

AUMT - AUTOMOTIVE TECH

AUMT 1024 Automotive Service Attendant 0.7-4 Credit Hours (7 to 40 Lec)

AUMT 1201 Introduction and Theory of Automotive Technology 2 Credit Hours (2 Lec)

An introduction to the automobile industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automobile maintenance.

Course Type: Technical/Vocational Course

AUMT 1281 Cooperative Education 2 Credit Hours (1 Lec, 8 Lab)

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Course Type: Cooperative Course, Technical/Vocational Course

AUMT 1305 Introduction to Automotive Technology 3 Credit Hours (2 Lec, 4 Lab)

An introduction to the automobile industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities, and basic automobile maintenance. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 1306 Automotive Engine Removal and Installation 3 Credit Hours (2 Lec, 4 Lab)

Fundamentals of engine inspection, removal and installation procedures. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 1307 Automotive Electrical Systems 3 Credit Hours (2 Lec, 4 Lab)

An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of, charging and starting systems, and electrical accessories. Emphasis on electrical principles, schematic diagrams, and service publications. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 1341 Auto Climate Control Systems Theory 3 Credit Hours (2 Lec, 2 Lab)

Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis of system malfunctions. Includes manual and electronic climate control systems.

Course Type: Technical/Vocational Course

AUMT 1345 Automotive Climate Control Systems 3 Credit Hours (2 Lec, 4 Lab)

Diagnosis and repair of manual/electronic climate control systems. Includes the refrigeration cycle and EPA guidelines for refrigerant handling. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 1407 Automotive Electrical Systems 4 Credit Hours (3 Lec, 4 Lab)

An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of, charging and starting systems, and electrical accessories. Emphasis on electrical principles schematic diagrams, and service manuals. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 1410 Automotive Brake Systems 4 Credit Hours (3 Lec, 4 Lab)
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. May be taught with manufacturer specific instructions.

Course Type: Technical/Vocational Course

AUMT 1416 Automotive Suspension and Steering Systems 4 Credit Hours (3 Lec, 4 Lab)

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.

Course Type: Technical/Vocational Course

AUMT 1419 Automotive Engine Repair 4 Credit Hours (3 Lec, 4 Lab)

Fundamentals of engine operation, diagnosis and repair. Emphasis on identification, inspection, measurements, and disassembly, repair, and reassembly of the engine. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 1445 Automotive Climate Control Systems 4 Credit Hours (3 Lec, 4 Lab)

Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements.

Course Type: Technical/Vocational Course

AUMT 2313 Automotive Drive Train and Axles 3 Credit Hours (2 Lec, 4 Lab)

A study of automotive clutches, clutch operation devices, manual transmissions/ transaxles, and differentials with emphasis on diagnosis and repair. May be taught with manufacturer specific instructions.

Course Type: Technical/Vocational Course

AUMT 2317 Automotive Engine Performance Analysis I Capstone 3 Credit Hours (2 Lec, 4 Lab)

Theory, operation, diagnosis of drivability concerns, and repair of ignition and fuel delivery systems. Use of current engine performance diagnostic equipment. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 2321 Automotive Electrical Diagnosis and Repair 3 Credit Hours (2 Lec, 4 Lab)

Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 2328 Automotive Service 3 Credit Hours (2 Lec, 4 Lab)

Mastery of automotive vehicle service and component systems repair. Emphasis on mastering current automotive competencies covered in related theory courses.

Course Type: Technical/Vocational Course

AUMT 2337 Automotive Electronics 3 Credit Hours (2 Lec, 4 Lab)

Study of electronic principles applied to microcomputers and communication systems. Includes digital fundamentals, and use of electronic test equipment. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 2413 Manual Drive Train and Axles 4 Credit Hours (3 Lec, 4 Lab)

A study of automotive clutches, clutch operation devices, standard transmissions, transaxles, and differentials with emphasis on the diagnosis and repair of transmissions and drive lines.

Course Type: Technical/Vocational Course

AUMT 2417 Automotive Engine Performance Analysis I CAPSTONE 4 Credit Hours (3 Lec, 4 Lab)

Theory, operation, diagnosis of drivability concerns, and repair of ignition and fuel delivery systems. Use of current engine performance diagnostic equipment. May be taught with manufacturer specific instructions. This is a CAPSTONE course.

Course Type: Technical/Vocational Course

AUMT 2421 Automotive Electrical Diagnosis and Repair 4 Credit Hours (3 Lec, 4 Lab)

Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 2425 Automotive Automatic Transmission and Transaxle 4 Credit Hours (3 Lec, 4 Lab)

A study of the operation, hydraulic circuits and electronic controls of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and repair techniques. May be taught manufacturer specific.

Course Type: Technical/Vocational Course

AUMT 2434 Automotive Engine Performance Analysis II CAPSTONE 4 Credit Hours (3 Lec, 4 Lab)

Diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems. Includes use of advanced engine performance diagnostic equipment. May be taught manufacturer specific. This is a CAPSTONE course.

Course Type: Technical/Vocational Course

AUMT 2437 Automotive Electronics 4 Credit Hours (3 Lec, 4 Lab)

Topics address electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology.

Course Type: Technical/Vocational Course