

ELECTRONIC ENGINEERING TECHNOLOGY ARTICULATION AGREEMENT GUIDE

Henry Ford Community College –AAS in Electrical Engineering Technology
Eastern Michigan University – BS in Electronic Engineering Technology

Henry Ford 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 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 [HFC's website](#).

1. A course in English Composition		
Choose from the approved MTA list	3	University Elective
2. A second course in English Composition or Communication		
* Choose one from: ENG 132 or ENG 132H	3	WRTG 121 Composition II (pre-req for SET 350W)
3. A course in Mathematics		
* MATH 180 Calculus I	5	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	5	CHEM 121/122 General Chemistry w/lab (4)+1
* PHYS 132 General Physics II	4	PHY 222 Electricity and Light
5. Two courses in Humanities from different disciplines		
Choose from the approved MTA list.....	6	University Electives
6. Two courses in Social Sciences from different disciplines		
Choose from the approved MTA list	6	University Elective

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; PHIL 201; WR 233, 236, 241 **Social Science:** ANTH 131, 151, 152, 154; EDU 296; GEOG 132; HIST 113, 243, 252, 261; POLS 152; PSY 296; SOC 152, 251.

This course applies, but does not satisfy the MTA: BBA 250; LGL 248; PLGL 248

HFC Electrical Engineering Technology Program Requirements (50 credits)

CIS 100 Introduction to Information Technology	3	IS 215 University Elective	3
ELEC 103 Basic Electricity	4	ELEC 000 University Elective	4
ELEC 106 Basic Electronics	3	ELEC 000 University Elective	3
* ELEC 115 Digital Circuits I	3	ELEC 214 Digital Circuit Analysis I	3
ELEC 120 Basic Hydraulics	3	ELEC 000 University Elective	3
ELEC 145 AC/DC Rotating Machinery	3	ELEC 000 University Elective	3
ELEC 185 Pneumatics	3	ELEC 000 University Elective	3
* ELEC 195 AC/DC Circuit Analysis	3	ELEC 200 Circuit Analysis I	3
* ELEC 200 Ladder Diagrams & Motor Controls	3	ELEC 218 Motors and Controls	3
ELEC 235 Siemens PLC/HMI Programming	3	CET 000 University Elective	3
ELEC 245 Programmable Controllers	3	CET 000 University Elective	3
ELEC 255 Instrumentation Systems	3	ELEC 000 University Elective	3
* ELEC 260 Automation Controls and Robotics	3	CET 427 Programmable Logic Controllers	3
ELEC 270 Instrumentation II LabVIEW Programming	3	SET 000 University Elective	3
Electrical Technology Support	10	University Electives	10

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

* ENGR 130 Introduction to Engineering	3	ET 100 Introduction to Engineering Technology	3
* ENGR 232 Statics (3) and			
* PHYS 131 General Physics I (4)	7	MET 211 + PHY 221 Statics + Mechanics, Sound & Heat	7
* MATH 183 Calculus II	5	MATH 121 Calculus II (sub for MATH 141)	5
* MATH 283 Linear Algebra	3	MATH 122 Elementary Linear Algebra	3

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.

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Completion of the BS in Electronic Engineering Technology Program at EMU

Major Requirements	(45-46 credits)
CET 151 Intro to Computing in Engineering Tech	3
ELEC 210 Circuit Analysis II	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
¹ ELEC 387L4Co-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
QUAL 320 Industrial Quality Control	3
SET 350W Engineering Communication	3
Choose one course from the following:	3-4
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.

*MATH 120 (MATH 180 at HFC) is pre or co-requisite to ELEC 210.
MATH 121 (MATH 183 at HFC) is pre or co-requisite to ELEC 310*

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 and CET 151	3

Winter Semester	(9 credits)
ELEC 210 W, pre-req: ELEC 200	3
ELEC 310 W, pre-req: ELEC 300	3
ELEC 420 W, pre-req: ELEC 320	3

Fall Semester	(12 credits)
ELEC 326 F, pre-reqs: ELEC 210 and MATH 120	3
ELEC 415 F, pre-req: ELEC 310	3
QUAL 320 F, W	3
Choose one from: CET 120, 220, 252; COSC 246	3

Winter Semester	(12 credits)
¹ ELEC 387L4F,W	3
ELEC 426 W, pre-reqs: ELEC 326 and MATH 121	3
ELEC 450 W, pre-reqs: ELEC 420 and 415	3
SET 350W F, W, pre-req: WRTG 121	3

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.

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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.

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