

# **Automotive Technology**

The complexity of motor vehicles demands a very high level of technical knowledge and skill for service personnel. Basic learning skills in reading, writing and computation are essential to success in the field. The program is a full-time commitment for one academic year, all day four days a week for two semesters plus all day for five days a week in the summer. Basic vehicle theory and principles are taught in the classroom to give the student an understanding of how electrical, electronic and mechanical components function and why they fail. Actual shop practices train the student to utilize appropriate safety procedures, research repair procedures, record time and effort, to make repairs, diagnose, replace and adjust components. The Automotive Technology curriculum prepares graduates for entry-level employment in vehicle diagnosis, repair and maintenance work and leads to target jobs in deep east Texas.

#### **Admission Criteria for Automotive Technology**

Program application process to be completed before the end of the first summer session:

- 1. Gain admission to Angelina College
- 2. Proof of a valid Texas driver's license with no outstanding tickets

#### **Program Admission Process**

The first 14 qualified students to provide the valid driver's license and complete any other conditional terms will receive "full" acceptance into the program. Accepted students must pay tuition and fees and purchase textbooks before the first class day.

## **Cooperative Education (Coop) Class Screening**

The coop site will interview students for employment at least two weeks before the coop begins. Coop sites will require a drug test, criminal background check, and driver's license check in the same way a potential employee would. The coop site will do these screenings before accepting students for a coop position at their facilities. The employer will pay for the screening.

## **Program Learning Outcomes (PLO)**

- PLO 1: Demonstrate how to properly set the lift to raise a vehicle in the air safely.
- PLO 2: Apply knowledge to resurface a brake rotor using the ProCut on the car brake lathe.
- PLO 3: Apply knowledge to mount and balance a tire correctly.
- PLO 4: Diagnose and analyze results to determine the cause of an electrical fault.
- PLO 5: Demonstrate the ability to set up the four-wheel alignment machine and evaluate the readings to determine the needed adjustments to correct the alignment.

## **Courses Measuring the Achievement of Program Learning Outcomes**

<u>Course</u>	<u>PLO 1</u>	<u>PLO 2</u>	<u>PLO 3</u>	<u>PLO 4</u>	<u>PLO 5</u>
AUMT 1410	X	X			
AUMT 1416			X		X
AUMT 2434				X	

### **AUTOMOTIVE TECHNOLOGY RECOMMENDED ACADEMIC PLAN**

1ST YEAR	, 1ST SEI	MESTER		Credit Hours	✓		
Term 1							
AUMT	1407	Automotive Electrical Systems		4			
AUMT	1410	Automotive Brake Systems		4			
Term 2							
AUMT	1416	Automotive Suspension/Steering		4			
AUMT	1419	Automotive Engine Repair		4			
1ST YEAR, 2ND SEMESTER							
Term 1							
AUMT	2417	Automotive Engine Performance Analysis I		4			
AUMT	2425	Automotive Transmissions		4			
Term 2							
AUMT	2434	Automotive Engine Performance Analysis II		4			
AUMT	1445	Automotive Climate Control Systems		4			
© Apply for Graduation							
1ST YEAR, SUMMER SEMESTER							
Full Term							
AUMT	2480	Cooperative Education - Automotive		4			
* Earned	<b>!:</b>	Level 1 Certificate in Automotive Technology	Total Hours	36			