MECHANICAL ENGINEERING ARTICULATION AGREEMENT GUIDE

Northwest State Community College – **AAS in Mechanical Engineering Technology** Eastern Michigan University – **BS in Mechanical Engineering Technology**

Northwest State Community College Courses: Transfer to Eastern Michigan University as:

Ohio Transfer Module + EMU General Education Core Requirements (44 credits)

The courses below were selected to satisfy both the OTM and EMU's General Education Core Requirements. If students complete the OTM, then EMU's General Education Core is also satisfied and only the General Education Applied requirements of one Perspectives on a Diverse World course, one Writing Intensive course, and one Learning beyond the Classroom course or experience must be completed. All three Applied requirements are included in this guide. Contact Community College Relations <u>ccr_office@emich.edu</u> to have this agreement and the OTM applied to your EMU record.

1. English Composition: Two courses required				
ENG 111 Composition I	WRTG 120 Composition I			
ENG 112 Composition II	WRTG 121 Composition II (GEEC)			
2. Oral Communication:				
ENG 113 Speech	COMM 124 Found of Speech Communication (GEEC) 3			
3. Mathematics Electives:				
* MTH 213 Calculus I5	MATH 120 Calculus I (GEQR) (4)+15			
4. Natural & Physical Sciences: Two courses from different disc	ciplines			
* CHM 201 General Chemistry I5	CHEM 121/122 General Chemistry & Lab (GEKN) (4)+1 5			
* PHY 251 Physics: Mech & Heat4	PHY 221 Mechanics, Sound and Heat (GEKN)			
5. Arts & Humanities: Three courses required				
Choose two courses:6	EMU's Knowledge of the Arts (GEKA)6			
HUM 221, HUM 230, ENG 240				
Choose two courses:6	EMU's Knowledge of the Humanities (GEKH)6			
ENG 223, 230, 240, 241, 250, 251, 260. 261; PHI 110, 201,	210			
6. Social & Behavioral Sciences: Three courses from at least 2				
Choose two:				
ECO 211, 212, HIS 101, 102, 203, SSC 101, 120	EMU's Knowledge of the Social Sciences (GEKS)6			
¹ Choose one: GEO 110; HIS 210; SSC 130, or SSC 210 3	EMU's Perspectives on a Diverse World (GEUS/GEGA)3			
NSCC Mechanical Engineering Technology (40 credit				
* CAD 213 CAD III4	PDET 224 Solid Modeling (3)+14			
ENG 210 Technical Communication3	ENG 000 University Elective			
* PHY 252 Physics: Electricity & Magnetism4	PHY 222 Electricity and Light4			
* MET 100 Introduction to Engineering Technology2	ET 100 Introduction to Engineering Technology (3)-12			
MET 107 Engineering Graphics3	University Elective (PDET 101)3			
* MET 121 Manufacturing Processes	PDET 123 Manufacturing Processes (4)-13			
* MET 134 Engineering Materials3	PDET 111 Materials3			
MET 234 Strength of Materials	MET 000 University Elective			
* MET 235 Statics3	MET 211 Statics			
MET 255 Fluid Mechanics3	MET 000 University Elective			
MET 265 Machine Design3	MET 000 University Elective			
QCT 100 Quality Concepts	University Elective			
* Choose one: CAD 112 or EET 1213	PDET 122 or ELEC 200			
FMU Dequirement that May be Taken at NCCC or FMU (5 analite)				
EMU Requirement that May be Taken at NSCC or EMU (5 credits)				

EMU Requirement that May be Taken at NSCC or EMU (5 credits)					
* MTH 214	Calculus II5	MATH 121 Calculus II (4)+15			
Credits a	t NSCC:89	Credits that transfer to EMU			

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

¹ Satisfies EMU's Perspectives on a Diverse World requirement

<u>Sign up with us:</u> 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.

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Completion of Mechanical Engineering Technology Major

Major Requirements

(45 credits)

Core Courses (45 credits)

	CET 151 Introduction to Computing in Engineering Tech	.3
	MET 312 Applied Dynamics Principles	.3
	MET 313 Applied Mechanics of Materials	.3
	MET 314 Applied Thermodynamics & Heat Transfer	.3
	MET 319 Applied Fluid Mechanics	.3
1	MET 387L4 Cooperative Education in MET	.3
	MET 411 Mechanical/Machine Design	
	MET 430 Computer Aided Engineering	
	MET 437 Kinematics of Machines	
	MET 470 Mechanical Vibrations	
	MET 492L6 Senior Design Projects I	.3
	MET 493 Senior Design Projects II	
2	SET 350W Engineering Communication	
	Choose one: ELEC 218, MATH 122, PDET 220, QUAL 320	
	Complete whichever was not transferred from NSCC:	
	ELEC 200 Circuit Anal (3) or PDET 122 Engin Graphics (3)	-

Credits at EMU:	45
Transfer Credits:	
Credits to Graduate:	

¹ Satisfies EMU's "Learning Beyond the Classroom" requirement ² Satisfies EMU's Writing Intensive Requirement

Sample sequence for completing program.

Students must be admitted to the MET major before registering for courses with a MET prefix. See page 3, #6 for admission requirements. Courses may not be offered every semester. See the MET advisor to create a personal program of study and keep it up to date.

Semester 1 Fall ELEC 200 or PDET 122 (Whichever hasn't been tr CET 151 FW SET 350W FWS prereq: WRTG 121	3
Semester 2 Winter MET 312 FW prereq: MET 211 & PHY 221 MET 313 W prereq: MET 211 & PHY 221 MET 314 FW prereq: MATH 120 & PHY 221 Restricted Elective	
Semester 4 Fall MET 387L4 FWS MET 470 F prereq: MET 312, MATH 121, CET MET 437 F (prereq: MET 312 & MET 313 MET 492L6 F prereq: SET 350W, concur MET	۲ 1513 3
Semester 5 Winter MET 319 FW prereq: MET 211 and PHY 221. MET 430 FW prereq: PDD 224 & MET 313 MET 411 W prereq: PDD 123, MET 312, & ME MET 493 W prereq: MET 492L6	3 ET 3133

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Additional Information:

- 1. Each institution will determine the satisfaction of their individual program and degree requirements. Both Northwest State Community College and EMU agree to accept transferable courses from each other and from other regionally accredited institutions. Northwest State Community College courses indicated with an * are required for EMU's BS in Mechanical Engineering Technology. Substitutions for these courses must be approved by the EMU program coordinator.
- Students who complete the Ohio Transfer Module "OTM" have satisfied EMU's General Education Core 2. 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. Contact the Director of Community College Relations at ccr office@emich.edu to have the OTM transferred to vour EMU records.
- 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 be completed in EMU coursework, of which 15 hours is in program requirements, at the 300-level or above. Of the last 30 hours completed before graduating, at least 10 hours must be in courses offered by EMU. A minimum of 124 total 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 to EMU, including submitting transcripts from all previously attended colleges. NSCC students will receive equal consideration with other students for course registration and financial aid. Ohio undergrad students will receive EMU's in-state tuition rate.
- To be admitted to the Mechanical Engineering Technology program, students must: 6.
 - Have a minimum EMU cumulative GPA of a 2.3 or a combined 2.3 transfer GPA from all transfer institutions
 - Have completed PHY221 or 223 (PHY 251 at NSCC) with a grade of "C" or higher
 - Have completed MATH 120 (MTH 213 at NSCC) with a grade of "C" or higher
 - Submit an on-line application by the dates published in the online catalog
 - Attend a mandatory meeting with a MET faculty member or COET staff advisor. (Student will be contacted to schedule an appointment after receipt of application.
- 7. After admission, program majors will be required to:
 - Complete each program core course (e.g., all courses having a MET prefix);
 - *Maintain a cumulative GPA of at least 2.3 on a 4.0 scale
 - Must see an advisor for academic advising before enrolling in each semester.

*A student whose cumulative GPA or cumulative major GPA falls below 2.3 will be placed on program probation for the next succeeding term or two semesters if the student is a part-time student (defined as taking 11 credits or less). If the student fails to raise their GPA to 2.3 or higher during the probationary term(s), the student will be dismissed from the program. Students may reapply for admission once their GPA is raised to 2.3 or higher.

Students are encouraged to contact the College of Engineering and Technology Student Service Office before applying to EMU. To facilitate advising and the evaluation of transcripts, sign up for this articulation agreement, and bring a copy of the articulation guide to all advising sessions.

Effective dates: September 1, 2020 until August 31, 2023

This agreement is consistent with the 2020-21 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 a more recent articulation guide. Contacts:

Northwest State Community College

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Eastern Michigan University

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CET Student Services Office 734.487.8659, cot advising@emich.edu