

SUBJECTS AND COURSES

COURSE DESCRIPTIONS - AUTOMOTIVE MECHANICS (AUM)

AUM 101 Fundamentals of Automotive Tec

This course provides basic instruction in Fundamentals of Automotive Technology. Prerequisite(s): As determined by College CORE
5 Credit Hours

AUM 112 Electrical Fundamentals

This course introduces the principles and laws of electricity. Emphasis is placed on wiring diagrams, test equipment, and identifying series, parallel and series-parallel circuits. Upon completion, students should be able to calculate, build, and measure circuits. Prerequisite(s): As determined by college. CORE
5 Credit Hours

AUM 121 Automotive Braking Systems

This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on practical application of brakes. Prerequisite(s): As determined by College CORE
5 Credit Hours

AUM 122 Steering & Suspension

This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of steering and suspension. Prerequisite(s): As determined by College CORE
5 Credit Hours

AUM 124 Automotive Engines

This course provides instruction on the operation, design, and superficial repair of automotive engines. Emphasis is placed on understanding the four-stroke cycle, intake and exhaust manifolds and related parts, engine mechanical timing components, engine cooling and lubrication system principles and repairs, and basic fuel and ignition operation. Prerequisite(s): As determined by College CORE
5 Credit Hours

AUM 130 Drivetrains and Axels

This course provides basic instruction in automotive drive trains and axles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and drivability. Prerequisite(s): As determined by College CORE
5 Credit Hours

AUM 133 Motor Vehicle Air Conditioning

This course provides basic instruction in theory, operation, and repair of automotive heating and air- conditioning systems. Emphasis is placed on the understanding and repair of vehicle air- conditioning and heating systems, including but not limited to air management, electrical and vacuum controls, refrigerant recovery, and component replacement. Prerequisite(s): As determined by College
5 Credit Hours

AUM 162 Electrical/electronic Systems

This is an intermediate course in automotive electrical and electronic systems. Emphasis is placed on troubleshooting and repair of battery, starting, charging, and lighting systems, subsystems, and components. Prerequisite(s): As determined by college. CORE
5 Credit Hours

AUM 212 Adv Electrical/Electronics Sys

This course provides instruction in advanced automotive electrical and electronic systems. Emphasis is placed on troubleshooting and repair of advanced electrical and electronic systems, subsystems, and components. Prerequisite(s): As required by college
5 Credit Hours

AUM 220 Advanced Automotive Engines

This course provides in depth instruction concerning internal engine diagnosis, overhaul and repair, including but not necessarily limited to the replacement of timing chains, belts, and gears, as well as the replacement or reconditioning of valve train components as well as replacement of pistons, connecting rods, piston rings, bearings, lubrication system components, gaskets, and oil seals. Prerequisite(s): As required by College
5 Credit Hours

AUM 224 Manual Transmission & Transaxl

This course covers basic instruction in manual transmissions and transaxles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and drivability. Prerequisite(s): As required by College
5 Credit Hours

AUM 230 Automatic Transmission

This course provides basic instruction in automatic transmissions and transaxles. Emphasis is placed on the comprehension of principles and powerflow of automatic transmissions and repairing or replacing internal and external components. Prerequisite(s): As required by College CORE
5 Credit Hours

AUM 239 Engine Performance I

This course provides basic instruction in engine performance with emphasis on fuel and ignition systems relating to engine operation. Prerequisite(s): As required by College CORE
5 Credit Hours

AUM 244 Engine Performance II

This course provides advanced instruction in engine performance. Emphasis is placed on engine management and computer controls of ignition, fuel, and emissions systems relating to engine performance and drivability. Prerequisite(s): As required by College CORE
5 Credit Hours

AUM 246 Automotive Emissions

This is an introductory course in automotive emission systems. Emphasis is placed on troubleshooting and repair of systems, subsystems, and components. Prerequisite(s): As required by College
5 Credit Hours