AUTOMOTIVE TECHNOLOGY (AUMT)

AUMT 1201 Introduction and Theory of Automotive Technology 2 Credits (1 Lec, 3 Lab)
This course provides an introductory overview of the automotive service industry including history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities, and automobile maintenance.
Course Type: Technical

AUMT 1316 Automotive Suspension and Steering 3 Credits (2 Lec, 4 Lab)
This course is the study of 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(s): AUMT 2421

Course Type: Technical

AUMT 1319 Automotive Engine Repair 3 Credits (2 Lec, 4 Lab)
This course is the study of the fundamentals of engine operation, diagnosis, and repair. Emphasis on identification, inspection, measurements, disassembly, repair, and reassembly of the engine. May be taught manufacturer specific.
Prerequisite(s): AUMT 1407

Course Type: Technical

AUMT 1345 Automotive Climate Control Systems 3 Credits (2 Lec, 4 Lab)
This course is a study of the diagnosis and repair of manual/electronic climate control systems; includes the refrigeration cycle and EPA guidelines for refrigerant handling. May be taught manufacturer specific.
Prerequisite(s): AUMT 1407

Course Type: Technical

AUMT 1407 Automotive Electrical Systems 4 Credits (2 Lec, 6 Lab)
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 on electrical principles, schematic diagrams, and service publications. May be taught manufacturer specific.
Course Type: Technical

AUMT 1410 Automotive Brake Systems 4 Credits (2 Lec, 6 Lab)
This course is the study of 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. May be taught manufacturer specific.
Course Type: Technical

AUMT 1416 Automotive Suspension and Steering 4 Credits (2 Lec, 6 Lab)
This course is the study of 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.
Course Type: Technical

AUMT 1419 Automotive Engine Repair 4 Credits (2 Lec, 6 Lab)
This course is the study of the fundamentals of engine operation, diagnosis, and repair. Emphasis on identification, inspection, measurements, disassembly, repair, and reassembly of the engine. May be taught manufacturer specific.
Course Type: Technical

AUMT 2188 Internship - Automotive Technology 1 Credit (0 Lec, 6 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. A learning plan is developed by the College and the employer.
Course Type: Technical

AUMT 2288 Internship - Automotive Technology 2 Credits (0 Lec, 12 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the College and the employer.
Course Type: Technical

AUMT 2289 Internship - Automotive Technology 2 Credits (0 Lec, 12 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the College and the employer.
Course Type: Technical

AUMT 2313 Automotive Drivetrain and Axles 3 Credits (2 Lec, 4 Lab)
This is a study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on diagnosis and repair. May be taught manufacturer specific.
Course Type: Technical

AUMT 2407 Hybrid and/or Battery Electric Vehicle (BEV) Systems Diagnostics 4 Credits (2 Lec, 7 Lab)
This course is an advanced study of hybrid and/or battery electric vehicles (BEV) and the unique characteristics of hybrid and/or BEV systems. Includes hybrid and/or BEV safety procedures, diagnosis, and repair of hybrid and/or BEV systems. May be taught manufacturer specific.
Prerequisite(s): AUMT 1407

Course Type: Technical

AUMT 2413 Manual Drivetrain and Axles 4 Credits (2 Lec, 6 Lab)
This is a study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on diagnosis and repair. May be taught manufacturer specific.
Prerequisite(s): AUMT 1407

Course Type: Technical

AUMT 2417 Automotive Engine Performance Analysis I 4 Credits (2 Lec, 6 Lab)
This course is the study of the theory, operation, diagnosis of drivability concerns, and repair of ignition, and fuel delivery systems. Includes use of current engine performance diagnostic equipment. May be taught manufacturer specific.
Prerequisite(s): AUMT 2421

Course Type: Technical

AUMT 2421 Automotive Electrical Diagnosis and Repair 4 Credits (2 Lec, 6 Lab)
This is a course in 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

AUMT 2425 Automotive Automatic Transmission and Transaxles 4 Credits (2 Lec, 6 Lab)
This course is 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.
Prerequisite(s): AUMT 1407

Course Type: Technical

AUMT 2432 Automotive Automatic (& Manual) Transmission and Transaxle II 4 Credits (2 Lec, 8 Lab)
This course is an analysis of electronic controls and actuators and the related circuits of modern automatic transmissions/transaxles (and manual transmission) with an emphasis on diagnostics. May be taught manufacturer specific.
Course Type: Technical

AUMT 2434 Automotive Engine Performance Analysis II 4 Credits (2 Lec, 6 Lab)
This course is the study of the 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.
Course Type: Technical