

AUTOMOTIVE (AUT)

AUT 111. Automotive Engines I. (4 Credits)

Presents analysis of power, cylinder condition, valves and bearings in the automotive engine to establish the present condition, repairs or adjustments. Lecture 3 hours per week. Laboratory 3 hours per week. Total 6 hours per week.

AUT 121. Automotive Fuel Systems I. (4 Credits)

Analyses major domestic and foreign automotive fuel systems to include carburetors and fuel injection systems. Includes detailed inspection and discussion of fuel tanks, connecting lines, instruments, filters, fuel pumps, superchargers, and turbo charger. Also includes complete diagnosis, troubleshooting, overhaul and factory adjustment procedures of all major carbureted and fuel injection systems. Lecture 3 hours per week. Laboratory 3 hours per week. Total 6 hours per week.

AUT 122. Automotive Fuel Systems II. (4 Credits)

Analyses major domestic and foreign automotive fuel systems to include carburetors and fuel injection systems. Includes detailed inspection and discussion of fuel tanks, connecting lines, instruments, filters, fuel pumps, superchargers, and turbo charger. Also includes complete diagnosis, troubleshooting, overhaul and factory adjustment procedures of all major carbureted and fuel injection systems. Lecture 3 hours per week. Laboratory 3 hours per week. Total 6 hours per week. Prerequisite: AUT 121.

AUT 136. Automotive Vehicle Inspection. (2 Credits)

Presents information on methods for performing automotive vehicle safety inspection. Lecture 1 hour per week. Laboratory 2 hours per week. Total 3 hours per week.

AUT 141. Auto Power Trains I. (4 Credits)

Presents operation, design, construction and repair of power train components, standard and automatic transmission. Includes clutches, propeller shaft, universal joints, rear axle assemblies, fluid couplings, torque converters as well as 2, 3, and 4 speed standard, overdrive and automatic transmissions. Lecture 2 hours per week. Laboratory 6 hours per week. Total 8 hours per week.

AUT 142. Auto Power Trains II. (4 Credits)

Presents operation, design, construction and repair of power train components, standard and automatic transmission. Includes clutches, propeller shaft, universal joints, rear axle assemblies, fluid couplings, torque converters as well as 2, 3, and 4 speed standard, overdrive and automatic transmissions. Lecture 2 hours per week. Laboratory 6 hours per week. Total 8 hours per week. Prerequisite: AUT 141.

AUT 197. Cooperative Education in Automotive Analysis. (1 Credit)

Supervises in on-the-job training for pay in approved business, industrial and service firms, coordinated by the college's cooperative education office. May be repeated for credit. Laboratory 3 hours per week. Total 3 hours per week.

AUT 199. Supervised Study in Automotive Analysis. (1 Credit)

Assigns problems for independent study incorporating previous instruction and supervised by the instructor. May be repeated for credit. Laboratory 3 hours per week. Total 3 hours per week.

AUT 217. Computerized Fuel Systems. (3 Credits)

Introduces devices which sense the engine condition and control fuel mixture to produce economical fuel consumption. Teaches theory of operation, testing, adjustment and repair or replacement of these devices. Lecture 2 hours per week. Laboratory 3 hours per week. Total 5 hours per week.

AUT 236. Automotive Climate Control. (4 Credits)

Introduces principles of refrigeration, air conditioning controls, and adjustment and general servicing of automotive air conditioning systems. Lecture 3 hours per week. Laboratory 3 hours per week. Total 6 hours per week.

AUT 241. Automotive Electricity I. (4 Credits)

Introduces electricity and magnetism, symbols and circuitry as applied to the alternators, regulators, starters, lighting systems, instruments and gauges and accessories. Lecture 3 hours per week. Laboratory 3 hours per week. Total 6 hours per week.

AUT 245. Automotive Electronics. (4 Credits)

Introduces field of electronics as it applies to the modern automobile. Emphasizes basic circuit operation, diagnosis and repair of digital indicator and warning systems. Lecture 3 hours per week. Laboratory 3 hours per week. Total 6 hours per week.

AUT 267. Automotive Suspension and Braking Systems. (4 Credits)

Presents the operation, design, construction, repair and servicing of braking and suspension systems. Explains use of tools and test equipment, evaluation of test results, estimation and repair cost, front and rear suspension alignment, power and standard steering, and power, standard and disc brakes. Lecture 3 hours per week. Laboratory 3 hours per week. Total 6 hours per week.

AUT 273. Automotive Driveability and Tune-Up I. (3 Credits)

Presents diagnostic and service procedures for automatic electrical and mechanical systems. Teaches use of tools and test equipment, evaluation of test results, estimation of repair cost. Emphasizes performance of required service. Lecture 2 hours per week. Laboratory 3 hours per week. Total 5 hours per week.

AUT 275. Shop Management. (2 Credits)

Studies shop layout, personnel management, cost analysis, record keeping and quality control. Discusses shop manager, service salesman, and service writer's roles in customer relations. Lecture 2 hours per week. Total 2 hours per week.