

ELECTRICAL AND COMPUTER ENGINEERING ARTICULATION AGREEMENT GUIDE

Schoolcraft College –Associate in Engineering

Eastern Michigan University – BS in Electrical and Computer Engineering

Schoolcraft College Courses:

Transfer to Eastern Michigan University as:

Michigan Transfer Agreement (MTA) Requirements (31 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 EMU General Education Application Requirements of one Perspectives on a Diverse World course, one Learning Beyond the Classroom experience, and one writing intensive course in the major. Courses listed below for the MTA also satisfy program requirements at EMU and/or SC.

1. A course in English Composition

Choose one from the approved MTA list..... 3 General Transfer Credit..... 3

2. A Second course in English Composition or Communication

Choose one from the approved MTA list..... 3 General Transfer Credit..... 3

3. A course in Mathematics

* MATH 150 Calculus with Analytic Geometry I..... 5 MATH 120 Calculus I (4)+1 (GEQR)..... 5

4. Two courses in Natural Sciences from different disciplines (one lab required)

* PHYS 211 Physics for Scientists and Engineers I 5 PHY 223 Mechanics and Sound 5

* CHEM 111 General Chemistry I..... 4 CHEM 121/122 General Chemistry I..... 4

5. Two courses in Humanities and Fine Arts from different disciplines

Choose from the approved MTA list..... 4 General Transfer Credit..... 4

6. Two courses in Social Sciences from different disciplines

Choose one from ECON 201 or 202 4 ECON 201 or ECON 202 (3)+1 4

Choose one from the approved MTA list..... 3 General Transfer Credit..... 3

If needed, complete an additional course in the above categories to meet the 30 credit minimum for the MTA.

These courses also satisfy an MTA area: **Natural Science:** BIOL 104; GEOG 212; **Humanities:** COMA 240; ENG 170, 275; HIST 138; HUM 201, 202, 203, 204; **Social Sciences:** ANTH 112, 201, 214; GEOG 133; HIST 138; POLS 207, 209; SOC 210, 211

These courses apply, but do not satisfy the MTA: BUS 240; EDUC 200; SPE 100

SC Associate in Engineering Program Requirements (29 credits)

* ENGR 100 Intro to Engineering and Technology 3 ET 100 sub for EECE 100 3

* MATH 151 Calculus with Analytic Geometry II..... 5 MATH 121 Calculus II (4)+1..... 5

* MATH 230 Linear Algebra (Elective)..... 4 MATH 122 Elementary Linear Algebra (3)+1 4

* MATH 240 Calculus with Analytic Geometry III..... 5 MATH 223 Multivariable Calculus (4)+1..... 5

* MATH 252 Differential Equations 5 MATH 325 Differential Equations (3)+2 5

* PHYS 212 Physics for Scientists and Engineers II 5 PHY 224 Electricity and Light..... 5

* CIS 290 Object Oriented Program w/ Java (Elective)..... 3 COSC 111 Introduction to Programming..... 3

EMU Requirements and Electives that may be taken at SC or EMU (13 credits)

Open Electives 13 General Transfer Credit..... 13

Credits at SC:.....73 Credits that apply to EMU's program..... 73

* Required for the Electrical and Computer Engineering program at EMU. Must be taken at EMU if not completed prior to transferring.

[Sign up to use this articulation agreement.](#) 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.

ELECTRICAL AND COMPUTER ENGINEERING ARTICULATION AGREEMENT GUIDE

Schoolcraft College – Associate in Engineering (AE)

Eastern Michigan University – BS in Computer and Electrical Engineering

Completion of the BS in Electrical and Computer Engineering

Major Requirements (47 credits)

Electrical and Computer Engineering Requirements (41 credits)

EECE 212	Engineering Circuit Analysis	3
EECE 213	Engineering Circuit Analysis II	3
EECE 251	Digital Logic Design	3
EECE 262	Engineering Algorithmic Constructions	3
EECE 341	Engineering Electronics I	3
EECE 351	Microcontrollers	3
EECE 369	Introduction to Engineering Analysis Methods	3
EECE 371	Signals and Systems	3
EECE 380	Electric Circuit and Design Lab	3
EECE 400	EECE Professional Practice	2
EECE 421	Control Systems Engineering	3
EECE 430	Power Electronics	3
EECE 480	Senior Capstone	3
EECE 481W	Senior Capstone II	3

Restricted Electives (6 credits) Choose 2 below:

EECE 342	Engineering Electronics II	3
EECE 352	Digital Systems Designs with HDL	3
EECE 365	Engineering Electromagnetics	3
EECE 372	Communication Systems	3
EECE 411	Machine Learning	3
EECE 431	Digital Control Systems	3
EECE 435	Internet of Things	3
EECE 441	Introduction to Digital Signal Processing	3
EECE 452	Advanced Digital System Design with FPGA	3

LBC Requirement

Students must complete one Learning Beyond the Classroom course or noncredit experience offered by EMU. Consult your advisor for options.

Credits at EMU: 47

Transfer Credits: 73

Total Credits: 120

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Eastern Michigan University – BS in Computer and Electrical Engineering

Additional Information:

1. Each institution will determine the satisfaction of their individual program and degree requirements. Both institutions agree to accept transferable courses from each other and from other regionally accredited institutions. SC courses indicated with an * are required for EMU's BS in Electrical and Computer Engineering. 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. 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 47 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 120 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. SC students will receive equal consideration with other students for course registration and financial aid.
6. Admission Requirements
 - A minimum cumulative gpa of a 2.5, or cumulative transfer gpa of 2.5
 - Completion of PHY 223, MATH 120, MATH 121, and EECE 212
 - See [catalog for information on applying](#)
7. Students are encouraged to contact EMU's GameAbove College of Engineering and Technology Student Services Office 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, 2022 until August 31, 2025.

This is a renewal of an agreement made in September 2019. This agreement is consistent with the 2022-2023 catalog. Students have until summer 2030 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:

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