

## Montcalm Community College

Transfer Guide

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, including pre-calculus and Physics 1, 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

Montcalm Community College			
Course	Ferris Equiv.	Montcalm CC Course Titles	Cr. Hrs.
CMIS 101 or 115	MECH 122	Computer Apps 1 for Technology	2
TDSN 100 & 250	ETEC 140	Engineering Graphics	3
ENGL 100	ENGL 150	English 1	3
ENGL 101	ENGL 250	English 2	3
MATH 120*	MATH 116	Intermediate Algebra	4
MATH 159*	MATH 126	Adv. Algebra and Analytical Trig	4
MATH 250	MATH 220	Analytical Geometry and Calculus 1	4
MATH 251	MATH 230	Analytical Geometry and Calculus 2	4
CHEM 220	CHEM 114	Introduction to Chemistry	4
PHYS 230	PHYS 211	Introductory Physics 1	4
PHYS 231	PHYS 212	Introductory Physics 2	4
COMM 210	COMM 121	Public Speaking	3
MATH 190	MFGE 341	Quality Science Statistics	3
INDS 220	MFGT 150	Manufacturing Processes	2
INDS 230	MATL 240	Intro to Material Science	4
MCC	VARIABLES	FSU General Education - Self and Society Elective	9
MCC	VARIABLES	FSU General Education - Culture Elective	9
<b>Total Montcalm Community College Credits</b>			<b>69</b>

\* MATH The equivalents shown above are not exact matches. There are often several options in math that lead up to calculus. Consultation with a counselor at the community college is recommended.

### Please refer to FSU's General Education Requirements 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.

Ferris State University		
Course	Ferris Course Titles	Cr. Hrs.
EEET 201	Electrical Fundamentals	3
ENGL 311	Advanced Technical Writing	3
MATL 341	Material Selection – Metals	3
MECH 111	MET Seminar	1
MECH 211	Fluid Mechanics	4
MECH 212	Kinematics of Mechanisms	2
MECH 222	Machine Design	4
MECH 223	Thermodynamics	3
MECH 311	Finite Elem Analysis/Modeling	2
MECH 322	Computer Apps 2 for Technology	2
MECH 330	Heat Transfer	3
MECH 332	Mech.Measurements/Mechatronics	3
MECH 340	Statics and Strength of Materials	4
MECH 341	Statics and Strength of Mat'ls Lab	1
MECH 360	Dynamics	3
MECH 393	Industrial Internship	4
MECH 421	MET Senior Lab	4
MECH 440	Noise and Vibrations	3
MECH 499	Senior Project	3
MFGE 423	Engineering Economics	2
Main Campus, FSUGR, or possibly CC	Technical Electives (see FSU advisor)	6
<b>Total Ferris Credits</b>		<b>63</b>
<b>Credits Required for Degree</b>		<b>132</b>

Program Offered at:  
**Main Campus, Big Rapids**  
 Mechanical Engineering Technology  
<http://www.ferris.edu/mech>  
 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 the bottom of the guide.