FERRIS STATE UNIVERSITY

MANUFACTURING ENGINEERING TECHNOLOGY TRANSFER GUIDE FOR LANSING COMMUNITY COLLEGE

Ferris Program: Manufacturing Engineering Technology
Degree Type: Bachelor of Science
Ferris College: College of Engineering Technology
Transfer School: Lansing Community College (LCC)
Consortium Eligible: Yes
Total Credits Required: 121-125
Catalog Year: 2024-2025

GENERAL EDUCATION REQUIREMENTS — *40 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.
Visit the Ferris State general education page for more information.

Communication Competency

If the Process Development Concentration (PDV) is chosen, MFGE 324, 393, and 421 are major and concentration courses that are also considered Communication Across the Curriculum (CATCs) courses and satisfy the upper-level Communication requirement. If the Quality Concentration (QTY) is chosen, the upper-level Communication requirement is met by ENGL 311.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
COMM 121	Fundamentals of Public Speaking	3	COMM 130
ENGL 150	English 1	3	ENGL 121
ENGL 211 or ENGL 250	Industrial and Career Writing or English 2	3	ENGL 124 or ENGL 122
ENGL 311 or ENGL 321 or (MFGE 324 and MFGE 393 and MFGE 421)	Advanced Technical Writing or Advanced Composition or Advanced Business Writing or (Principles of Process Planning 1 or Internship in Manufacturing Engineering or Automation and Systems Design)	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 220	Analytical Geometry and Calculus 1	4	MATH 151

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	PHYS 221
Varies	Natural Sciences Elective	2	Varies

Culture Competency

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

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
Varies	Culture Electives	9	Varies

Self and Society Competency

Three courses are required with a minimum of 9 credits: must be from two different disciplines and have at least one at FSU 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

COLLEGE REQUIREMENTS — *81-85 Credits Required*

Major Courses

32 Credits Required.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MFGE 311	Industrial Engineering	4	No Equivalent
MFGE 321	Metrology	3	No Equivalent
MFGE 322	Production Processes	3	No Equivalent
MFGE 340	Statics and Strengths of Materials	4	No Equivalent
MFGE 341	Quality Science Statistics	3	No Equivalent
MFGE 342	Statistical Process Engineering	3	No Equivalent
MFGE 354	Lean Manufacturing	3	No Equivalent

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MFGE 393	Internship in Manufacturing Engineering	4	No Equivalent
MFGE 423	Engineering Economics	2	No Equivalent
MFGE 442	Design of Experiments 1	3	No Equivalent

Electives

31-33 Credits Required. In order to graduate with a bachelor's degree, a student must have a minimum of 120 credits. The electives required for each student may vary depending on courses taken. Based on how a student meets the programmatic requirements, they may need more or less than 31 to 33 credits of elective courses to meet the required 120 credit minimum. The total number of elective credits required depends on the chosen concentration in the Concentration section.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MECH 122 or ISYS 105	Computer Applications 1 for Technology or Introduction to Microcomputer Systems and Software	2 or 3	METD 105 or CITA 110
MATH 126 or MATH 130	Algebra and Analytic Trigonometry or Advanced Algebra and Analytical Trigonometry	4	MATH 120 and MATH 122 or MATH 126
MATL 240	Introduction to Material Science	4	METM 190
MFGT 150	Manufacturing Processes	2	METM 108
PDET 122	Parametric Modeling	1	METD 220
Varies	Technical Electives (Consult Advisor)	12	Varies
Varies	Electives (Consult Advisor)	7-9	Varies

CONCENTRATION – *18-20 Credits Required (Advisor Approval)*

Choose One Concentration

Process Development Concentration (PDV)

20 Credits Required. Available at Both Big Rapids and Grand Rapids Campuses.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MFGE 312	CNC and CAM	4	No Equivalent
MFGE 324	Principles of Process Planning 1	3	No Equivalent

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
PLTS 325	Plastics Technology	2	No Equivalent
MFGE 411	Principles of Process Planning 2	2	No Equivalent
WELD 416	Production Welding Processes	2	No Equivalent
MFGE 421	Automation and Systems Design	4	No Equivalent
MFGE 422	Manufacturing Facilities Planning	3	No Equivalent

Quality Concentration (QTY)

18 Credits Required. Available at Grand Rapids Campus Only.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
ENGL 311	Advanced Technical Writing	3	No Equivalent
MATL 341	Material Selection Metals	3	No Equivalent
MFGE 443	Continuous Improvement	3	No Equivalent
MFGE 444	Quality Auditing	3	No Equivalent
MFGE 446	Design of Experiments 2	3	No Equivalent
MFGE 447	Quality Planning	3	No Equivalent

PROGRAM CONTACT INFORMATION

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

Ferris Statewide - Flint Hub
(810) 762-0461
FerrisFlint@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.

Ferris State University

- 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 of higher.

MORE INFORMATION

Select courses may be 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 a statewide location).

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
  - 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 Sores; go to the College Board website - Ferris State University School Code: 1222

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.

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.