FERRIS STATE UNIVERSITY

Automotive Engineering Technology

Bachelor of Science Degree

British Columbia Institute of Technology School of Transportation Automotive Service Technician Transfer Guide

Automotive Engineering Technology (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.

General Admission Criteria

Students transferring into AET must have a minimum 2.75 GPA in their automotive courses and a minimum 2.5 cumulative GPA overall. A transfer student expecting to enter the AET program as a junior must have completed the equivalents for the following Ferris State University courses: AUTO 111, AUTO 112, AUTO 113, AUTO 114, AUTO 115, AUTO 117, AUTO 200, AUTO 213, ENGL 150, ENGL 250, MATH 116, PHYS 211, MATL 240, CHEM 114, three credits of Cultural Enrichment, and three credits of Social Awareness. Official transcripts from all accredited colleges/universities must be submitted with the Ferris application.

Course Requirements

British Columbia Institute of Technology

Course	Ferris Equiv.	BCIT Course Title	Cr Hrs
ASTP 1200	MATH 116	Math I	2.5
ASTP 2300	MATH 126	Math II	2.5
MATH 2041	MATH 216	Calculus IA	4.0
MATH 2042		Calculus IB	
MATH 2043		Calculus IC	
PHYS 1301	PHYS 211	General Physics I	4.0
ASTP 1215	AUTO 112	Automotive Wheels, Hubs, Tires, and Bearings	4.0
ASTP 1230		Automotive Brake Systems	
ASTP 1220	AUTO 115	Automotive Suspension Systems	4.0
ASTP 1225		Automotive Steering Systems	
ASTP 1235	AUTO 113	Automotive Electrical Systems	4.0
ASTP 2335		Automotive Starting Systems	
ASTP 2340		Automotive Charging Systems	
ASTP 2321	AUTO 114	Automotive Engine Overhaul	4.0
ASTP 2330			
ASTP 2990	AUTO 200	Co-op 2	6.0
ASTP 3410	AUTO 117	Automotive Fuel Delivery Systems	4.0
ASTP 3422		Automotive Electronic Fuel Management Systems	
ASTP 3460		Automotive Ignition Systems	
ASTP 4520		Automotive Emission Control System	
ASTP 3415	AUTO 213	Intro to Lab Scopes	4.0
ASTP 3455		Automotive Body Electrical Systems	
ASTP 3465		Automotive Safety Systems	
ASTP 3430	AUTO 111	Automotive Clutches and Manual Transmissions	4.0
ASTP 3435		Automotive AWD Systems	
		Total BCIT Credits	**47**

Ferris State University

Course	FSU Course Title	Cr Hrs
CHEM 114	Intro to General Chemistry	4.0
COMM 221	Small Group Decision Making	3.0
ENGL 150	English 1	3.0
ENGL 250	English 2	3.0
ENGL 311	Advanced Technical Writing	3.0
Electives	Cultural Enrichment	6.0
Electives	Social Awareness (one at 200 level)	9.0
AUTO 310	Engine Air Flow Analysis	3.0
AUTO 320	Dynamometer Testing	3.0
AUTO 450	Automotive Fuels and Lubes	3.0
AUTO 460	Emissions Systems	3.0
AUTO 480	Alternate Fuel and Vehicle Sys	3.0
AUTO 493	Internship	4.0
MATL 240	Intro to Material Science	4.0
MATL 341	Material Selection Metals	3.0
MECH 212	Kinematics of Mechanisms	2.0
MFGE 321	Metrology	3.0
MFGE 341	Quality Science Statistics	3.0
MFGE 342	Statistical Proc Engineering	3.0
MFGE 442	Design of Experiments 1	3.0
PDET 322	Model - Prototype Development	2.0
PDET 413	Applied Fluids - Thermodynamics	3.0
PDET 415	Advanced Solid Modeling CAD	2.0
SURE 331	Ethics-Prof in Engineering-Tec	3.0

Total Ferris Credits 81

Credits Required for Degree 128.0

Contact Information:

College of Engineering Technology
(231) 591-2890
www.ferris.edu/transferservices

General Credit

Additional Automotive General Credit may be awarded when courses at BCIT have a higher credit count than an equivalent course at Ferris.

Transfer Student Orientation

All new students to Ferris State University are required to complete an orientation. Orientation for incoming freshmen is a one day session that occurs on campus and includes class registration. Eligible transfer students have the option of completing an online orientation or attending an on campus session.

Advising Notes

It is recommended that potential applicants meet/talk with an advisor to review the program, course schedule, and have any questions answered prior to completing an application. Academic advising and official course sequence plans will be developed between a student and an advisor after they have officially been admitted. Once enrolled a student must continue to meet with an advisor as they work towards graduation.

If you have questions regarding transferability of specific courses please feel free to contact the College of Engineering Technology Director of Student Academic Affairs at Ferris State University: Technology@ferris.edu or call 231-519-2890.

Graduation Requirements

In addition to completing the specific course requirements listed on the front of this guide, students must:

- Have a 2.0 cumulative GPA in Ferris coursework
- Complete a minimum of 30 semester credits from Ferris State University
- Ensure completion of at least 40 semester credits at the 300/400 level as determined by Ferris
- Complete a minimum of 120 semester credit hours applicable to the degree from all institutions
- Apply for a 'graduation audit' at least one semester prior to their planned final semester

Online Learning

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 FerrisConnect skills. This maybe 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.

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 Ferris to keep informed of changes. Final responsibility for verifying all transfer information lies with the student.

Effective date: January 1, 2015