

Automotive Technology

2014-2015 Catalog

Award Granted Upon Completion: Associate in Applied Science in Automotive Technology

Credits/Contacts Required: **68/95**

Major code: 03/308

CIP Code: 470604

Description

The Automotive Technology program is designed to provide a combination of theoretical and practical skills to enable graduates to move rapidly in their chosen occupational field. Students learn to apply automotive operating principles and to diagnosis malfunctions in automotive systems. The program emphasizes the development of skills in service, repairs, and diagnostic procedures. With state regulations, certification of auto technicians is required by law. The program provides an opportunity for students to prepare themselves for technician certification exams. The automotive industry has experienced a great deal of growth during the past one hundred years. It continues to remain a young, healthy, and a growing industry. Great opportunities await alert students seeking a profitable and challenging career in the future. Year by year, as automotive systems become more sophisticated, there is an increasing demand for trained technicians who have the knowledge and skill to service the ever changing and improved products. Equipment: Students are required to provide their own safety equipment, work clothes, and basic hand tool set. A list is provided. Estimated cost is between \$1,000 and \$2,500. Special student discounts are available. A quality set of hand tools is required by the second week of the semester for each course of the program, co-op, and future employability. Note: A valid driver's license is required for co-op. Types of Jobs: Dealership service technicians, assistant or parts department manager, skilled jobs in automotive manufacturing, service equipment representative, rebuilding shop assembler, and repair shop operator.

Upon completion of this program, students will be able to:

1. Inspect, diagnose, maintain or repair common malfunctions of engines
2. Inspect, diagnose, maintain or repair common malfunctions of automatic transmissions/transaxles.
3. Inspect, diagnose, maintain or repair common malfunctions of manual drive train and axles.
4. Inspect, diagnose, maintain or repair common malfunctions of suspension and steering.
5. Inspect, diagnose, maintain or repair common malfunctions of brakes.
6. Inspect, diagnose, maintain or repair common malfunctions of electrical/electronic systems.
7. Inspect, diagnose, maintain or repair common malfunctions of heating and air conditioning.
8. Inspect, diagnose, maintain or repair common malfunctions of engine performance.

General Education Requirements – Min 15 credits

		Cr
ENGL-101	Rhetoric & Composition	3
COMM-103	Interpersonal Communication -OR-	3
COMM-104	Public Speaking *	
BUSN-177	Mathematics of Business -OR-	3-4
MATH-106	Technical Algebra & Trig I *	
XXXX-xxx	Social/Behavioral Science or	3
	Humanities Elective	
XXXX-xxx	General Education Electives	3-4

Requirements – Min 53 credits **

		Cr
AUTO-100	Automotive Engines	5
AUTO-110	Automotive Brakes	5
AUTO-120	Automotive Electrical I	5
AUTO-130	Automotive Standard	4
	Transmissions & Powertrains	
AUTO-140	Automotive Engine Performance I	5
AUTO-150	Automotive Suspension & Steering	5
AUTO-200	Automotive Engine Performance II	5
AUTO-220	Automotive Electrical II	5
AUTO-230	Automatic Transmissions	5
AUTO-270	Automotive HVAC Systems	3
AUTO-272	Automotive Service Co-op **	6

Internships and Co-ops may require that the student pass a criminal background check.

* Transfer students should choose MATH-110 or higher, and COMM-104.

** Qualified students may be placed into pre-approved training work sites that are compatible with their career objectives, geographic preferences, and qualifications. A valid driver's license and the approved hand tool set are required for co-op. Students need to request instructor's approval and complete pre-registration documentation prior to final registration. Please see College Co-op Handbook.

Suggested Sequences Per Semester

		Cr / Ct
First Semester		
AUTO-110	Automotive Brakes	5/8
AUTO-120	Automotive Electrical I	5/8
AUTO-100	Automotive Engines -OR-	4-5/6-8
AUTO-130	Auto Stand Trans & Powertrains	
AUTO-140	Auto Engine Performance I	5/8
19-20/30-32		
Second Semester		
AUTO-150	Automotive Steering & Suspension	5/8
AUTO-200	Automotive Engine Performance II	5/8
AUTO-220	Automotive Electrical II	5/8
AUTO-230	Automatic Transmissions -OR-	3-5/4-8
AUTO-270	Automotive HVAC Systems	
18-20/28-32		
Third Semester		
AUTO-100	Automotive Engines -OR-	4-5/6-8
AUTO-130	Auto Stand Trans & Powertrains	
BUSN-177	Mathematics of Business	3-4/3-4
MATH-106	-OR- Tech Algebra & Trig I *	
COMM-103	Interpersonal Communication	
COMM-104	-OR- Public Speaking	3/3
ENGL-101	Rhetoric & Composition	3/3
13-15/15-18		
Fourth Semester		
AUTO-230	Automatic Trans -OR-	3-5/4-8
AUTO-270	Automotive HVAC Systems	
AUTO-272	Automotive Service Co-op **	6/6
XXXX-xxx	Social & Behavioral Sciences/ Humanities Elective	3/3
XXXX-xxx	General Education Requirement	3-4/3-4
15-18/16-21		