

AET is an instructional program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing, manufacturing and testing self-propelled ground vehicles and their systems. Includes instruction in vehicular systems technology, design and development testing, instrument calibration, test equipment operation and maintenance, and report preparation.

Communication Competency Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	COD Equiv.	COD Course Title	COD Cr. Hrs.
COMM 221 / COMM 121	Small Group Decision Making	3	SPEEC 1100	Fundamentals of Speech Communication (will substitute for COMM 221)	3
ENGL 150	English 1	3	ENGL1101	English Composition 1	3
ENGL 250	English 2	3	ENGL 1102	English Composition 2	3
ENGL 311	Advanced Technical Writing	3	No Equivalent	No Equivalent	No Equivalent

Quantitative Literacy Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	COD Equiv.	COD Course Title	COD Cr. Hrs.
MATH 116	Intermediate Algebra	3	MATH 1115	Technical Mathematics 1	3

Natural Sciences Competency Course Requirements – minimum 6 credits required – one course must have a lab

FSU Course	FSU Course Title	FSU Cr. Hrs.	COD Equiv.	COD Course Title	COD Cr. Hrs.
CHEM 114	Introduction to General Chemistry	4	CHEM 1211	Intro to General Chemistry	4
PHYS 211	Introductory Physics 1	4	PHYSI 1201	General Physics 1	4

Self and Society Competency Course Requirements – 9 credits required - courses must come from 2 different disciplines

FSU Course	FSU Course Title	FSU Cr. Hrs.	COD Equiv.	COD Course Title	COD Cr. Hrs.
Varies	FSU General Education – Self & Society Electives	9	Varies	Varies	9

Culture Competency Course Requirements – 9 credits required – courses must come from 2 different disciplines

FSU Course	FSU Course Title	FSU Cr. Hrs.	COD Equiv.	COD Course Title	COD Cr. Hrs.
Varies	FSU General Education – Culture Electives	6	Varies	Varies	6
SURE 331	Ethics-Prof In Engineering Technology	3	No Equivalent	No Equivalent	No Equivalent

Additional General Education Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	COD Equiv.	COD Course Title	COD Cr. Hrs.
MATH 126	Algebra & Analytical Trig	4	No Equivalent	No Equivalent	No Equivalent
MATH 216	Applied Calculus	4	No Equivalent	No Equivalent	No Equivalent

[Ferris State University General Education Courses](#) Students are encouraged to work with an advisor to select appropriate general education courses

Major Requirements – 53 Credits Required

FSU Course	FSU Course Title	FSU Cr. Hrs.	COD Equiv.	COD Course Title	COD Cr. Hrs.
AUTO 111 + AUTO 211	Manual Transmission and Drive Lines + Automatic Transmission		AUTO 1120 + AUTO 2120 + AUTO 2220	Manual Drivetrain & Axles + Auto Transmission + Advanced Auto Drivetrains	
AUTO 112	Automotive Brake Systems	4	AUTO 1240	Braking Systems	3
AUTO 113	Automotive Electricity/Electronics	4	AUTO 1131 + AUTO 1232	Automotive Basic Electricity + Auto Engine Electricity	3
AUTO 114	Automotive Engines	4	AUTO 1110	Engine Design & Operation	
AUTO 115	Suspension, Steering, Alignment Services	4	AUTO 1140 + AUTO 2140	Suspension/Steer/Alignment + Advanced Chassis Systems	
AUTO 117	Electronic Fuel Management Systems	4	AUTO 1261 + AUTO 2162	Engine Controls / Emissions 1 + Engine Controls / Emissions 2	
AUTO 200	Service Area	6	AUTO 2280	Automotive Service	6
AUTO 211	Automatic Transmission	4	AUTO 1120 + AUTO 2120	Manual Drive Train / Axles + Auto Transmission	4 + 4
AUTO 213	Chassis Electrical/Electronics	4	AUTO 2133	Automotive Body Electricity	3
AUTO 214	Auto AC & Heating	4	AUTO 1250	Auto Air Conditioning / Heating	4

Ferris State University and College of DuPage – Automotive Engineering Technology - Transfer Guide

Effective Summer 2020

Ferris State University is an equal opportunity institution. For information on the University's Policy on Non-Discrimination, visit ferris.edu/non-discrimination.

Major Requirements (continued)

FSU Course	FSU Course Title	FSU Cr. Hrs.	COD Equiv.	COD Course Title	COD Cr. Hrs.
AUTO 310	Engine Air Flow Analysis	3	No Equivalent	No Equivalent	No Equivalent
AUTO 320	Dynamometer Analysis	3	No Equivalent	No Equivalent	No Equivalent
AUTO 450	Automotive Fuels and Lubes	3	No Equivalent	No Equivalent	No Equivalent
AUTO 460	Emission Systems	3	No Equivalent	No Equivalent	No Equivalent
AUTO 480	Alternate Fuel and Vehicle System	3	No Equivalent	No Equivalent	No Equivalent
AUTO 493	Internship	4	No Equivalent	No Equivalent	No Equivalent

Additional Requirements – 28 Credits Required

FSU Course	FSU Course Title	FSU Cr. Hrs.	COD Equiv.	COD Course Title	COD Cr. Hrs.
MECH 212	Kinematics and Mechanisms	2			
MATL 240	Intro to Material Science	4	No Equivalent	No Equivalent	No Equivalent
MFGE 321	Metrology	3	No Equivalent	No Equivalent	No Equivalent
PDET 322	Model and Prototype Development	2	No Equivalent	No Equivalent	No Equivalent
MATL 341	Material Science Metals	3	No Equivalent	No Equivalent	No Equivalent
MFGE 341	Quality Science Statistics	3	No Equivalent	No Equivalent	No Equivalent
MFGE 342	Statistical Process	3	No Equivalent	No Equivalent	No Equivalent
PDET 413	Fluids/Thermodynamics	3	No Equivalent	No Equivalent	No Equivalent
PDET 415	Advanced Solid Modeling CAD	2	No Equivalent	No Equivalent	No Equivalent
MFGE 442	Design of Experiments 1	3	No Equivalent	No Equivalent	No Equivalent

Total Credits Required for Degree	131
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Program Delivery Locations and Contact Information:**Main Campus, Big Rapids****College of Engineering Technology**(800) 433-7747 | (231) 591-2890 | [FSU Automotive Email](#)[Transfer Partnerships Website](#)

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 an off-campus location).

General Admission Criteria**Transfer Students**

- 2.5 College GPA Overall
- MATH 116 Placement
- ENGL 150 placement

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.

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 effective and/or revised date on the bottom of this guide.