

**Ferris Program:** Mechanical Engineering Technology

**Degree Type:** Bachelor of Applied Science

**Ferris College:** College of Engineering Technology

**Transfer School:** Alpena Community College

**Consortium Eligible:** No

**Total Credits Required:** 129-131

**Catalog Year:** 2025-2026

**GENERAL EDUCATION REQUIREMENTS – 53-54 Credits Required**

Students are encouraged to work with an advisor to select appropriate general education courses. Diversity Competency -2 Courses Required. If not met by courses taken for Culture, Self and Society, or MTA, a student must meet the following: 1 course with the Global Diversity attribute and 1 course with the U.S. Diversity attribute. Ferris State University General Education [www.ferris.edu/gened](http://www.ferris.edu/gened).

**Communication Competency**

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
COMM 121	Fundamentals of Public Speaking	3	No Equivalent
ENGL 150	English 1	3	ENG 111
ENGL 250	English 2	3	ENG 112
ENGL 311	Advanced Technical Writing	3	No Equivalent

**Quantitative Literacy Competency**

Requirements for Quantitative Literary Competency can be met with the following:

- Official Pre-2016 Math SAT Score of 560 or Higher
- Official Post-2016 Math SAT Score of 580 or Higher
- Official Math ACT Score of 24 or Higher

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MATH 116	Intermediate Algebra and Numerical Trigonometry	4	No Equivalent
MATH 120	Trigonometry	3	MTH 122

**Natural Sciences Competency**

Two courses are required with a minimum of 6 credits: must have at least one lab course.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
PHYS 211	Introductory Physics 1	4	PHY 121
PHYS 212	Introductory Physics 2	4	No Equivalent

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## Culture Competency

Three courses are required with a minimum of 9 credits: must be from two different disciplines and have at least one 200 level or higher course.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
SURE 331 or PHIL 316	Ethics-Prof in Engineering Technology or Applied Ethics	3	No Equivalent
Varies	Culture Electives	6	Varies

## Self and Society Competency

Three courses are required with a minimum of 9 credits: must be from two different disciplines, have at least one 200 level or higher course, and at least one Self and Society Foundation course.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
Varies	Self and Society Electives	9	Varies

## Additional General Education Requirements

These courses are additional General Education courses to meet the requirements for this specific program.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MATH 126 or MATH 130	Algebra and Analytic Trigonometry or Advanced Algebra Analytical Trigonometry	4	No Equivalent or MTH 123
MATH 220	Analytical Geometry and Calculus 1	4	MTH 131
MATH 230	Analytical Geometry and Calculus 2	4	MTH 132

## COLLEGE REQUIREMENTS – 76 Credits Required

### Major Courses

48 Credits Required.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MECH 111	Mechanical Engineering Technology Seminar	1	No Equivalent
MECH 122	Computer Apps 1 for Technology	2	No Equivalent
MECH 211	Fluid Mechanics	4	No Equivalent

# FERRIS STATE UNIVERSITY

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MECH 212	Kinematics of Mechanisms	2	No Equivalent
MECH 222	Machine Design	4	No Equivalent
MECH 223	Thermodynamics	3	No Equivalent
MECH 311	Finite Element Analysis and Modeling	2	No Equivalent
MECH 322	Computer Apps for Technology	2	No Equivalent
MECH 330	Heat Transfer	3	No Equivalent
MECH 340	Statics and Strengths of Materials	4	No Equivalent
MECH 341	Lab for Statics and Strengths of Materials	1	No Equivalent
MECH 380	Dynamics and Vibrations	4	No Equivalent
MECH 389	Mechanical Measurements	4	No Equivalent
MECH 393	Industrial Internship	4	No Equivalent
MECH 421	Mechanical Engineering Technology Senior Lab	4	No Equivalent
MECH 440	Noise and Vibrations	3	No Equivalent
MECH 498	Senior Project 1	2	No Equivalent
MECH 499	Senior Project 2	2	No Equivalent

## Technical Related Courses

28 Credits Required. In addition to the required courses within this section, 6 credits are required in Approved Technical Electives. Any combination of 6 credits or more can be taken between the two electives.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
PDET 125	Parametric Modeling	2	No Equivalent
ETEC 140	Engineering Graphics Comprehensive	3	DRA 122
MFGT 150	Manufacturing Processes	2	No Equivalent
EAET 201	Electrical Fundamentals	3	APP 100E
MATL 240	Introduction to Material Science	4	MET 200
MATL 341	Material Selection Metals	3	No Equivalent

# FERRIS STATE UNIVERSITY

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MFGE 341	Quality Science Statistics	3	No Equivalent
MFGE 423	Engineering Economics	2	No Equivalent
Varies	Approved Technical Elective	6	Varies

## PROGRAM CONTACT INFORMATION

College of Engineering Technology  
Manufacturing Engineering Technology Programs  
(231) 591-2511  
[ManufacturingDegrees@Ferris.edu](mailto:ManufacturingDegrees@Ferris.edu)

Ferris Statewide - Alpena  
(231) 995-1734  
[FerrisNorth@Ferris.edu](mailto:FerrisNorth@Ferris.edu)

## ADMISSION REQUIREMENTS

### New Student Admission Requirements

- The Manufacturing Engineering Technology, BS degree is only open to students who meet the Transfer Student Admission Requirements below.
- High school students interested in this program may apply to the Manufacturing Technology, AAS program.

### Transfer Student Admission Requirements

- Combined college or university GPA of 2.50 (on a 4.00 scale) from all institutions attended. Developmental courses will not be considered in computing the GPA requirement.
- Minimum 57 transferable semester credit hours (C or higher) from an accredited college or university, including technical courses, general and technical related courses.
- Successful completion of COMM 121, ENGL 150 and (ENGL 211 or ENGL 250), MATH 126 or MATH 130, MATL 240, MFGE 150, PDET 122, MECH 122 or ISYS 105, a Natural Science Competency course (preferably Chemistry), a Culture Competency course, a Self and Society Competency course, or transfer equivalent courses of C grade or higher.

## MORE INFORMATION

To fulfill the residency requirement for a bachelor's degree a student must earn a minimum of 30 credits from Ferris State University.

### Steps to Apply

- Complete your [free application](#).
- Submit official transcripts
  - Submit official transcripts from every school attended to [Transfer@Ferris.edu](mailto:Transfer@Ferris.edu)
  - Or mail to:  
Ferris State University Admissions Office  
1201 S. State St., CSS 201  
Big Rapids, MI 49307
- Submit test scores (if required)
  - ACT Scores; go to the [ACT website](#) - Ferris State University School Code: 1994
  - SAT, CLEP and AP Scores; go to the [College Board website](#) - Ferris State University School Code: 1222

# FERRIS STATE UNIVERSITY

## Advising Notes

It is recommended that potential applicants meet with an advisor to review the degree, course schedule, transfer policies and have any questions answered prior to completing an application. Ferris accepts transfer courses in which the student earned a letter grade of "C" or better. Additional policies such as the Ferris Sunset and Residency Requirement should be discussed with a Ferris advisor. 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 coursework may reduce the chance of completing a course that will not apply toward the selected degree. Students must work with their Ferris advisor to declare a Minor or Concentration and for the selection of Directed Electives.

Once admitted, students are required to complete an orientation and should continue to meet with an advisor as they work toward graduation.

To schedule an appointment or for additional transfer resources and policies see our [Transfer Resource page](#).

\*Indicates an approved Ferris course substitution

## Reverse Transfer Agreement

Ferris has reverse transfer agreements with several Michigan Community Colleges. Under such agreement, Ferris will provide your official University transcript to a partner school you have attended, so that they may grant you an associate or bachelor's degree upon completion of sufficient and appropriate credit hours from both institutions. In turn, the degree-granting institution will provide Ferris with an updated transcript reflecting the newly earned credential.

## 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.

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.

## Transfer Equivalencies Tools

The transfer equivalencies link is located in the Transfer Resources section at [transfer.ferris.edu](https://transfer.ferris.edu).

## Disclaimer

Transfer guides are not intended to be a contract with Ferris. The information in this guide is subject to change and is aligned with the catalog year listed above. Students should contact their community college and/or Ferris to keep informed of changes. Students' final responsibility for verifying all transfer information lies with the student. Please refer to the [Ferris catalog](#) for the most current curriculum.

Partners may contact the Office of Transfer and Secondary School Partnerships with questions or updates at [TransferGuidesArticulations@Ferris.edu](mailto:TransferGuidesArticulations@Ferris.edu).