ARTICULATION AGREEMENT GUIDE

Henry Ford College – **AS in Pre-Engineering: General**
Eastern Michigan University – **BS in Mechanical Engineering**

Henry Ford College Courses:			Eastern Michigan University Courses:	
Michigan Transfer Agreement (MTA) Requirements (33 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. For HFC approved MTA courses go to the community college's website. Students without an MTA or MACRAO endorsement must complete EMU's general education program.				
1. A course in English Composition				
ENG 131	Introduction to College Writing	3	WRTG 120 Composition I	3
2. A course in English Composition or Communication				
* ENG 135	Business and Technical Writing and Research	3	WRTG 121 Composition II (prerequisite for SET 350W)	3
3. A course in Mathematics				
* MATH 180	Calculus I	5	MATH 120 Calculus I (4)+1	5
4. Two courses in Natural Sciences from different disciplines (one lab required)				
* CHEM 141	Principles in General & Inorganic Chemistry	5	CHEM 121/122 General Chemistry I (4)+1	5
* PHYS 231	Engineering Physics I	5	PHY 223 Mechanics and Sound	5
5. Two courses in Humanities and Fine Arts from different disciplines				
Choose two from the approved MTA list		6	General Transfer Credit…….	6
6. Two courses in Social Sciences from different disciplines				
Choose one from BEC 151 or 152		3	ECON 201 or ECON 202	3
Choose one from the approved MTA list		3	General Transfer Credit…….	3

EMU's Perspectives on a Diverse World requirement: Transfer students are required to complete one course that meets the diversity requirement. The course will also fulfill an MTA requirement at HFC. **Natural Science**: BIO 138 (non-lab); **Humanities**: ART 224, 225, 226, 227; ENG 243, 248; MUS 154 PHIL 201; WR 233, 236, 241; **Social Science:** ANTH 131, 151, 152, 154; EDU 296; GEOG 132; HIST 113, 261; POLS 152; SOC 152, 251. ***This course applies, but does not satisfy the MTA:*** ART 229, BBA 250; LGL 248; PLGL 248; SPN 130

HFC Pre-Engineering Program Requirements (26 credits)				
* PHYS 232	Engineering Physics II	5	PHY 224 Electricity and Light	5
* MATH 183	Calculus II	5	MATH 121 Calculus II (4)+1	5
* MATH 280	Calculus III	5	MATH 223 Multivariable Calculus (4)+1	5
* MATH 288	Differential Equations	5	MATH 325 Differential Equations (3)+2	5
* ENGR 130	Introduction to Engineering	3	ME 100 Intro to Engineering Design & Manufacturing	3
* ENGR 125	Introduction to Computation for Engineers	3	CEET 151 Intro to Computing in Engineering Technology	3
EMU Requirements and Electives that may be taken at HFC or EMU (16 credits)				
* ENGR 240	Circuits	5	EECE 212 Engineering Circuit Analysis (3)+2	5
[1]* ENGR 232	Statics	3	ME 211 Statics	3
* ENGR 235	Mechanics of Materials	2	ME 313 Mechanics of Materials (3)-1	2
* MATH 283	Linear Algebra	3	MATH 122 Elementary Linear Algebra	3
Open Electives		3	General Transfer Credit	3
Credits at HFC:		**75**	**Credits that transfer to EMU**	**75**

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

1 To receive credit for ME 211, students must have already completed PHY 231 with a C or higher.

ARTICULATION AGREEMENT GUIDE

Henry Ford College – **AS in Pre-Engineering: General**
Eastern Michigan University – **BS in Mechanical Engineering**

Completion of the BS in Mechanical Engineering

Major Requirements (45 credits)

Foundational Requirements (3 credits)

SET 350W	Engineering Communication	3

Technical Requirements (35 credits)

[1] ME 312	Dynamics (or PHY 230)	3
ME 316	Thermodynamics	3
ME 317	Fluid Mechanics (or PHY 485)	3
ME 325	Mechanics of Composite Materials	2
ME 326	Composite Design and Process	1
ME 330	Machine Design	3
ME 418	Heat Transfer	3
ME 420	Thermo/Fluids Lab	2
ME 431	Mechanical Design and Analysis	3
ME 432	Machine Dynamics	3
ME 435	Computational Solid Mechanics	3
ME 492W	Senior Capstone I	3
ME 493	Senior Capstone II	3

[1]To receive credit for ME 312, students must complete PHYS 231 and ENGR 232 with a C or higher.

General Credit (7 credits)
Students must complete a minimum of 45 credits at EMU under this agreement. Students may choose any 100 level or higher courses at EMU to complete this requirement. See an advisor in the program for recommendations.

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: 45
Transfer Credits: 75
Total Credits: 120

ARTICULATION AGREEMENT GUIDE

Henry Ford College – **AS in Pre-Engineering: General**
Eastern Michigan University – **BS in Mechanical 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. HFC courses indicated with an * are required for EMU's BS in Mechanical 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 45 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. HFC students will receive equal consideration with other students for course registration and financial aid.
6. Admission Requirements: To be considered for admission students must meet the following requirements:
   - A minimum EMU cumulative GPA of 2.7. (If a student has not yet established an EMU GPA, a combined GPA of 2.7 from all transfer institutions will be accepted)
   - Completion of PHY 223 with a grade of C or higher (or equivalent Transfer Credit)
   - Completion of MATH 120 and MATH 121, with a grade of C or higher (or equivalent Transfer Credit)
7. Students are encouraged to contact EMU's Undergraduate Admissions Office before applying to EMU. To facilitate advising and the evaluation of transcripts, bring a copy of this articulation guide to all advising sessions.

Effective Date: September 1, 2024 until August 31, 2027.
This is a renewal of an agreement made in September 2018 and renewed in 2021. This agreement is consistent with the 2024-2025 catalog. Students have until summer 2032 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
Faculty: Hassan Mohseni Nameghi
313. 317. 1746; hnameghi@hfcc.edu

Eastern Michigan University
Undergraduate Admissions
Student Center Suite 220
734.487.6453; transfer_admissions@emich.edu
Schedule an appointment