

The Mechanical Engineering Technology program prepares students for a broad range of occupations and challenges. Beginning with foundation courses in math, applied science, CAD, manufacturing processes and communication, students move on to the applied engineering courses that give them a solid technical background for their careers. Students develop strong analytic and problem-solving skills. Their understanding of the principles taught in the classroom is enhanced with many hands-on labs and real-world applications provided by faculty with extensive industrial experience.

### General Admission Criteria

There are several ways to use the community college as a start for the BS in Mechanical Engineering Technology. One option would be to take essential math and science courses at the community college then transfer after 1-3 semesters. A second option, shown below, would include completing at least four semesters at the community college and taking as many math, science, technology, and general education credits as could be applied. To transfer to Ferris State, students must have an over GPA of 2.00. Note that only classes with grades of C or better (not C-) will transfer to Ferris State. Official transcripts from all accredited colleges/universities must be submitted with the Ferris application. Financial Aid may be available and may include concurrent enrollment at both institutions.

### Course Requirements

Grand Rapids Community College				Ferris State University			
Course	Ferris Equiv.	GRCC Course Titles	Cr. Hrs.	Course	Ferris Course Titles	Cr. Hrs.	
CO 101 or BA 145	MECH 122	Computer Apps 1 for Technology	2	EEET 201	Electrical Fundamentals	3	
EG 110	EETEC 140	Engineering Graphics	3	ENGL 311 <sup>9</sup>	Advanced Technical Writing	3	
EN 100* or EN 101*	ENGL 150	English I	3	MATL 341 <sup>9</sup>	Material Selection – Metals	3	
EN 102*	ENGL 250	English II	3	MECH 111	MET Seminar	1	
MA 107	MATH 115	Intermediate Algebra	4	MECH 211	Fluid Mechanics	4	
MA 131	MATH 130	Advanced Algebra and Analytical Trigonometry	4	MECH 212	Kinematics of Mechanisms	2	
MA 133	MATH 220	Analytical Geometry and Calculus I	4	MECH 222	Machine Design	4	
MA 134	MATH 230	Analytical Geometry and Calculus II	4	MECH 223 <sup>9</sup>	Thermodynamics	3	
CHM120	CHEM 114	Introduction to Chemistry	4	MECH 311	Finite Elem Analysis/Modeling	2	
PH 125	PHYS 211	Introductory Physics I	4	MECH 322	Computer Apps 2 for Technology	2	
PH 126	PHYS 212	Introductory Physics II	4	MECH 330	Heat Transfer	3	
COM 131	COMM 121	Public Speaking	3	MECH 332	Mech.Measurements/Mechatronics	3	
TE 114	MATL 240	Intro to Material Science	4	MECH 340 <sup>9</sup>	Statics and Strength of Materials	4	
MN 199	MFGT 150	Manufacturing Processes	2	MECH 341	Statics and Strength of Mat'ls Lab	1	
GRCC	VARIES	FSU General Education - Self and Society Elective	9	MECH 360	Dynamics	3	
GRCC	VARIES	FSU General Education - Culture Elective	9	MECH 393	Industrial Internship	4	
<b>Total Grand Rapids Community College Credits</b>				<b>66</b>	MECH 421	MET Senior Lab	4
					MECH 440	Noise and Vibrations	3
					MECH 499	Senior Project	3
					MFGE 341 <sup>9</sup>	Quality Science Statistics	3
					MFGE 423 <sup>9</sup>	Engineering Economics	2
					Main Campus, Technical Electives	6	
					FSUGR or (see FSU advisor)	possibly CC	
					<b>Total Ferris Credits</b>	<b>66</b>	

\*These courses may be completed at the Ferris State University – Grand Rapids campus; however, students must consult with the Ferris Faculty Advisor prior to taking any of these courses due to the timeline of completing the program.

**FSU General Education Requirements can be found at:**  
<http://www.ferris.edu/HTMLS/academics/gened/index.htm>.

Students transferring to Ferris with the Michigan Transfer Agreement (MTA) and entering a degree program will have met a 30-hour block of lower-level general education courses. However, this does not exempt students from completing program specific prerequisites or higher-level general education course requirements. Students should contact their advisor regarding classes that meet the MTA.

Students are encouraged to work with their Ferris advisor for selection of any electives, to ensure transferability and to minimize credits taken.

**Credits Required for Degree**

**132**

Program Offered at:  
**Main Campus, Big Rapids**  
**Mechanical Engineering Technology**  
<http://www.ferris.edu/mech>  
[mec@ferris.edu](mailto:mec@ferris.edu)  
 231-591-2755  
[www.ferris.edu/transfer](http://www.ferris.edu/transfer)

#### **Advising Notes**

It is recommended that potential applicants meet with an advisor to review the degree, course schedule, and have any questions answered prior to completing an application. Students who are completing the MTA may have different general education course requirements for the particular degree selected. Meeting with a Ferris advisor prior to the selection of general education or elective course work may reduce the chance of completing a course that will not apply toward the selected degree. Once admitted, students must continue to meet with an advisor as they work toward graduation.

#### **Transfer Student Orientation**

All new students to Ferris State University are required to complete an orientation.

#### **Online Learning**

Select courses delivered online and/or in a mixed delivery format (i.e. a mix of online and face-to-face instruction at the Ferris Main Campus or at an off-campus location). The "Online Readiness Tutorial" is required for students who register for an online *course* or are completing an online *degree*. Students must demonstrate competency in Blackboard skills. This may be done by taking a tutorial and quiz, or, for students who have already taken and passed online courses, they can submit a waiver request. Students should check with the department that offers the class to determine its particular needs and/or the Ferris advisor regarding registration for online course work.

#### **Reverse Transfer Agreement**

The Community College and Ferris have entered into a partnership in order to work collaboratively and creatively to increase student completion of associate and bachelor degrees. The partners work together to provide a seamless transfer experience and increase student retention and completion at both the community college and Ferris.

#### **Michigan Transfer Agreement (MTA)**

Ferris participates in the Michigan Transfer Agreement (MTA). This agreement will facilitate the transfer of general education requirements from one Michigan institution to another. Students may complete the MTA as part of a degree program or as a stand-alone package. The MTA consists of a minimum of 30 general education credit hours as identified by the college or university.

#### **Disclaimer**

This is a guide for students who plan to transfer to Ferris State University. This guide is not intended to be a contract with Ferris. The information on this guide is subject to change. Students should contact their community college or Ferris to keep informed of changes. Final responsibility for verifying all transfer information lies with the student. Please refer to the effective and/or revised date on