ARTICULATION AGREEMENT RENEWAL

Between

Henry Ford College

AAS Electrical Engineering Technology

and

Eastern Michigan University
College of Engineering and Technology
School of Engineering

BS in Electronic Engineering Technology

September 2020
ARTICULATION AGREEMENT RENEWAL BETWEEN
Henry Ford College
AAS in Electrical Engineering Technology
and
Eastern Michigan University
BS in Electronic Engineering Technology

Article I
Agreement on Principle

Eastern Michigan University (EMU) and Henry Ford College (HFC) agree that students who choose to begin their studies at a community college and transfer to a university to earn a bachelor’s degree should be provided with a smooth curriculum transition that minimizes loss of credit and duplication of coursework. Therefore, EMU and HFC agree to enter into this Articulation Agreement ("Agreement") to facilitate the completion of the Electrical Technology program at HFC and the BS in Electronic Engineering Technology at EMU. Both parties enter into this Agreement as cooperating, equal partners who shall maintain the integrity of their separate programs.

Article II
Agreement on Program Specifics

EMU and HFC agree that interested students may transfer the course credits indicated on the attached articulation guide toward a BS in Electronic Engineering Technology at EMU. Under this Agreement the 60-hour rule for courses taken at the four year level will be waived and require that a minimum of 30 credit hours to be completed in courses offered by EMU, of which 15 hours must be in major/program requirements at the 300-level or above. A minimum of 124 total credits is required to graduate.

To use this Agreement students must apply and be admitted to EMU. HFC students will receive equal consideration with other students seeking admission and financial aid.

The Michigan Transfer Agreement (MTA) requirements may be completed at the most appropriate time for the student whether before or after admission to EMU. If already on the transcript, the MACRAO designation will be accepted at EMU after summer semester 2019. Students who have not satisfied the MTA or MACRAO agreement must complete EMU’s General Education Requirements as applied to transfer students. All other EMU graduation and program requirements must be satisfied whether by transferred courses, EMU courses, or approved substitutions or waivers.

For the purpose of this Agreement, both HFC and EMU agree to accept transferable courses from each other and from other regionally accredited institutions. Articulation guides will be provided to assist students in completing the articulated program of study. Each institution will determine the satisfaction of their individual program and degree requirements. HFC courses indicated with an * on the articulation guide are required for EMU’s program. Any substitutions for these courses must be approved by the EMU program coordinator if not already stated in the Agreement. In the case of a student who has accumulated credits before declaring this program, every effort will be made to maximize the use of credits already completed. All students using this Agreement will be encouraged to complete an associate degree, although it is not required. Students will be informed of reverse transfer opportunities. Disputes regarding the transfer of courses may be appealed to the EMU Provost by contacting the Office of Community College Relations 734.487.6577.

Eastern Michigan University
Community College Relations

January 29, 2020
Page 1 of 5
Article III
Agreement on Communication

EMU and HFC agree to cooperate in communicating with each other and with their common and respective publics concerning the established relationship between the two institutions. Communication may include the development of various kinds of publications to inform those who might benefit personally or professionally from the opportunities provided by this Agreement. Faculty and staff at both institutions will share the information in this Agreement with interested and qualified students and both institutions will provide counseling and advising to students and prospective students. EMU will provide transfer student performance data to HFC officials annually through the Community College Transfer Student Report. To the extent permitted by applicable law, including the Family Educational Rights and Privacy Act ("FERPA"), 20 U.S.C. § 1232g, and its implementing regulations, 34 C.F.R. § 99.1 et seq., HFC and EMU may share data on student achievement to assess program effectiveness.

Article IV
Maintenance and Review Procedures

At least one administrative or faculty member from each institution will be appointed to act as agents for the implementation of this Agreement, to speak for the institutions and to communicate changes to respective faculty members, advisors, counselors, and others to whom the information is pertinent. Responsibility for oversight of this Agreement rests with the Vice President of Academic Affairs at HFC and the Director of the School of Engineering at EMU. Both parties agree to communicate annually any changes in their respective programs that may affect this Agreement.

Effective Date: September 1, 2020 until August 31, 2023.
This is a renewal of an agreement made in April 2006 and renewed in September 2009 and January 2014, and updated in September 2014. This Agreement is consistent with the 2020-2021 catalog. Students have until summer 2028 to graduate from Eastern Michigan University following this agreement. In the event that a student does not complete the program within seven years, they may be required to have their credits reevaluated using the requirements of the current articulation guide.

Termination: Either Party may terminate this Agreement without cause with 30 days written notice to the other, with the stipulation that students involved in programming at HFC or EMU pursuant to this Agreement at the time of termination shall be allowed to complete their training under the terms of the Agreement.

Article V
Miscellaneous Provisions

Discrimination: The Parties agree orientation that they will not discriminate against any student or participant because of race, color, age, sex/gender, sexual, gender identity, gender expression, religion, national origin, height, weight, marital status, disability perceived disability, political affiliation, familial status, veteran status, genetic or other characteristic protected by law in the performance of programs and services under this Agreement, consistent with federal and state laws and with the non-discrimination policies of each Party. Neither party will discriminate against any employee or applicant for employment (with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment) because of race, color, age, sex/gender, sexual orientation,
gender identity, gender expression, religion, national origin, height, weight, marital status, disability, perceived disability, political affiliation, familial status, veteran status, genetic or other characteristic protected by law.

The Parties agree that they will provide appropriate accommodations and services for students with disabilities who are protected by the Americans with Disabilities Act and make sure that all of their programs are also accessible and comply with the Americans with Disabilities Act (ADA), Rehabilitation Act of 1974, World Wide Web Consortium’s Accessibility Guidelines (W3CG) and any other applicable law or regulation.

Notices: Notices required under this Agreement shall be in writing and shall be sent registered mail or certified mail, return receipt requested. Such notices shall be addressed to the Parties at the addresses set forth below, or at such other address as may be specified by either Party. The Parties may otherwise communicate by email.

If to HFC: Director, Academic Services
Henry Ford College
5101 Evergreen Rd.
Dearborn, MI 48128
academicservices@hfcc.edu

If to EMU: Director, Community College Relations
Eastern Michigan University
200 McKenny Hall
Ypsilanti, MI 48197
ccr_office@emich.edu
**Disputes.** The Parties agree to attempt best efforts to resolve disputes on an informal basis through meetings and discussions. Disputes that are not resolved at the informal level will be submitted to facilitation. If facilitation is unsuccessful, the Parties shall submit their dispute to binding arbitration in lieu of litigation and waive the right to file suit against the other. The arbitration shall be conducted in Dearborn, Michigan by a mutually acceptable arbitrator who shall determine which Party(ies) shall be responsible for paying the arbitrator’s fee.

**Invalid Parts.** If any provision of this Agreement is declared by any court of competent jurisdiction to be invalid for any reason, such invalidity shall not affect the remaining provisions. On the contrary, such remaining provisions shall be fully severable, and this Agreement shall be construed and enforced as if such invalid provisions never had been inserted in this Agreement.

**Modifications.** This Agreement may only be modified by written instrument signed by both Parties hereto.

**Enforcement and Governing Law.** All matters relating to the validity, interpretation, performance or enforcement of this Agreement, and any claims arising from or related to this Agreement, will be governed by and construed in accordance with the laws of the United States of America, State of Michigan, without regard to the principle of conflict of laws.

**Indemnification.** Statutory and common law theories and principles of indemnification, contribution, and equitable restitution shall govern and apply to claims, actions, causes of action, costs, expenses and losses (including attorneys’ fees) resulting from or caused by the actions or omissions of the parties or their employees pursuant to this Agreement.

**Entire Agreement.** This Agreement embodies the entire agreement of the Parties and supersedes all other verbal and/or written agreements, warranties, representations, or understandings entered into by the Parties and may only be modified by a written amendment executed by authorized signatories of both Parties.

**Counterparts.** This Agreement may be executed in counterparts which, when combined, shall constitute the entire agreement.
RENEWAL OF
ARTICULATION AGREEMENT BETWEEN
Henry Ford College
AAS in Electrical Engineering Technology
and
Eastern Michigan University
BS in Electronic Engineering Technology

Henry Ford College and Eastern Michigan University agree to the terms of this Agreement, which is effective from September 1, 2020 until August 31, 2023. The signatories below warrant they are authorized to enter into this Agreement on behalf of their respective Parties.

Signatures

**Henry Ford College**

Russell Kavalhuna, JD  
President  
3/4/2020  

Michael Nealon, PhD  
Vice President of Academic Affairs  
3/4/2020

Pat Chatman, PhD, Dean  
School of Business, Entrepreneurship and Professional Development  
3/4/2020

**Eastern Michigan University**

James M. Smith, PhD  
President  
2/6/2020

Rhonda Kinney Longworth, PhD  
Provost & Executive Vice President  
Academic and Student Affairs  
2/6/2020

Mohamad Qatu, PhD  
Dean of the College of Engineering and Technology  
1/30/2020

Bob Lahidji PhD, Director  
School of Engineering  
1/30/2020
## ELECTRONIC ENGINEERING TECHNOLOGY
### ARTICULATION AGREEMENT GUIDE
Henry Ford Community College – AAS in Electrical Engineering Technology
Eastern Michigan University – BS in Electronic Engineering Technology

<table>
<thead>
<tr>
<th>Michigan Transfer Agreement (MTA) Requirements (30 credits)</th>
<th>Eastern Michigan University Courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students with the MTA endorsement on their community college transcript have satisfied EMU’s General Education Core Requirements and will be required to complete only the General Education Application Requirements of one Perspectives on a Diverse World course, one Learning beyond the Classroom experience, and a writing intensive course in the major. Courses listed below for the MTA also satisfy program requirements at EMU and/or HFC. If the MTA or MACRAO are not endorsed on a student’s transcript, they must fulfill EMU’s General Education program. For courses approved by HFC to satisfy the MTA go to <a href="#">HFC’s website</a>.</td>
<td></td>
</tr>
</tbody>
</table>

1. **A course in English Composition**
   - Choose from the approved MTA list: ENG 132 or ENG 132H
   - University Elective

2. **A second course in English Composition or Communication**
   - Choose one from: ENG 132 or ENG 132H
   - WRTG 121 Composition II

3. **A course in Mathematics**
   - *MATH 180 Calculus I
   - MATH 120 Calculus I (sub for MATH 140)

4. **Two courses in Natural Sciences from different disciplines (one lab required)**
   - *CHEM 141 Principles of General Inorganic Chemistry
   - CHEM 121/122 General Chemistry w/labs (4)+1
   - *PHYS 131 General Physics
   - PHYS 221 Mechanics, Sound and Heat

5. **Two courses in Humanities from different disciplines**
   - Choose from the approved MTA list
   - University Electives

6. **Two courses in Social Sciences from different disciplines**
   - Choose from the approved MTA list
   - University Electives

*If needed, complete additional credits in any of the above categories to satisfy the 30 credit minimum for the MTA*

**EMU’s Perspectives on a Diverse World requirement: Complete one course from the following list:**
- These courses also satisfy an MTA area: Natural Science: BIO 138 (non-lab); Humanities: ART 224, 225, 226, 227; ENG 243, 248 Social Science: ANTH 131, 151, 152, 154; EDU 265; GEOG 132; HIST 113, 234, 252, 261; POLS 152; PSY 265; SOC 152, 251.

*This course applies, but does not satisfy the MTA: BBA 250; LGL 248; Phil 201; PLGL 248; WR 233, 238, 241*

### HFC Electrical Engineering Technology Program Requirements (50 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 100 Introduction to Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 103 Basic Electricity</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 106 Basic Electronics</td>
<td>3</td>
</tr>
<tr>
<td>*ELEC 115 Digital Circuits I</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 120 Basic Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 145 AC/DC Rotating Machinery</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 185 Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>*ELEC 195 AC/DC Circuit Analysis</td>
<td>3</td>
</tr>
<tr>
<td>*ELEC 200 Ladder Diagrams &amp; Motor Controls</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 235 Siemens PLC/HMI Programming</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 245 Programmable Controllers</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 255 Instrumentation Systems</td>
<td>3</td>
</tr>
<tr>
<td>*ELEC 260 Automation Controls and Robotics</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 270 Instrumentation II LabVIEW Programming</td>
<td>3</td>
</tr>
<tr>
<td>Electrical Technology Support</td>
<td>10</td>
</tr>
<tr>
<td>IS 215 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 000 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 214 Digital Circuit Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 000 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 000 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 000 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 200 Circuit Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 218 Motors and Controls</td>
<td>3</td>
</tr>
<tr>
<td>CET 000 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>CET 000 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>CET 000 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 000 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>CET 427 Programmable Logic Controllers</td>
<td>3</td>
</tr>
<tr>
<td>SET 000 University Elective</td>
<td>3</td>
</tr>
<tr>
<td>University Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

**EMU Program Requirements that may be taken at HFC or EMU (18 credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 130 Introduction to Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 232 Statics</td>
<td>3</td>
</tr>
<tr>
<td>*MATH 183 Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>*MATH 283 Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>*PHYS 132 General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ET 100 Introduction to Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>MET 211 Statics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 121 Calculus II (sub for MATH 141)</td>
<td>5</td>
</tr>
<tr>
<td>MATH 122 Elementary Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PHY 222 Electricity and Light</td>
<td>4</td>
</tr>
</tbody>
</table>

**Credits at HFC: 98 Credits that Transfer to EMU: 79**

*Required for EMU’s EET program. If not transferred from HFC, must be completed at EMU. Sign up to use this articulation agreement, EMU will keep in touch with you and provide information and advising to you while you are still at the community college.*
**ELECTRONIC ENGINEERING TECHNOLOGY**  
**ARTICULATION AGREEMENT GUIDE**  
Henry Ford Community College – AAS in Electrical Engineering Technology  
Eastern Michigan University – BS in Electrical Engineering Technology

### Completion of the BS in Electronic Engineering Technology Program at EMU

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 151</td>
<td>Intro to Computing in Engineering Tech</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 210</td>
<td>Circuit Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 300</td>
<td>Analog Circuit Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 310</td>
<td>Analog Circuit Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 314</td>
<td>Digital Circuit Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 320</td>
<td>Microcomputer Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 326</td>
<td>Transform Circuit Analysis with Calculus</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 387L4</td>
<td>Co-op in Electronic Technology</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 415</td>
<td>Communication Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 420</td>
<td>Advanced Microprocessors</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 426</td>
<td>Control Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 450</td>
<td>Senior Design Project</td>
<td>3</td>
</tr>
<tr>
<td>QUAL 320</td>
<td>Industrial Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>SET 350W</td>
<td>Engineering Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one course from the following:  
- CET 120 Engr Graphics Essentials w/Electronics Apps  
- CET 220 Computer Aided Electronics  
- CET 252 Engineering Programming  
- COSC 246 Programming in C++

**Minimum Credits at EMU:** 45-46  
**Transfer Credits:** 79  
**Credits to Graduate:** 124

### Suggested Sequence for completing the program:

Courses may not be offered every semester. Consult with the program coordinator to develop a program of study.

- **Fall Semester** (12 credits)  
  - CET 151 F,W .............................................3  
  - ELEC 300 F, pre-req: ELEC 210  
  - ELEC 314 F, pre-req: ELEC 214  
  - ELEC 320 F, pre-reqs: ELEC 214 and CET 151  

- **Winter Semester** (9 credits)  
  - ELEC 210 W, pre-req: ELEC 200  
  - ELEC 310 W, pre-req: ELEC 300  
  - ELEC 420 W, pre-req: ELEC 320  

- **Fall Semester** (12 credits)  
  - ELEC 326 F, pre-reqs: ELEC 210 and MATH 120  
  - ELEC 415 F, pre-req: ELEC 310  
  - QUAL 320 F, W  
  - Choose one from: CET 120, 220, 252; COSC 246

- **Winter Semester** (12 credits)  
  - ELEC 387L4F,W .............................................3  
  - ELEC 426 W, pre-reqs: ELEC 326 and MATH 121  
  - ELEC 450 W, pre-reqs: ELEC 420 and 415  
  - SET 350W F, W, pre-req: WRTG 121

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1. ELEC 387 may be waived if student has work experience in this field, however, one LBC experience or course must be completed to graduate. See program advisor for suggestions.
ELECTRONIC ENGINEERING TECHNOLOGY
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Additional Information:
1. Each institution will determine the satisfaction of their individual program and degree requirements. Both institutions agree to accept transferrable courses from each other and from other regionally accredited institutions. HFC courses indicated with an * are required for EMU's BS in Electronic Engineering Technology program. Substitutions for these courses must be approved by the EMU program coordinator.

2. Students with the MTA endorsement on their community college transcript have satisfied EMU's General Education Core Requirements and will be required to complete only the General Education Application Requirements of one Perspectives on a Diverse World course, one Learning beyond the Classroom experience, and a Writing Intensive course in the major. The Perspectives on a Diverse World requirement may be satisfied at the community college as part of the MTA requirements.

To use the Michigan Transfer Agreement (MTA), students must have an official community college transcript, with the "MTA Satisfied" endorsement sent to EMU's Admissions Office. Students who do not have "MTA Satisfied" on their community college transcript, will be required to satisfy EMU's general education requirements as listed in the Undergraduate Catalog. The MTA may be completed after admission to EMU, however, students should inform advisors or they may be advised to complete additional courses for the general education program. If already on the transcript, the MACRAO designation will be accepted at EMU after August 2019.

3. Only courses with a grade of “C” or better (2.0 on a 4.0 scale) will be accepted for transfer to either institution.

4. Under this Agreement, the 60 hour rule at a four year college level is waived and a minimum of 45 semester hours must be completed at the four-year college level, of which 30 hours must be completed at EMU, with at least 15 hours at the 300- level or above. Of the last 30 semester hours prior to graduation, at least 10 hours must be completed in courses offered by EMU. A minimum of 124 credit hours, completed in-residence or accepted in transfer, is required for graduation.

5. Students must satisfy all admission requirements at the time of application for admission to EMU, including submitting transcripts from all previously attended colleges. HFC students will receive equal consideration with other students for course registration and financial aid.

6. Students are encouraged to contact the Electronic Engineering Technology Program Coordinator before applying to EMU. To facilitate advising and the evaluation of transcripts, sign up for this articulation agreement, and bring a copy of this articulation guide to all advising sessions.

7.

Effective Dates: September 1, 2020 until August 31, 2023
This is a renewal of an agreement made in April 2006 and renewed in September 2009, January 2014, and updated in September 2014. This agreement is consistent with the 2020-2021 catalog. Students have until summer 2028 to graduate from Eastern Michigan University following this Agreement. In the event that a student does not complete the program within seven years, they may be required to have their credits reevaluated using the requirements of the current articulation guide.

Contacts:
Henry Ford College
Mark Siedlik
313.845.6353
msiedlik@hfcc.edu

Eastern Michigan University
College of Engineering & Technology Student Services
734.487.8659
cet_advising@emich.edu