

EXHIBIT A
MECHANICAL ENGINEERING TECHNOLOGY
ARTICULATION AGREEMENT GUIDE

Henry Ford College – AS in Pre-Engineering

Eastern Michigan University – BS in Mechanical Engineering Technology

Henry Ford College Courses:**Transfer to Eastern Michigan University as:****Michigan Transfer Agreement Requirements (32 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 will satisfy specific requirements for this program. Students who started before Fall 2014 may continue to use the MACRAO Agreement until the end of summer 2019. Courses approved for the MTA can be found on [HFC's website](#).

1. A course in English Composition		
ENG 131 Introduction to College Writing	3	WRTG 120 University Elective
2. A second course in English Composition or Communication		
* ENG 132 College Writing and Research	3	WRTG 121 Comp II (pre-req for SET 350W)
3. A course in Mathematics		
* MATH 180 Calculus I	5	MATH 120 Calculus I
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
¹ * PHYS 231 Engineering Physics	4	PHY 221 or 223
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		
Complete one: BEC 151 or 152	3	ECON 201 or 202 Macro or Microeconomics (Univ Elective)
Choose from the approved MTA list	3	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** (Courses on this list can be used toward satisfying an MTA category above.)

Complete one course: **Social Science:** ANTH 131, 151, 152, 154; GEOG 132; HIST 113, 243, 252, 261; POLS 152; PSY 296; SOC 152, 251; WR 233, 236; **Humanities:** ART 224, 225, 226, 227; ENG 243, 248; WR 233, 236

HFC Pre-Engineering Program Requirements (26 credits)

* MATH 183 Calculus II	5	MATH 121 Calculus II	5
MATH 280 Calculus III	5	MATH 223 University Elective (4)+1	5
MATH 288 Differential Equations	5	MATH 325 University Elective	5
* ENGR 130 Introduction to Engineering	3	ET 100 Introduction to Engineering Technology	3
¹ PHYS 232 Engineering Physics II	5	PHYS 224 sub for PHY 222	5
Computer Technology Requirement	3	University Elective	3

EMU Requirements that may be completed at HFC or EMU (21 credits)

* DRAF 120 Introduction to CAD	3	PDD 122 Engineering Graphics (4)-1	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
* MTT 100 Machine Tool Processes I	4	PDD 123 Manufacturing Processes	4
* ENGR 201 Science of Materials	3	PDD 111 Materials	3
* Choose one of the following courses:	3	MET Additional Requirement	3
ELEC 200 Ladder Diagrams and Motor Controls (3)		ELEC 218 Motors and Controls (3)	
MATH 283 Linear Algebra (3)		MATH 122 Elementary Linear Algebra (3)	
Open Elective Credits (not to exceed 79 credits at HFC)	2	University Elective	2

Credits at HFC:.....79**Credits that transfer to EMU..... 79**

*Required for EMU's MET program. If not transferred from HFC, these courses must be completed at EMU.

¹ EMU will also accept HFC PHYS 131 and 132 for the Mechanical Engineering Technology program.

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.

EXHIBIT B
MECHANICAL ENGINEERING TECHNOLOGY
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Henry Ford College – AAS in Engineering Technology - Mechanical
 Eastern Michigan University – BS in Mechanical Engineering Technology

**Completion of the Mechanical Engineering
 Technology Program at EMU**

Major Requirements		(45 credits)
CET 151	Intro to Computing in Engineering Tech	3
MET 211	Statics.....	3
MET 312	Applied Dynamics Principles	3
MET 313	Applied Mechanics of Materials.....	3
MET 314	Applied Thermodynamics and Heat Transfer	3
MET 319	Applied Fluid Mechanics.....	3
¹ MET 387L4	Co-op in Mechanical Engineering Technology	3
MET 411	Mechanical/Machine Design.....	3
MET 430	Computer Aided Engineering	3
MET 437	Kinetics of Machines.....	3
MET 470	Mechanical Vibrations	3
¹ MET 492L6	Senior Design Projects I.....	3
MET 493	Senior Design Projects II	3
PDD 224	3-D Solid Modeling	3
² SET 350W	Engineering Communication	3
Minimum 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.

Fall Semester (12 credits)

CET 151	F,W	3
MET 211	F,W, pre-reqs: MATH 120 & PHY 221 or 223	3
MET 314	F,W, pre-reqs: MATH 120 & PHY 221 or 223	3
PDD 224	F,W, pre-reqs: PDD 122, 123.....	3

Winter Semester (12 credits)

MET 312	F,W, pre-req: MET 211	3
MET 313	W, pre-reqs: MET 211 & PHY 221 or 223	3
MET 319	F,W, pre-reqs: MET 211 and PHY 221 or 223	3
SET 350W	F,W, pre-req: WRTG 121	3

Fall Semester (12 credits)

MET 387L4	F,W,S	3
MET 411	F, pre-reqs: PDD 123, MET 312, 313	3
MET 430	F,W,pre-reqs: PDD 224 & (325 or MET 313)	3
MET 437	F, pre-reqs: MET 312 and 313	3

Winter Semester (9 credits)

MET 470	W, pre-reqs: MET 312, MATH 121, CET 151	3
MET 492L6	pre-req: SET 350W, concurrent: MET 437.....	3
MET 493	W, pre-req: MET 492L6.....	3

* EMU requires 124 credits to graduate. If sufficient credits are not transferred in, students may need to complete additional requirements at EMU to meet the requirement.

¹ Satisfies the Learning Beyond the Classroom Requirement.

² Satisfies the Writing Intensive Requirement.

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 Eastern Michigan University – **BS in Mechanical Engineering Technology**

Additional Information:

1. Each institution will determine the satisfaction of their individual program and degree requirements. For the purpose of this articulation agreement, 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 Mechanical 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. Students who enrolled in college prior to September 2014 have until the end of August 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 or (9 hours in the major and 6 hours in the minor), 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. HFC students will receive equal consideration with other students for course registration and financial aid.
6. Admission requirements for the BS in Mechanical Engineering Technology:
 - A minimum EMU cumulative GPA of 2.3. (If a student has not yet established an EMU GPA, a combined GPA of 2.3 from all transfer institutions will be accepted).
 - Completion of PHY 221 or PHY 223 with a grade of C or higher (or equivalent transfer credit)
 - Completion of MATH 120 or MATH 140, with a grade of C or higher (or equivalent transfer credit)
7. Students are encouraged to contact the Mechanical 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 Dates: 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:

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