# **Northwest State Community College**

Mechanical Engineering Technology and

## Eastern Michigan University

BS in Mechanical Engineering Technology

## Article I Agreement on Principle

Eastern Michigan University (EMU) and Northwest State Community College (NSCC) agree that students who choose to begin their studies at a community college and transfer to a university to earn a bachelor's degree should be provided with a smooth curriculum transition that minimizes loss of credit and duplication of coursework. Therefore, EMU and NSCC agree to enter into this articulation agreement to facilitate the completion of the associate degree in Mechanical Engineering Technology at NSCC and the Bachelor of Science in Mechanical Engineering Technology at EMU. Both institutions enter into this agreement as cooperating, equal partners who shall maintain the integrity of their separate programs.

## Article II Agreement on Program Specifics

EMU and NSCC agree that any student who has satisfied the minimum requirements on the attached articulation guide may transfer the course credits indicated toward a Bachelor of Science in Mechanical Engineering Technology at EMU. Under this agreement, EMU will waive the 60-hour rule and require students to complete a minimum of 45 credit hours in EMU coursework, of which 15 hours are program requirements at the 300-level or above. A minimum of 124 total credits is required to graduate.

EMU agrees that students who have completed the Ohio Transfer Module 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. Students may complete the OTM before or after admission to EMU. Students who have not satisfied the OTM must complete the General Education Program (both the Core and Application requirements) as applied to transfer students. Contact the Director of Community College Relations for assistance in transferring the OTM at ccr\_office@emich.edu . All other EMU graduation and program requirements must be satisfied whether by transferred courses, EMU courses, or approved substitutions or waivers.

For the purpose of this articulation agreement, both NSCC and EMU agree to accept transferrable courses from each other and from other regionally accredited institutions. Articulation guides will be provided to assist students in completing the articulated program of study. Each institution will determine the satisfaction of their individual program and degree requirements. NSCC courses indicated with an \* on the articulation guide are required for EMU's program. Any substitutions for these courses must be approved by the EMU program coordinator if not already stated in the agreement. In the case of a student who has accumulated credits before

declaring this program, every effort will be made to maximize the use of credits already completed. Students using this agreement will be encouraged to complete an associate degree.

Students using this agreement must apply and be admitted to EMU and to the Mechanical Engineering Technology major. NSCC students will receive equal consideration with other students seeking admission and financial aid. Ohio undergraduate students will receive EMU's in-state tuition rate.

## Article III Agreement on Communication

NSCC and EMU agree to cooperate in communicating with each other and with their common and respective publics concerning the established relationship between the two institutions. Communication may include the development of various kinds of publications to inform those who might benefit personally or professionally from the opportunities provided by this agreement. Faculty and staff at both institutions will share the information in this agreement with interested and qualified students and both institutions will provide counseling and advising to students and prospective students.

## Article IV Maintenance and Review Procedures

At least one administrative or faculty member from each institution will be appointed to act as agents for the implementation of this agreement, to speak for the institutions and to communicate changes to respective faculty members, advisors, counselors, and others to whom the information is pertinent. Responsibility for oversight of this agreement rests with the Dean of Science, Technology, Engineering Technology and Math at NSCC and the Director of the School of Engineering at EMU. Both parties agree to communicate annually any changes in their respective programs that may affect this articulation agreement.

## Effective Dates: September 1, 2020 until August 31, 2023

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 a more recent articulation guide.

## ARTICULATION AGREEMENT BETWEEN

## Northwest State Community College Associate Degree in Mechanical Engineering Technology and

## Eastern Michigan University Bachelor of Science in Mechanical Engineering Technology

Northwest State Community College and Eastern Michigan University agree to the terms of this agreement, which will be in effect from September 1, 2020 until August 31, 2023

## **Northwest State Community College** Eastern Michigan University 6/10/2020 Michael Thomson, PhD James M. Smith, PhD Date President President 6/3/20 Dan Burklo, MSE, PhD Rhonda Kinney Longworth, PhD Date Vice President for Academics Provost and Executive Vice President Academic and Student Affairs M.S. Qatu 5/26/2020 8/6/2020 Ryan Hamilton Mohamad Qatu, PhD Date Dean of Science, Technology, Engineering Dean, College of Engineering & Technology Technology & Math 5/262020 Bob Lahidji, PhD, Interim Director Date

School of Engineering

**Signatures** 

## 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 cor\_office@emich.edu to have this agreement and the OTM applied to your EMU record. 1. English Composition: Two courses required ENG 111 Composition I......3 ENG 112 Composition II.......3 2. Oral Communication: ENG 113 Speech......3 COMM 124 Found of Speech Communication (GEEC) ...... 3 3. Mathematics Electives: \*MTH 213 Calculus I......5 4. Natural & Physical Sciences: Two courses from different disciplines \*CHM 201 General Chemistry I......5 CHEM 121/122 General Chemistry & Lab (GEKN) (4)+1 ..... 5 Mechanics, Sound and Heat (GEKN) .....4 \* PHY 251 Physics: Mech & Heat......4 5. Arts & Humanities: Three courses required EMU's Knowledge of the Arts (GEKA) ......6 HUM 221, HUM 230. ENG 240 EMU's Knowledge of the Humanities (GEKH)......6 Choose two courses:......6 ENG 223, 230, 240, 241, 250, 251, 260, 261; PHI 110, 201, 210 6. Social & Behavioral Sciences: Three courses from at least 2 disciplines Choose two: ECO 211, 212, HIS 101, 102, 203, SSC 101, 120,......6 EMU's Knowledge of the Social Sciences (GEKS) ......6 <sup>1</sup>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 credits)** CAD III ......4 PDET 224 Solid Modeling (3)+1......4 \* CAD 213 Technical Communication ......3 ENG 000 University Elective ......3 **ENG 210** \* PHY 252 Physics: Electricity & Magnetism......4 PHY 222 Electricity and Light ......4 \* MET 100 Introduction to Engineering Technology ......2 ET 100 Introduction to Engineering Technology (3)-1....2 University Elective (PDET 101) ......3 Engineering Graphics......3 **MET 107** Manufacturing Processes ......3 PDET 123 Manufacturing Processes (4)-1......3 \* MET 121 Engineering Materials......3 \* MET 134 **MET 234** Strength of Materials ......3 MET 000 University Elective ......3 \* MET 235 Statics......3 MET 211 University Elective ......3 Fluid Mechanics......3 MET 000 **MET 255** Machine Design......3 **MET 265** Quality Concepts ......3 QCT 100 Choose one: CAD 112 or EET 121......3 EMU Requirement that May be Taken at NSCC or EMU (5 credits) MATH 121 Calculus II (4)+1......5 Calculus II......5 Credits at NSCC:.....89 Credits that transfer to EMU.....89

Sign up with us: 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.

<sup>\*</sup>Required for EMU's Mechanical Engineering Technology program. If not transferred, must be completed at EMU.

<sup>&</sup>lt;sup>1</sup> Satisfies EMU's Perspectives on a Diverse World requirement

## MECHANICAL ENGINEERING ARTICULATION AGREEMENT GUIDE

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

## Completion of Mechanical Engineering Technology Major

Major Requirements	(45 credits)
Core Courses (45 credits)  CET 151 Introduction to Computing in Enginee MET 312 Applied Dynamics Principles	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Credits at EMU: Transfer Credits: Credits to Graduate:	89

<sup>&</sup>lt;sup>1</sup> Satisfies EMU's "Learning Beyond the Classroom" 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.

CET 151	1 Fail or PDET 122 (Whichever hasn't been to FW FWS prereq: WRTG 121	3
Semester MET 312 MET 313 MET 314	<b>2 Winter</b> FW prereq: MET 211 & PHY 221 W prereq: MET 211 & PHY 221	(12 credits) 3 3
Semester MET 387L4 MET 470 MET 437		(12 credits) 3 T 1513
Semester MET 319 MET 430 MET 411 MET 493		(12 credits) 3 3 ET 3133

<sup>&</sup>lt;sup>2</sup> Satisfies EMU's Writing Intensive Requirement

## MECHANICAL ENGINEERING ARTICULATION AGREEMENT GUIDE

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

### Additional Information:

- 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 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 your 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.
- 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:
  - 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.

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### Contacts:

### Northwest State Community College

Ryan Hamilton, Dean

Science, Technology, Engineering Technology & Math

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### Eastern Michigan University

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**CET Student Services Office** 

734.487.8659, cot advising@emich.edu