### Monroe County Community College Courses: Eastern Michigan University Courses:

#### Michigan Transfer Agreement (MTA) Requirements (30 credits)
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 MCCC. Students who started before fall semester 2014 may continue to follow the MACRAO Agreement until the end of summer semester 2019. MCCC approved MTA Courses.

1. **A course in English Composition**
   - ENGL 151 English Composition I ........................................... 3
   - ENGL 152 English Composition II ........................................... 3
2. **A course in English Composition or Communication**
   - ENGL 151 English Composition I ........................................... 3
3. **A course in Mathematics**
   - MATH 171 Calculus I .......................................................... 4
   - MATH 120 Calculus I  sub for MATH 140 ............................. 4
4. **Two courses in Natural Sciences from different disciplines (one lab required)**
   - CHEM 151 General College Chemistry I ................................. 4
   - PH1 151 General Physics I (C1) ........................................... 4
5. **Two courses in Humanities and Fine Arts from different disciplines**
   - Choose two from the approved MTA list.............................. 6
6. **Two courses in Social Sciences from different disciplines**
   - Choose two from the approved MTA list.............................. 6

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

#### EMU's Perspectives on a Diverse World requirement: Complete one course from the following list:
- **Natural Science:** BIOL 156; **Humanities:** ENGL 240, 255, 266; **Social Sciences:** ANTHR 152; **Geography:** GEOG 152; **History:** HIST 159, 173; **Political Science:** POLSC 211, 252; **Sociology:** SOC 253.

#### These courses apply, but do not satisfy the MTA: BMGT 220; IAS 105

#### MCCC Electrical Engineering Technology Program Requirements (49 credits)

<table>
<thead>
<tr>
<th>MCCC Courses</th>
<th>Eastern Michigan University Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ELEC 125 Fundamentals of Electricity</td>
<td>ELEC 200 Circuit Analysis I .......................... 3</td>
</tr>
<tr>
<td>*ELEC 129 AC/DC Motors and Controls</td>
<td>ELEC 000 University Elective ........................ 3</td>
</tr>
<tr>
<td>*ELEC 130 Programmable Logic Controllers = PLC’s</td>
<td>CET 000 University Elective ........................ 3</td>
</tr>
<tr>
<td>*ELEC 132 Electronics I</td>
<td>ELEC 000 University Elective ........................ 4</td>
</tr>
<tr>
<td>*ELEC 133 Circuit Analysis</td>
<td>ELEC 210 Circuit Analysis II (3)+1 ............. 4</td>
</tr>
<tr>
<td>*ELEC 135 Digital Electronics</td>
<td>ELEC 214 Digital Circuit Analysis I (3)+1 ........ 4</td>
</tr>
<tr>
<td>*ELEC 137 Microprocessors</td>
<td>ELEC 000 University Elective ........................ 4</td>
</tr>
<tr>
<td>ELEC 141 Industrial Automation and Process Control</td>
<td>ELEC 000 University Elective ........................ 3</td>
</tr>
<tr>
<td>ELEC 145 Data Acquisition and Insnetrumentation</td>
<td>ELEC 000 University Elective ........................ 4</td>
</tr>
<tr>
<td>ELEC 200 Electronic and Electrical Troubleshooting</td>
<td>ELEC 000 University Elective ........................ 4</td>
</tr>
<tr>
<td>ELEC 211 Medium Voltage Power Distribution</td>
<td>ELEC 000 University Elective ........................ 3</td>
</tr>
<tr>
<td>ELEC 214 National Electric Code – NEC</td>
<td>ELEC 000 University Elective ........................ 2</td>
</tr>
<tr>
<td>MDTC 160 Mechanical Drafting and CAD I</td>
<td>PDD 122 University Elective ........................... 4</td>
</tr>
<tr>
<td>MECH 131 Introduction to Automated Manufacturing</td>
<td>PDD 000 University Elective ........................... 3</td>
</tr>
<tr>
<td><strong>EMU Requirements and Electives that May be Taken at MCCC or EMU (18 credits)</strong></td>
<td></td>
</tr>
<tr>
<td>2 CIS 150 Computer Science I</td>
<td>COSC 246 Programming in C++ (3)+1 ......... 4</td>
</tr>
<tr>
<td>*MATH 251 Introduction to Linear Algebra</td>
<td>MATH 122 Elementary Linear Algebra .......... 3</td>
</tr>
<tr>
<td>*METC 100 Introduction to Engineering and Technology</td>
<td>ET 100 Introduction to Engineering Technology .......... 3</td>
</tr>
<tr>
<td>*METC 220 Statics and Strength of Materials</td>
<td>PDD 325 sub for MET 211 Statics (3)+1 .......... 4</td>
</tr>
<tr>
<td>*PHY 152 General Physics II</td>
<td>PHY 222 Electricity and Light .................. 4</td>
</tr>
</tbody>
</table>

**Credits at MCCC:** ............................................ 97
**Credits that apply to EMU program:** ........ 79

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*Required for EMU's BS in Electronic Engineering Technology program. If not transferred, must be completed at EMU.

1 WRTG 121 is a pre-requisite for SET 300W. If ENGL 152 is not transferred to EMU, WRTG 121 must be completed at EMU.

2 If CIS 150 (COSC 246) is not taken at MCCC, additional options are available for the requirement at EMU.

**Sign up with us:** If you let us know you are using this articulation agreement we can stay in touch with you and provide information and advising to you while you are still at your community college.
Completion of the Electronic Engineering Technology Program at EMU

Major Requirements (45 credits)
- CET 151 Intro to Computing in Engineering Tech ......3
- CET 427 Programmable Logic Controller ..............3
- ELEC 300 Analog Circuit Analysis I ...................3
- ELEC 310 Analog Circuit Analysis II ...................3
- ELEC 314 Digital Circuit Analysis II ....................3
- ELEC 320 Microcomputer Circuits ......................3
- ELEC 326 Transform Circuit Analysis with Calculus ..3
- ELEC 387L4 Co-op in Electronic Technology ..........3
- ELEC 415 Communication Circuits ......................3
- ELEC 420 Advanced Microprocessors .................3
- ELEC 426 Control Systems Engineering ...............3
- ELEC 450 Senior Design Project .......................3
- MATH 141 Applied Calculus II for Technology .......3
- QUAL 320 Industrial Quality Control ..................3
- SET 350W Engineering Communication ...............3

Credits at EMU: .............................................45
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.

MATH 120 (MATH 171 at MCC) is pre or co-requisite to ELEC 210.

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

Winter Semester (9 credits)
- ELEC 310 W, pre-req: ELEC 300 .........................3
- ELEC 420 W, pre-req: ELEC 320 .........................3
- MATH 141 pre-req: MATH 140 (or MATH 120) .......3

Fall Semester (12 credits)
- ELEC 326 F, pre-reqs: ELEC 210 and MATH 120 ....3
- ELEC 415 F, pre-req: ELEC 310 .........................3
- CET 427 F,W, pre-req: ELEC 218 .......................3
- SET 350W F, W, pre-req: WRTG 121 ..................3

Winter Semester (12 credits)
- ELEC 387L4 F,W .............................................3
- ELEC 426 W, pre-reqs: ELEC 326 and MATH 121 ..3
- ELEC 450 W, pre-reqs: ELEC 420 and 415 ..........3
- QUAL 320 F, W ..............................................3

1 Fulfills the Learning Beyond the Classroom requirement.
2 Fulfills the Writing Intensive requirement.
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. MCCC courses indicated with an * are required for EMU’s BS in Electronic Engineering Technology. 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 transferred to EMU.

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 applied to transfer students. The MTA may be completed after admission to EMU, however, students should inform their advisors or they may be advised to complete additional courses for the general education program. Students who enrolled in college prior to fall semester 2014 will have until the end of summer semester 2019 to complete the MACRAO agreement. 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, EMU will waive the 60-hour rule and require that a minimum of 30 credit hours must be completed in EMU courses, with at least 15 hours in the program at the 300-level or above. Of the last 30 hours completed before graduating, a minimum of 10 credit hours must be 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. MCCC students will receive equal consideration with other students for course registration and financial aid.

6. Students are encouraged to contact EMU’s 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.

Effective Date: September 1, 2018 until August 31, 2021.

This agreement is consistent with the 2018-2019 catalog. Students have until summer 2026 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:

Monroe County Community College
Peter Coomar, Dean
Applied Science and Engineering
734.384.4112
pcoomar@monroeccc.edu

Eastern Michigan University
College of Technology Student Services
150 Sill Hall
734.487.8659
cot_advising@emich.edu