

# AUTOMOTIVE MECH/TECH (AUMT)

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## AUMT 1201

### Introduction and Theory of Automotive Technology

CRT HRS:2 LEC HRS:2 LAB HRS:1 OTH HRS:0

This course is an introduction overview of the automotive service industry including history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities, and automobile maintenance.

*Prerequisite: None.*

## AUMT 1264

### Practicum I

CRT HRS:2 LEC HRS:0 LAB HRS:0 OTH HRS:20

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and the student.

*Prerequisite: Permission from the department.*

## AUMT 1265

### Practicum I

CRT HRS:2 LEC HRS:0 LAB HRS:0 OTH HRS:20

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and the student.

*Prerequisite: Permission from the department.*

## AUMT 1266

### Practicum I

CRT HRS:2 LEC HRS:0 LAB HRS:0 OTH HRS:20

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and the student.

*Prerequisite: Permission from the department.*

## AUMT 1267

### Practicum II

CRT HRS:2 LEC HRS:0 LAB HRS:0 OTH HRS:20

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and the student.

*Prerequisite: Permission from the department.*

## AUMT 1316

### Automotive Suspension and Steering Systems-GM-ASEP

CRT HRS:3 LEC HRS:2 LAB HRS:4 OTH HRS:0

This course covers the diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. Includes component repair, alignment procedures and tire and wheel service. May be taught manufacturer specific.

*Prerequisite: AUMT 1407.*

## AUMT 1345

### Automotive Climate Control Systems

CRT HRS:3 LEC HRS:2 LAB HRS:4 OTH HRS:0

This course covers the theory of automotive air conditioning and heating systems, including diagnosis and repair of manual/electronic climate control systems. Emphasis is placed on the basic refrigeration cycle and diagnosis and repair of system malfunctions. EPA guidelines for refrigerant handling and new refrigerant replacements are also covered.

*Prerequisite: DEMR 1401 or AUMT 1407.*

## AUMT 1407

### Automotive Electrical Systems

CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0

This course is an overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of, charging and starting systems, and electrical accessories. Emphasis is placed on electrical principles, schematic diagrams and service publications.

*Prerequisite: None.*

## AUMT 1410

### Automotive Brake Systems

CRT HRS:4 LEC HRS:2 LAB HRS:8 OTH HRS:0

This course covers the operation and repair of drum/disc type brake systems. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes.

*Prerequisite: AUMT 1407.*

## AUMT 1416

### Automotive Suspension and Steering Systems

CRT HRS:4 LEC HRS:2 LAB HRS:8 OTH HRS:0

This course covers the diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. Includes component repair, alignment procedures and tire and wheel service. May be taught manufacturer specific.

*Prerequisite: Concurrent enrollment in AUMT 1407.*

## AUMT 1419

### Automotive Engine Repair

CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0

This course explores the fundamentals of engine operation, diagnosis and repair. Emphasis is on identification, inspection, measurements, and disassembly, repair, and re-assembly of the engine.

*Prerequisite: Concurrent enrollment in AUMT 1407.*

## AUMT 2264

### Practicum I

CRT HRS:2 LEC HRS:0 LAB HRS:0 OTH HRS:20

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and the student.

*Prerequisite: Permission from the department.*

## AUMT 2266

### Practicum III-GM ASEP

CRT HRS:2 LEC HRS:0 LAB HRS:0 OTH HRS:20

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and the student.

*Prerequisite: Permission from the department.*

## AUMT 2267

### CAPSTONE: Practicum IV- GM ASEP

CRT HRS:2 LEC HRS:0 LAB HRS:0 OTH HRS:20

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college and the student.

*Prerequisite: Permission from the department.*

## AUMT 2313

### Automotive Drive Train and Axles

CRT HRS:3 LEC HRS:2 LAB HRS:5 OTH HRS:0

This course is a study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on diagnosis and repair.

*Prerequisite: AUMT 1419.*

## AUMT 2417

### Automotive Engine Performance Analysis I

CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0

This course includes theory, operation, diagnosis of drivability concerns, and repair of ignition and fuel delivery systems. Use of current engine performance diagnostic equipment is emphasized.

*Prerequisite: AUMT 1407; concurrent enrollment in AUMT 1419.*

**AUMT 2421****Automotive Electrical Diagnosis and Repair**

CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0

This course covers the repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis is placed on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques.

*Prerequisite:* AUMT 1407.

**AUMT 2425****Automatic Transmission and Transaxle**

CRT HRS:4 LEC HRS:2 LAB HRS:6 OTH HRS:0

This course is a study of the operation, hydraulic circuits and electronic controls, and related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and proper repair techniques are covered.

*Prerequisite:* AUMT 1407.

**AUMT 2434****Automotive Engine Performance Analysis II**

CRT HRS:4 LEC HRS:2 LAB HRS:8 OTH HRS:0

This course covers the diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment.

*Prerequisite:* AUMT 2417.