/Summer Refund Policy

Registration fees are the same during the spring/summer session as during the regular college year.

A week of spring/summer session classes is the equivalent in class time of two weeks of a regular semester. Therefore, spring/summer session refunds of tuition, lab fees, and the service fees will be prorated as follows:

100% through the first week of spring/summer classes. The registration fee is nonrefundable.

No tuition refunds are given after the end of the refund period, and no exceptions will be made for students who enter late. Courses of other than 7.5-week or twelve-week duration have differing refund schedules. Details may be obtained in the Office of Admissions, Registration and Records.



People & Places

HFCC Area Code is 313

College Office Locations, Phone and Web Sites

President and Executive Officers

Andrew A. Mazzara
 President
 Room 415, fourth floor, Administrative Services Conference Center
 845-9650 amazara@hfcc.edu

Lynne Hensel
 Interim Vice President/Dean, Academic Education
 Room 424, fourth floor, Administrative Services Conference Center
 845-9605 lhensel@hfcc.edu

Marjorie Swan
 Vice President/Controller
 Room 420, fourth floor, Administrative Services Conference Center
 845-9601 mswan@hfcc.edu

William Barber
 Interim Vice President/Dean, Career Education
 Room 434, fourth floor, Administrative Services Conference Center
 845-9607 wbarber@hfcc.edu

Sally D. Barnett
 Interim Vice President of Administration and Human Resources
 Room 314, third floor, Administrative Services Conference Center
 845-9820 sbarnett@hfcc.edu

Kevin Culler
 Interim Vice President/Dean, Student Services
 Room 430, fourth floor, Administrative Services Conference Center
 845-9610 kjculler@hfcc.edu

Academic Education

Room 424, fourth floor,
 Administrative Services Conference Center
 Lynne Hensel, Interim Vice President/Dean
 845-9605 lhensel@hfcc.edu

Center for Lifelong Learning
 Dearborn Heights Center
 22586 Ann Arbor Trail
 Dearborn Heights, MI 48127
 Carol Kalmeta, Director
 317-1500 carolk@hfcc.edu
www.hfcc.edu/cl2

English and Foreign Languages
 Room 208, second floor, Liberal Arts Building
 Reginald Gerlica, Associate Dean
 845-9624 rgerlica@hfcc.edu

English Language Institute
 Room 142, Liberal Arts Building
 Mary Assel, Instructor
 317-1556 massel@hfcc.edu
www.hfcc.edu/eli

Ed Demerly, Instructor
 317-1556 edemerly@hfcc.edu
www.hfcc.edu/eli

Fine Arts & Fitness
 Room 128, Fine Arts Center
 Rick Goward, Associate Dean
 845-6470 rgoward@hfcc.edu

Henry Ford II Honors Program
 Room 150, Learning Technology Center
 Nabeel Abraham, Instructor
 845-6460 nabraham@hfcc.edu
www.hfcc.edu/honors

Instructional Technology
 Room 004, Learning Technology Center
 Vivian Beaty, Instructor
 845-9633 vbeaty@hfcc.edu

Learning Laboratory
 Room 205, second floor, Learning Resource Center
 845-9643

Library
 Room 110, Library
 845-9606

Barbara Lukaszewicz, Director
845-6379

bluka@hfcc.edu
www.hfcc.edu/library

Mathematics

Room 244, second floor, Liberal Arts Building
Larry Smyrski, Associate Dean
845-6388

lsmyrski@hfcc.edu

Radio Station Advisor

Room 140, Fine Arts Center
Jay Korinek, Faculty Advisor
845-6477

jkorinek@hfcc.edu

Science

Room 107, Science Building
Charles Jacobs, Associate Dean
845-9632

cjacobs@hfcc.edu

Social Science

Room 103, Liberal Arts Building
Henry Bowers, Associate Dean
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Business and Auxiliary Services

Room 420, fourth floor,
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Marjorie Swan, Vice President/Controller
845-9601

mswan@hfcc.edu

Auxiliary Services

Room 233A, Health Careers Education Center
Edward Wallish, Coordinator
845-6309

edw@hfcc.edu

Buildings & Grounds

Room 107, Facilities Management Building
T. Allen Gigliotti, Director
845-9602

tagigliotti@hfcc.edu

Campus Safety

Room 151, Learning Technology Center
Gary McBain, Coordinator
845-9770

gmc bain@hfcc.edu

Child Development Center

Room 114, Child Development Center
Janice Cataldo, Instructor
317-6527

jcataldo@hfcc.edu
www.hfcc.edu/children

College Store

Pamela Hall, Manager
845-6410

phall@hfcc.edu
www.hfcc.edu/collegestore

Data & Voice Communication

Room 215, second floor, Administrative Services and
Conference Center
Sandro Silvestri, Director
845-9769

sandro@hfcc.edu

Financial Services

Room 019, lower level, Learning Resources Center
David Cunningham, Director
845-9542

dccunningham@hfcc.edu

Food Service

Student and Culinary Arts Center
Bruce Wall, Manager
845-9648

bwall@hfcc.edu

Media Services

Room 5, lower level, Fine Arts Center
Henry Morgan, Coordinator
845-9627

hmorgan@hfcc.edu

Publicity

Room 330, third floor,
Administrative Services Conference Center
Susan H. Brown, Manager
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Purchasing

Room 113, Facilities Management Building
Frederick Steiner, Supervisor
845-9621

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Systems Coordinator

Room 221, second floor,
Administrative Services and Conference Center
Al Burrell, Coordinator
845-6491

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Career Education

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Administrative Services Conference Center
William Barber, Interim Vice President/Dean
845-9607

wbarber@hfcc.edu

Business and Economics

Room 330, third floor, Liberal Arts Building
Elaine Saneske, Associate Dean
845-9645

esaneske@hfcc.edu

Career Education

Room 324, third floor, Administrative Services and
Conference Center
Leslie Kellogg, Coordinator
317-4028

lkellogg@hfcc.edu

Corporate Training

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Additional Useful Numbers

Campus Tours **www.hfcc.edu/tour**
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FAFSA (Apply for financial aid) **www.studentaid.ed.gov**
 800-433-3243

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Appendix A

ARTICULATION AGREEMENTS

Formal articulation agreements have been established which permit HFCC graduates of many career and academic programs to continue their education in certain bachelor degree programs at particular four-year colleges and universities. These agreements assure graduates the opportunity of working toward's a bachelor's degree without loss of credits earned at Henry Ford Community College, providing a student selects the preferred courses listed on the articulation guides. An articulated transfer guide/agreement is for areas where HFCC does not have a concentration/program or where not all the credits from a concentration/program can be used towards completing a Bachelor degree.

Articulations between Henry Ford Community College and the transfer colleges and universities, including dates of signed original agreements, are as follows:

Four Year Institutions	Original Signing Date	Updated
Concordia University in Ann Arbor	September 1995	2001
Davenport University (Detroit College of Business)	June 1990	2002
Eastern Michigan University(Hospitality)	October 1993	2004
Eastern Michigan University (Applied Technology)	September 2000	2003
Eastern Michigan University (Legal Assistant)	June 2004	
Eastern Michigan University (Technology Management)	February 2003	
Eastern Michigan University (Elementary Education)	2004	
Eastern Michigan University (Secondary Education)	2004	
Eastern Michigan University (Nursing)	December 2004	
Lawrence Technological University	April 1996, May 1990, August 1983	2004
Madonna (Business Administration)	November 2003	
*Madonna (Culinary Arts)	July 2002	2004
*Madonna (Hotel Restaurant Mgmt.)	July 2002	2003
Madonna (Nursing)	May 1996, May 1991	2002
Madonna (Law Enforcement)	December 1998	2004
Marygrove College (Education)	September 1998	2002
Northwood University (Business Administration)	September 2002	2004
*Oakland University (Nursing)	August 1999	2000
Siena Heights University	April 1996	2001
Spring Arbor College (Business Administration)	April 2000	2005
University of Detroit Mercy (Accountancy)	February 1996	2005
University of Detroit Mercy (Business Administration)	February 1996	2005
University of Detroit Mercy (Computer)	May 1997	2005
University of Detroit Mercy (Criminal Justice-Law Enforcement)	April 2000	2003
University of Michigan - Dearborn (BGS)	May 1990	2004
University of Michigan - Dearborn (Elementary Education)	December 1996	2003
University of Michigan - Dearborn (Secondary Education)	May 1998	2003
University of Michigan - Dearborn (Law Enforcement, Corrections/ Probation & Parole)	August 2001	2004
University of Michigan - Dearborn *Pre-Professional Biology *Pre-Professional Chemistry *Pre-Environmental Studies	March 2003 November 2004	
Walsh College	April 1992	2002
Wayne State University (Accounting)	June 2003	
Wayne State University (Education)	August 1998	1999
Wayne State University (Business Administration)	November 1999	2004

*Articulated Transfer Guide Agreement

Articulation Agreements

The below listing shows the articulation/transfer agreements listed by college/university

Accounting

Davenport University (Detroit College of Business)

Bachelor of Business Administration

- Accounting
- Entrepreneurship
- Finance

Lawrence Technological University

Bachelor of Administration

Siena Heights University -- Metropolitan Detroit Program

Bachelor of Arts in Business Administration

University of Detroit Mercy

Bachelor of Science in Business Administration

University of Michigan-Dearborn

Bachelor of General Studies

Walsh College

Bachelor of Accountancy

- C.P.A. Oriented
- CMA Oriented

Wayne State University

Bachelor of Science/Bachelor of Arts in Business Administration

- Accounting

Administrative & Information Management (formerly Business Office Specialist)

Davenport University (Detroit College of Business)

Bachelor of Business Administration

- Management
- Administrative Management

Lawrence Technological University

Bachelor of Administration

Siena Heights University -- Metropolitan Detroit Program

Bachelor of Arts in Business Administration

University of Michigan-Dearborn

Bachelor of General Studies

Walsh College

Bachelor of Business Administration

- Management

Architectural Construction Technology

Davenport University (Detroit College of Business)

Bachelor of Business Administration

- Applied Business

Eastern Michigan University

Bachelor of Science

- Applied Technology
- Technology Management

Siena Heights University -- Metropolitan Detroit Program

Bachelor of Applied Science in Trade & Industrial Professions

University of Michigan-Dearborn

Bachelor of General Studies (Articulated Transfer Guide)

Art (Art Foundation, Ceramics, Graphic Design)

Davenport University (Detroit College of Business)

Bachelor of Business Administration

- Applied Business

Eastern Michigan University

Bachelor of Science

- Technology Management (Articulated Transfer Guide)
(Graphic Design Only)

Lawrence Technological University

Bachelor of Administration

University of Michigan-Dearborn

Bachelor of General Studies

Automotive Service

Davenport University (Detroit College of Business)

Bachelor of Business Administration

- Applied Business

Eastern Michigan University

Bachelor of Science

- Applied Technology
- Technology Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program

Bachelor of Applied Science in Trade & Industrial Professions

University of Michigan-Dearborn

Bachelor of General Studies (Articulated Transfer Guide)

Automotive Technology

Davenport University (Detroit College of Business)

Bachelor of Business Administration

- Applied Business

Eastern Michigan University

Bachelor of Science

- Applied Technology
- Technology Management

Lawrence Technological University

Bachelor of Administration

Siena Heights University -- Metropolitan Detroit Program
Bachelor of Applied Science in Trade & Industrial Professions

University of Michigan-Dearborn
Bachelor of General Studies (Articulated Transfer Guide)

Building Construction Trades

Davenport University (Detroit College of Business)
Bachelor of Business Administration
- Applied Business

Eastern Michigan University
Bachelor of Science
- Applied Technology
- Technology Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program
Bachelor of Applied Science in Trade & Industrial Professions

University of Michigan - Dearborn
Bachelor of General Studies

Business Administration

Davenport University (Detroit College of Business)
Bachelor of Business Administration
- Accounting
- Computer Info Systems
- Entrepreneurship
- Finance
- Management
- International Business
- Management
- Marketing
- Administrative Management
- Self-Directed Management

Lawrence Technological University
Bachelor of Administration

Madonna University
Bachelor of Science
- Business Administration

Northwood University
Bachelor of Business Administration
- Management
- Management/Management Information Systems

Siena Heights University-Metropolitan Detroit Program
Bachelor of Arts Business Administration

Spring Arbor College
Bachelor of Arts
- Management & Organization Development (MOD)

University of Detroit Mercy
Bachelor of Science in Business Administration

University of Michigan-Dearborn
Bachelor of General Studies

Walsh College
Bachelor of Business Administration
- Management

Wayne State University
Bachelor of Science
- Business Administration

Child Development

University of Michigan-Dearborn
Bachelor of General Studies (Articulated Transfer Guides)

Computer Information Systems

Davenport University (Detroit College of Business)
Bachelor of Business Administration
- Computer Information Systems
- CIS/Web Management

Eastern Michigan University
Bachelor of Science
- Technology Management

Lawrence Technological University
Bachelor of Administration

University of Detroit Mercy
Bachelor of Science
- Computer Information Systems

University of Michigan-Dearborn
Bachelor of General Studies

Corrections/Probation, Parole

Concordia University in Ann Arbor
Bachelor of Arts
- Criminal Justice Administration

University of Michigan - Dearborn
Bachelor of Arts
- Criminal Justice Studies

Criminal Justice

Concordia University in Ann Arbor
Bachelor of Arts Criminal Justice Administration

Davenport University (Detroit College of Business)
Bachelor of Business Administration
- Applied Business

Eastern Michigan University
Bachelor of Science
- Technology Management (Articulated Transfer Guide)

Lawrence Technological University
Bachelor of Administration

Madonna University - Law Enforcement only

Bachelor of Science
- Criminal Justice

University of Detroit Mercy - Law Enforcement only

Bachelor of Science
- Criminal Justice

University of Michigan-Dearborn - Law Enforcement Corrections/Probation and Parole

Bachelor of Arts
- Criminal Justice Studies
Bachelor of General Studies

Electrical/Electronics Technology with Automation/Robotics Option

Davenport University (Detroit College of Business)

Bachelor of Business Administration
- Applied Business

Eastern Michigan University

Bachelor of Science
- Applied Technology
- Technology Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program College

Bachelor of Applied Science in Trade & Industrial Professions

University of Michigan-Dearborn

Bachelor of General Studies
- Automation/Robotics (Articulated Transfer Guide)

Energy Technology

Davenport University (Detroit College of Business)

Bachelor of Business Administration
- Applied Business

Eastern Michigan University

Bachelor of Science
- Applied Technology
- Technology Management

Lawrence Technological University

Bachelor of Administration

Siena Heights University – Metropolitan Detroit Program

Bachelor of Applied Science in Trade & Industrial Professions

University of Michigan-Dearborn

Fitness Leadership

Davenport University (Detroit College of Business)

Bachelor of Business Administration
- Applied Business

University of Michigan-Dearborn

Bachelor of General Studies

Health Information Technology (formerly Medical Information Technology)

Eastern Michigan University

Bachelor of Science
- Technology Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program

Bachelor of Applied Science in Allied Health Professions

University of Michigan-Dearborn

Bachelor of General Studies (Articulated Transfer Guide)

Fire Fighter/Paramedic

Eastern Michigan University

Bachelor of Science
- Technology Management

University of Michigan-Dearborn

Bachelor of General Studies



Hospitality Studies

Davenport University (Detroit College of Business) (Culinary Arts, Hotel/Restaurant Management)

Bachelor of Business Administration
- Applied Business

Eastern Michigan University

- Bachelor of Science
 - Hospitality Management (Hotel/Restaurant Management only)
 - Technology Management (Articulated Transfer Guide)

Lawrence Technological University (Hotel/Restaurant/Institutional Mgt.)

- Bachelor of Administration

Madonna University (Hotel/Restaurant Management)

- Bachelor of Science
 - Hospitality Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program (Culinary Arts, Hotel/Restaurant Management)

- Bachelor of Arts in Business Administration

University of Michigan-Dearborn (Culinary Arts, Hotel/Restaurant Management)

- Bachelor of General Studies (Articulated Transfer Guide)

Walsh (Hotel/Restaurant Management only)

- Bachelor of Business Administration
 - General Business
 - Management

Industrial Drafting & CAD Technology**Davenport University (Detroit College of Business)**

- Bachelor of Business Administration
 - Applied Business

Eastern Michigan University

- Bachelor of Science
 - Applied Technology
 - Technology Management

Lawrence Technological University

- Bachelor of Administration
- Bachelor of Science in Engineering Technology

Siena Heights University -- Metropolitan Detroit Program

- Bachelor of Applied Science in Trade & Industrial Professions

University of Michigan-Dearborn

- Bachelor of General Studies

Law Enforcement Administration**Concordia University in Ann Arbor**

- Bachelor of Arts
 - Criminal Justice

Madonna University

- Bachelor of Science
 - Criminal Justice

University of Detroit Mercy

- Bachelor of Science
 - Criminal Justice

University of Michigan - Dearborn

- Bachelor of Arts
 - Criminal Justice Studies

Legal Assistant**Eastern Michigan University**

- Bachelor of Science in Legal Assistant - Paralegal Studies

Davenport University (Detroit College of Business)

- Bachelor of Business Administration
 - Applied Business

Lawrence Technological University

- Bachelor of Administration

Siena Heights University -- Metropolitan Detroit Program

- Bachelor of Arts in Business Administration

University of Michigan-Dearborn

- Bachelor of General Studies

Walsh College

- Bachelor of Business Administration
 - General Business
 - Management

Management**Davenport University (Detroit College of Business)**

- Bachelor of Business Administration
 - Management
 - Marketing
 - Self Directed Management

Lawrence Technological University

- Bachelor of Administration

Siena Heights University -- Metropolitan Detroit Program

- Bachelor of Arts in Business Administration

University Michigan-Dearborn

- Bachelor of General Studies

Walsh College

- Bachelor of Business Administration
 - Management
 - General Business

Manufacturing and Plant Maintenance Trades (Trade & Apprenticeship Education)**Davenport University (Detroit College of Business)**

- Bachelor of Business Administration
 - Applied Business

Eastern Michigan University

- Bachelor of Science
 - Applied Technology
 - Technology Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program
Bachelor of Applied Science in Trade & Industrial Professions

University of Michigan - Dearborn
Bachelor of General Studies

Manufacturing Productivity Systems

Manufacturing Productivity Systems with CNC Concentration

Davenport University (Detroit College of Business--only with Manufacturing Productivity Systems)
Bachelor of Business Administration
- Applied Business

Eastern Michigan University
Bachelor of Science
- Applied Technology
- Technology Management

Lawrence Technological University
Bachelor of Administration
Bachelor of Science in Engineering Technology

Siena Heights University -- Metropolitan Detroit Program
Bachelor of Applied Science in Trade & Industrial Professions

University of Michigan-Dearborn
Bachelor of General Studies

Music

Davenport University (Detroit College of Business)
Bachelor of Business Administration
- Applied Business

Lawrence Technological University
Bachelor of Administration

University of Michigan-Dearborn
Bachelor of General Studies

Network Administration

University of Michigan-Dearborn
Bachelor of General Studies (Articulated Transfer Guide)

Nursing

Eastern Michigan University
Bachelor of Science
- Nursing
- Technology Management (Articulated Transfer Guide)

Madonna University
Bachelor of Science in Nursing



Oakland University
Bachelor of Science in Nursing (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program
Bachelor of Applied Science in Allied Health Professions

University of Michigan-Dearborn
Bachelor of General Studies (Articulated Transfer Guide)

Paramedic (Emergency Medical Services)

Eastern Michigan University
Bachelor of Science
- Technology Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program
Bachelor of Applied Science in Allied Health Professions

University of Michigan-Dearborn
Bachelor of General Studies (Articulated Transfer Guide)

Physical Therapy Assistant

Eastern Michigan University
Bachelor of Science
- Technology Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program
Bachelor of Applied Science in Allied Health Professions

University of Michigan-Dearborn
Bachelor of General Studies (Articulated Transfer Guide)

Pre-Elementary Education

Eastern Michigan University
Bachelor of Science in Elementary Education

Marygrove College
Bachelor of Arts or Science Teacher Certification with certifiable major and minor

University of Michigan-Dearborn

Bachelor of Arts or Science in Elementary Education
 Bachelor of General Studies

Wayne State University

Bachelor of Elementary Education

Pre-Environmental Studies**University of Michigan-Dearborn**

Bachelor of Arts (Articulated Transfer Guide)

Pre-Professional Biology**University of Michigan-Dearborn**

Bachelor of Science Degree (Articulated Transfer Guide)

Pre-Professional Chemistry**University of Michigan-Dearborn**

Bachelor of Science Degree (Articulated Transfer Guide)

Pre-Secondary Education**Eastern Michigan University**

Bachelor of Science in Secondary Education

Marygrove College

Bachelor with Teacher Certification

University of Michigan-Dearborn

Bachelor of General Studies
 Bachelor with Teacher Certification

Wayne State University

Bachelor with Teacher Certification

Radiographer**Eastern Michigan University**

Bachelor of Science
 - Technology Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program

Bachelor of Applied Science in Allied Health Professions

University of Michigan-Dearborn

Bachelor of General Studies (Articulated Transfer Guide)

Respiratory Therapy**Eastern Michigan University**

Bachelor of Science
 - Technology Management (Articulated Transfer Guide)

Siena Heights University -- Metropolitan Detroit Program

Bachelor of Applied Science in Allied Health Professions

University of Michigan-Dearborn

Bachelor of General Studies (Articulated Transfer Guide)

Surgical Technologist**Eastern Michigan University**

Bachelor of Science
 - Technology Management (Articulated Transfer Guide)

Siena Heights University - Metropolitan Detroit Program

Bachelor of Applied Science in Allied Health Professions

University of Michigan-Dearborn

Bachelor of General Studies (Articulated Transfer Guide)

Telecommunication**Davenport University (Detroit College of Business)**

Bachelor of Business Administration
 - Applied Business

Lawrence Technological University

Bachelor of Administration

Siena Heights University - Metropolitan Detroit Program

Bachelor of Applied Science

University of Michigan-Dearborn

Bachelor of General Studies

Theatre**Davenport University (Detroit College of Business)**

Bachelor of Business Administration
 - Applied Business

Lawrence Technological University

Bachelor of Administration

University of Michigan-Dearborn

Bachelor of General Studies

Appendix B

HFCC- A History of Excellence, Innovation and Success

Since 1938, Henry Ford Community College has provided an enriching educational experience for a diverse student community. HFCC serves more than 20,000 students each year of all ages and backgrounds, offering university transfer programs and associate's degree and certificate career programs that are designed for your success all at an affordable cost.

HFCC was established as Fordson Junior College and classes were held at Fordson High School in Dearborn. HFCC is operated by the Dearborn Public School District and is governed by an elected, seven-member Board of Trustees.

Today, HFCC has three campuses. The main campus sits on 75 acres donated by the Ford Motor Company, on Evergreen Road just south of Ford Road in Dearborn. All of HFCC's associate degree and certificate programs are offered on the main campus. The Dearborn Heights Center is home to HFCC's Center for Lifelong Learning. The Center for Lifelong Learning offers continuing education courses for professional and personal development. The new Michigan Technical Education CenterSM at HFCC, located on Schaefer Road in east Dearborn, is a corporate and industrial training center that specializes in customized training in high-tech, high-demand, high-wage fields. It is the only center of its kind in Wayne and Monroe counties.

A visionary program, utilizing the latest in technology and training, the M-TEC at HFCC is a 30,000 square foot specialized facility constructed entirely with a \$5,000,000 state grant for training, retraining, and updating job skills of Ford Motor Company workers, the workers of other Michigan companies, and the general public. Much of the training focuses on the critical job-skill needs of the manufacturing, steel, and information technology sectors of the Detroit-area economy. The M-TEC operates during the day, evenings, and weekends to be easily accessible to workers and the public.

HFCC has completed a 10-year master plan of renovation and new construction on the main campus. Now, HFCC has one of the most modern, up-to-date college campuses in the country with state-of-the-art classrooms and laboratories equipped with the latest technology and equipment, including a wireless network in most buildings.

HFCC is committed to giving you the best educational experience. Come and be part of our community of excellence!

Appendix C

HFCC Foundation

The Henry Ford Community College Foundation was established by the HFCC Board of Trustees in 1982 as a tax-exempt organization for the explicit purpose of raising funds in support of the College's academic program. The management and control of the Foundation's property and activities are vested in the Board of Directors, a group of business, labor, and community leaders from southeastern Michigan committed to the mission and philosophy of service to the College. Contributions to the Foundation are tax deductible to the extent provided by law.

The College welcomes donors who may be interested in starting a scholarship. Needs of students continue to grow and College resources are maximized. If you are interested in starting a scholarship, please call the Foundation Office at **313-845-9620** or visit www.hfcc.edu/foundation.

The College offers nearly 500 scholarships yearly. The list on the next page summarizes all of the available scholarships. To apply for a scholarship, please visit our Web site at www.hfcc.edu/scholarships or call **313-845-9620**.

HENRY FORD COMMUNITY COLLEGE SCHOLARSHIP APPLICATION

Please print this application, complete it and send to the address below. Failure to include all required information and documentation will eliminate your application for consideration.

- Name (Please print) _____ City _____ Zip _____
Address _____
- Student I.D.# _____ Social Security# _____ Phone _____
- Are you an immigrant? Yes _____ No _____ Are you a minority? Yes _____ No _____
- Name the scholarships (no more than six) for which you are applying:
A. _____ D. _____
B. _____ E. _____
C. _____ F. _____
- List activities in which you have participated actively in the College and/or in the Community

- Write a statement explaining why you feel you should receive a scholarship. Complete your statement on one typed page of no less than 75 words, nor more than 250 words, and attach to this application.
- If an essay is required for a scholarship, the essay must accompany this application.
- For those scholarships based on financial need, applicants must have filed, a Free Application for Federal Student Aid (FAFSA) for the next school year. You must forward a copy of a current Student Aid Report to the HFCC Foundation Office.
- For new students, who have not attended HFCC, a copy of your complete high school transcript and/or your college transcript **must** accompany this application.
- I hereby give my permission for Henry Ford Community College to release the above information, as well as my transcripts, to any organization that might consider me for a scholarship. I recognize that I will not be considered unless I am admitted to Henry Ford Community College.
I understand failure to provide required information will eliminate my application for consideration.

Signature _____ Date _____

APPLICATION DEADLINE: Application MUST BE RETURNED With ALL Support Documentation ON or BEFORE MAY 1 to:
HFCC Foundation Office, ASCC Bldg, Room 326
5101 Evergreen Rd.
Dearborn, MI 48128

Do this for your self.

HFCC Scholarships and Fund Rules

Key:

* ... Award amount depends on endowment earnings; application deadline is May 1, 2006; a minimum of 6 credit hours required unless stated otherwise.

T ... Tuition F ... Fees HS ... High School
 B ... Books O ... Other C ... College

Categories Of Scholarships	Maximum \$ One Award	GPA	High School Or College	Fields Of Interest	Min. Hrs. Per Sem.	Other Criteria	Covers:			
							T	F	B O	
ADVERTISING										
Bewick, Mark & Karen	* Up to \$500	3.25	Engineer/Journalism/Adver.		9.00			X	X	X
ALLEN PARK HIGH SCHOOL GRADUATE										
Balsis, Douglas	Up to \$500	2.75				Allen Park HS Grad/Community Service		X	X	X
ALLIED HEALTH / HEALTH CAREERS										
Outer Drive Hospital	* Up to \$500	3.00	Allied Health Field			Enrolled in an Allied Health Program; Financial Need		X	X	X
James & Betty Davies		2.50	Radiology Tech			Radiology Tech, 2nd year student		X	X	X
ARCHITECTURE/CONSTRUCTION										
Architectural / Const. Tech (formerly MI Metal Fab)	* Up to \$1,000	H GPA HS/C	Architecture/Construction			(Essay; Commitment to career in A/CT) Good Standing in A/CT; Financial Need		X	X	X
Architectural ACT Golf Tourm			Architecture/Construction					X	X	X
ART										
Art Foundation	Varies		Art			Concentration in Ceramics & Pottery		X		
Ceramics Fund			Fine Arts			Awarded by Fine Arts Dept.		X	X	X
Dunn, Christopher	* Up to \$400	3.30 HS/3.5C	Fine Arts			Same Criteria as Honors; Show portfolio - Awarded by Fine Arts Dept.		X	X	X
Interior Design			Fine Arts			Awarded by Fine Arts Dept.		X	X	X
Sauer, Margaret	* Up to \$600	3.50 C 15hrs.	Art			Awarded by Fine Arts Dept. Must submit a portfolio to the Art Dept.		X	X	X
Virgo, Sam	\$300		Business Admin/Art			Demonstrate Financial Need		X	X	X
Graphics	Varies					Awarded by Fine Arts Dept.				
ATHLETICS										
Biggers, Hood E.	* Up to \$550	3.00 HS			12.00	Fall Term		X	X	X
Bryden, Nancy	* Up to \$200	3.00 C Soph.			9.00	Fall Term; Women's softball team		X	X	X

Categories Of Scholarships	Maximum \$ One Award	GPA	High School Or College	Fields Of Interest	Min. Hrs. Per Sem.	Other Criteria	Covers: T F B O
Coach Armitage Memorial	\$500					Incoming Freshman, Basketball program, Departmental Award	
Kosch, Donald & Mary	* Up to \$1,000					H.S. Academic Achievement; Outstanding Athlete, Financial Need	x x x x
BUSINESS/ACCOUNTING							
Doyle, Pat and Jim	\$500	2.50	Business		9.00		x
Duquette, Beverly Endowed/Memorial	\$500		Business				x
Long, Stephen J.	* Up to \$500	3.00	Business/Accounting		12.00	Dearborn Resident; Financial Need	x x x
Sharpe, Frederick P. & Violet	* Full Award	3.00	12 cr. hr Business			Req'd Major BUS-AIM	x x x x
Steele, Jeanette	\$500		Business			Fordson High School Grad	x
CIVIC INVOLVEMENT							
Adray, Michael	* Up to \$2,000	3.00	HS/C 15hrs.			Essay (300-500w on Entrepreneurship or Civic Responsibility)	x x x
Berry, Michael	* Up to \$1,000	3.00	HS/2.5C		12.00	Civic Involvement.; Lebanese heritage; one parent naturalized citizen	x x x
Civic Leaders	* Up to \$350	3.00	HS/C		9.00	Essay: (Civic Involvement); 2 letters of recom. to verify civic activities	x x x
Cobb, David / Kiwanis Outer Dr.	* Up to \$350	2.80	HS/C		9.00	Financial Need; Essay (Why I Should Receive This Award)	x x x
Dearborn Federal Savings	\$750	2.75	HS or C		12.00	Dearborn/Dbn. Hgts. Resident; no Dbn Fed. Savings families	x x x
DeJohn, Roni	* Up to \$200	3.00	HS/C		12.00	Live in HFCC District; Show civic involvement	x x x
Hackett, Helen	* Up to \$1,000	3.50	C		15.00	Show interest in campus or community activities	x x x
HFCC Alumni Association	* Up to \$800	2.50	HS/C		12.00	Nominated by Alumni; Community Service Involvement	x x x
Kiwanis Club of Dearborn	* Up to \$500	2.75	HS/C			Proof of Community Service	x x x
Komisar, Bobbie Jo	\$500	3.00	HS or C			Letters of support documenting community service/care	x x x
Southeast Dearborn Community	* Up to \$300	2.50	HS/C		9.00	Live S. of Mich.Ave./E. of Miller; Community Interest, Financial Need	x x x

Categories Of Scholarships	Maximum \$ One Award	GPA	High School Or College	Fields Of Interest	Min. Hrs. Per Sem.	Other Criteria	Covers:		
							T	F	B O
COMPUTER									
Spencer, Raymond	* Up to \$700	3.20	C 15hrs.	Math/Sci./Engin./Computer	3.5 GPA in Math; Math 175 is a pre-req.		x	x	x
Michael & Shannon Scanlon					Returning Student over 21, CIS major		x	x	
CRIMINAL JUSTICE									
Douglas W. Lowe /Memorial	* Up to \$500	2.5	HS/or C	Criminal Justice	Son or Daughter of Police Officer; Dearborn School Graduate. Dearborn Resident		x	x	x
DANCE									
Dance Scholarship	Varies								
Louie & Eleanor Mancinelli	Varies			Dance	Serious dance students involved in the dance company. Strong academic standing & work ethic		x	x	x
DEARBORN HEIGHTS RESIDENT									
Kiwanis Club of Dbn Hgts	* \$500	2.50			9.00 Not Eligible for Federal Grant; Dearborn Hgts. Resident		x	x	x
DIVINE CHILD HIGH SCHOOL GRADUATE									
Sheridan, Maurice/Marjorie	\$500	2.75			Divine Child High School Graduate/Community Service		x	x	x
DRAFTING									
Industrial Drafting	\$500	2.75	C.Draft.	Drafting	12.00 Pre-req.: 4 basic drafting classes; Financial Need				x
ENGINEERING									
Bewick, Mark & Karen	* Up to \$500	3.25		Engineer/Journalism/Adv	9.00		x	x	x
Bruno, Eduardo & Rosaria	* \$500	2.50	C 30hrs.	Tech/Engineering	Student from Union Family Preferred; (UAW preferred)		x	x	x
ENT, Power, ICT	\$750		C	Engineering/Tech	Faculty Committee Makes Award		x	x	x
Spencer, Raymond	* Up to \$700	3.20	C 15hrs.	Math/Sci./Engin./Computer	3.5 GPA in Math; Math 175 is a pre-req.		x	x	x
ENGLISH									
Martin, George & Helen	* Up to \$900			English	Fordson H.S. Graduate		x	x	x
Woods, Mary Joan & Anthony E.	\$500	3.50		English			x	x	x
ENVIRONMENT									
Garden Club of Dearborn	* Up to \$500	3.00	C Sci	Environmental/Sci	9.00 Completed 30cr. hrs.; R.Field of study; Biology Dept. selects		x	x	x

Categories Of Scholarships	Maximum \$ One Award	GPA	High School Or College	Fields Of Interest	Min. Hrs. Per Sem.	Other Criteria	Covers: T F B O
FEMALE							
American Association of University Women	\$500				6.00	Women at least 25 years of age, completed 6 credit hours. Academic achieve & FA	
Ankeny, Gloria	* Up to \$500				6.00	Female.; Pref.Dbn.Schls.Grad.; 2 ltrs. Recomm.; Financial Need	x x x x
Ford-EEOC	* varies					Women & minorities who are employees of Ford Motor Company. GPA selected	
Hedge, Susan K.	Up to \$500					Women homemakers only; Apply to Focus on Women Program	x x x x
FIRE SCIENCE/PARAMEDIC							
Knoop, Robert / Memorial	* Up to \$500	2.50	Firefighter/Fire Science			Child of Dbn. Firefighter Pref. or Grad.of Dbn Schools; Comm.Serv.	x x x
FORDSON HIGH SCHOOL GRADUATE							
Martin, George & Helen	* Up to \$900		English			Fordson H.S. Graduate	x x x
HISTORY							
Thomas, Arthur	\$600	3.50	C			Pre-req.: 6 hrs.of history; take directed study	x x x
HONORS PROGRAM							
Adray Memorial Golf Tournament	Full Tuition	3.50	HS/3.5C			H.S. 80th percentile or better on ACT/SAT Honors	x
Hackett, Helen	* Up to \$1,000	3.50	C 15hrs.		9.00	Show interest in campus or community activities	x x x
Henry Ford II Honors	* Full Tuition	3.50	HS/3.5C		8.00	H.S. 80th percentile or better on ACT/SAT	x
Honors Program	\$500	3.50	HS/3.5C			H.S. 80th percentile or better on ACT/SAT	x
HOSPITALITY							
Anderson, Kenneth	* Up to \$600	2.00	C	Hospitality		Have completed 10hrs. Hospitality.; Extra Curricular Hospitality Field	x x x x
Bokatgian, Arthur	* Up to \$650	2.50	C	Hospitality		3.0 in Culinary courses; Extra.C.in Culinary Field; Letter of Recomm.	x x x x
Dearborn Hyatt Regency	\$500			Hospitality		Awardee(s) to be selected by the Hospitality Department	x x x x

Categories Of Scholarships	Maximum \$ One Award	High School Or College	Fields Of Interest	Min. Hrs. Per Sem.	Other Criteria	Covers:		
						T	F	B O
Dearborn Pizza Papalis/Rio Wraps	\$500		Hospitality			X	X	X
Daoud, Tarik & Helen	* \$500		Hospitality			X	X	X
Fifty-One O One Award			Hospitality			X	X	X
Hospitality	Varies	2.50 C	Hospitality		Single Parent/Displaced Worker; Pref. to Past Hospitality Worker	X	X	X
Hospitality Worthy Goal								
Scott, Paul / Hospitality	\$500	2.50 HS	Hospitality	9.00	Selection made by Hospitality Department	X	X	X
Zudick Hospitality	* Up to \$750	3.00 HS/C 15hrs.	Hospitality		Awarded by Hospitality Department; 2 Letters of Recommendation	X	X	X
JOURNALISM								
Bewick, Mark & Karen / Memorial	* Up to \$500	3.25	Engineer/Journalism/Adv	9.00		X	X	X
Clack, Patrick	\$200	3.00	Journalism	12.00	Must be a full-time journalism student	X	X	X
Wygonik, David / Memorial	\$500	3.00	See Other Criteria		Journalism, Poly Sci, Pre-Law; Community Service	X		
LABOR ORGANIZATION								
Bruno, Eduardo & Rosaria	* \$500	2.50 C 30hrs.	Tech/Engineering		Student from Union Family Preferred; UAW preferred	X	X	X
King, Harold	* Up to \$600	3.00 C 24hrs.		12.00	Essay (500w. on Contrib. of Organized Labor to American Society)	X	X	X
MALE								
Saleh, Mazen / Memorial	* Up to \$500	3.20 C 30 hrs.		9.00	Male Student	X		
MANUFACTURING/TECHNOLOGY								
Rapp, Charles	* Up to \$200	3.50 C 15hrs.	Mfg/Tech			X	X	X
MATHEMATICS								
Math Scholarship	Varies					X		
Seavitt, Andrea	\$500	3.00	Math/Engineering Major			X	X	X
Spencer, Raymond	* Up to \$700	3.20 C 15hrs.	Math/Sci./Engin./Computer		3.5 GPA in Math; Math 175 is a pre-req.	X	X	X
MINORITIES								
Allen, Archie / Memorial	\$500		Music		For Minorities; see Music Dept. for details	X		
Ford-EEOC	* Varies				Women & minorities who are employees of Ford Motor Company. GPA selected at HFCC & U of M			

Categories Of Scholarships	Maximum \$ One Award	GPA	High School Or College	Fields Of Interest	Min. Hrs. Per Sem.	Other Criteria	Covers: T F B O
MUSIC							
Allen, Archie /Memorial	\$500		Music	Music		For Minorities; see Music Dept. for details	x
Mitchell, Rich /Memorial			Music	Music		Awarded by Music Department	
Music Department						Awarded by Music Department	
Zudick Music	* Up to \$750					Awarded by Music Department	
NEW CITIZENS							
Berry, Michael	* Up to \$1,000	3.00	HS/2.5C		12.00	Civic Involvement.; Lebanese heritage; one parent naturalized citizen	x x x
Mazzara, Antonio & Concetta	* Up to \$700	3.00	HS/2.5C		9.00	Applicant/parent naturalized citizen; Essay (100-200w. Importance of Family)	x x x
NURSING							
Ward Aurich	\$500			Nursing Text Books		Text Books only	x
Bugeia, Mary Huchla	*		C	Nursing	9.00	Student selected by Nursing Dept.	
Czarnecki Nursing	* Up to \$500					Student selected by Nursing Dept.	x x x
Darin, Frank & Barbara	* Up to \$500						
Dearborn Rotary Club	* Up to \$500						
Henry, Margaret E.	\$500			Nursing			
HFCC College Store	\$250	2.50				Nursing Student Preferred; Financial Need	x
Kohnke, John	\$500						
Montgomery, Martha M.	\$500			Nursing		Must be accepted in the Nursing Program	x x x
Muirhead, Alberta	* Up to \$500	3.00	HS/C	Nursing		Accepted in Nursing Program; Nursing Faculty Selection; 2 Ltrs. Ref.	x x x
Nursing Merit	\$500	3.20	C	Nursing		C. 1st yr. Nurs.; Ex.Curr.; Non. Financial Aid; Essay (Public Image of Nursing)	x x
Saffer, Dr. Mark B.	\$500	2.50		Nursing		General Education w/Financial Need (w/out Fed. Support)	x x x
Schlaff, David & Barbara	\$500			Nursing		Must be accepted in the Nursing Program	x x x
Steslicki, Raymond & Helen	* Up to \$500	3.20		Nursing		Perfer Polish Heritage/Nursing	x x x
PERFORMING ARTS DEPARTMENTAL PHYSICS							
Brandt, Stephen	* Up to \$350		C			Student in Physics 131 who will be taking Physics 132	x x x

Categories Of Scholarships	Maximum \$ One Award	GPA	High School Or College	Fields Of Interest	Min. Hrs. Per Sem.	Other Criteria	Covers: T F B O
PRE-EDUCATION							
Ankeny, Gloria	* Up to \$500				6.00	Female.; Pref.Dbn.Schls.Grad.; 2 ltrs. Recomm.; Financial Need	x x x x
Cervi, Pam / Memorial	\$500		Pre-Education				x x x
James & Betty Davies		2.50				Pre-Ed 2nd year student	
Kalmeta Family Fund	\$500	2.50	Pre-Education		6.00	Majoring in Pre-Education	x x x x
Mottillo-Jodocy Scholarship	\$500	2.50	Pre-Education		9.00		x
Ryan, Susan	\$500	3.00	Pre-Education				x x x x
Michael & Shannon Scanlon						Returning Student over 21, Pre-Ed major	x x
Yokie, Karl / Teaching	* Up to \$500	3.00	Pre-Education			Community Service and Extra Curricular Activities	x x x
Wayne County Reading Council	\$500	2.50	Pre-Education				x x x x
Zopf, Pre-Education	\$500						
PRE-LAW							
Wygonik, David / Memorial	\$500	3.00	See Other Criteria			Journalism, Poly Sci, Pre-Law; Community Serv	x
RETURNING STUDENT							
Grenke, John E.	\$500					Assist Returning Student/No GPA level required/General studies	x x x x
Smith, Wallace / Family	* Up to \$500	3.00				Returning student after extended absence from formal education	x
SCIENCE							
BASF Chemical Manufacturing		2.50		Chemical manufacturing plant		Enter a training program, leads to a career as a technician in a chemical manuf. plant	
Garden Club of Dearborn	* Up to \$500	3.00	C Sci	Environmental/Sci	9.00	Completed 30cr. hrs.; R. Field of study; Biology Dept. selects	x x x
Spencer, Raymond	* Up to \$700	3.20	C 15hrs.	Math/Sci./Engin./Computer		3.5 GPA in Math; Math 175 is a pre-req.	x x x
GENERAL							
Anderson, Lawrence R.	\$500		Business				x x x x
Anina & Benjamin Bachrach	* Up to \$500						
Brandenburg, Fred & Barbara	\$500					Academic Studies - Identified need	x x x x
Chadick, Edith/Memorial	\$500			Lincoln Park High School Graduate w/Financial need			x x x x

Categories Of Scholarships	Maximum \$ One Award	GPA	High School Or College	Fields Of Interest	Min. Hrs. Per Sem.	Other Criteria	Covers: T F B O
Curran, Robert & Susan							
John R. & M. Margrite Davis Foundation *	\$1,000					General Course of Study	x x x x
Dearborn Federal Savings	\$750	2.75	HS or C		12.00	Dearborn/Dbn. Hgts. Resident; no Dbn Fed. Savings families	x x x
Dearborn Kiwanis Key Club	\$500	3.00	HS			Edsel Ford H.S. Graduate; Active Key Club Member	x x x
Dearborn PTA	\$500	2.75	HS		12.00	Must work/volunteer; Financial Need	x x x
Demmer, Jack	* Up to \$500	2.50	HS			Divine Child student (Selected by staff); Financial Need	x x x
Fava, Karl and Doreen	\$500						
Fordson Alumni Varsity Club Scholarship						Fordson High School chooses	
Forfa, Eugene A. Memorial	\$1,000					Preference Fordson High School Grads	
Hallissey, Joseph & Veronica	* Up to \$1,000	3.20	HS/C			Pref. given to needy students without Financial aid	x x x
Handicapped Student Fund	\$1,000					Handicapped student	x x x
HFCC Foundation Board	\$1,000	3.00			6.00	Financial need considered	x
Jefferson, Arthur	* Up to \$200	3.00	HS		9.00	Needy, but not eligible for Financial aid	x x x
Kalmeta Family Fund	\$500	2.50	Pre-Education		6.00	Majoring in Pre-Education	x x x x
Knapp, Joseph	Up to \$900	3.25	12 C		9.00	Older student; financial need	x x
Meade, Dr. J. Michael & Mrs. Margaret	\$500						
Miller, Harry & Edith /Memorial	* Up to \$550	3.20	HS/C			One year only; Not eligible for other Financial Aid	x x x
Mireck, Dorothy	* Up to \$1,500	3.26	C 32hrs. Associate Degree			Must expect to graduate at the end of school year	x x x x
Emilie Erselv Mitchell	* up to \$500						
Muirhead, Alberta / Honors	* Up to \$500	3.50	C			No single semester below 3.2	x x x
Murray, Ida	* Up to \$500						x x x
President's Scholarship							
Returning Adults	Up to \$1,000						
Rosenau, Arthur & Elizabeth	* Up to \$1,000				9.00	Cannot pay more than 75% of tuition; \$500/semester	x
Scanlon, Michael & Shannon							x
Schoolmaster, M/M James	\$500						x

Categories Of Scholarships	Maximum \$ One Award	GPA	High School Or College	Fields Of Interest	Min. Hrs. Per Sem.	Other Criteria	Covers: T F B O
Helen C. Smith Endowed	* Up to \$500						
Special Needs	\$1,000				9.00		X
Talamonti, Walter & Rita	\$500				TBD		
Walls, Dorothy L.	\$500						X X X X
Wormell, Helen							

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