

# AUTOMOTIVE (AUT)

All AUT courses numbered 100 and above may be applied to the major field and elective requirement for the Associate in Arts and Associate in Science degrees.

All repeatable AUT courses can be counted only once toward GPA and graduation.

## **AUT 151 Automotive Engine Service & Repair (7) 5,4**

A comprehensive course to provide knowledge in the operation and repair of the automotive engine. Classroom and hands-on experiences combine to provide skills in all areas of engine service, including engine disassembly, inspection, measurement, and reassembly. Training is also provided on machining practices common to the automotive engine. Topics include cylinder head valve guide and seat service, piston and cylinder service, crack detection and cleaning practices. This course is repeatable 1 time. (1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$1016 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall and Spring

## **AUT 152 Intro to Auto Operation and Maint. (3) 2,2**

This course is designed to provide students an introduction to the operation and basic maintenance of the automobile. It requires no previous automotive experience or training, only a desire to learn more about how your car operates and what type of maintenance will help provide it a longer life with minimal problems. The parts and operation of each of the following systems will be discussed followed by hands-on lab activities reinforcing the inspection and basic maintenance each area requires. Systems included are the engine, cooling, lubrication, steering, suspension, brake, electrical, ignition, fuel and basic computer control. Preventive maintenance is stressed in each unit of instruction. Students desiring to perform inspection and maintenance on the vehicle of their choice are encouraged to have a basic set of tools available to them. (1.2) Proficiency Credit Available (2 LETSIR) Pass/No Credit Available.

**In-District Tuition/Fees:** \$444 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall and Spring

## **AUT 153 Manual Transmissions & Drivetrains (7) 5,4**

Lab work and lecture combine to present service skills in the repair of manual transmissions and drivetrain components. Instruction includes servicing clutches, front-wheel drive manual transaxles, driveshafts, rear-wheel drive manual transmissions and axle assemblies. This course is repeatable 1 time. (1.2) Proficiency Credit Available (2 TFSEI) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$1011 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall

## **AUT 160 Automotive Electricity I (6) 4,4**

A course that will help unravel the mysteries that seem to surround electricity. Hands on experiences, demonstrations, and lecture are utilized to explore and understand electricity and electronics as they apply to the automobile. A working knowledge of basic electrical theory, electrical circuitry, wiring diagrams, electronics, and an understanding of automotive computer operation can be gained through this course. Use of test equipment, automobile body circuit, and accessory diagnosis are stressed. This course is repeatable 1 time. (1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$873 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall, Spring and Summer

## **AUT 163 Automotive Electricity II (4) 2,4**

An operation, diagnosis, and service approach is taken to provide knowledge of automotive batteries, starting, and charging systems. In-depth understanding of these systems can be gained from exposure to a wide variety of current test equipment and service techniques. Hands-on testing and repair is emphasized in the service of charging and starting systems. This course is repeatable 1 time. (1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$597 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** AUT 160 or consent of instructor

**Semester(s) Offered:** Spring

**AUT 171 Auto Suspensions & Wheel Alignment (5) 3,4**

A comprehensive course providing service skills involving automotive suspension and steering systems. Shop exercises and lecture combine to provide knowledge regarding service procedures on front and rear suspension systems, wheels and tires, wheel balance, steering systems, and four-wheel alignment. Included is information on Macpherson struts, rack and pinion steering, and rear wheel alignment. This course is repeatable 1 time. (1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$735 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall and Spring

**AUT 172 Automotive Brake Systems (5) 3,4**

A service-oriented course that will provide experiences in all areas of brake repair. Topics will include drum brakes, front and rear disc brakes, hydraulic system service, machining drums and rotors, and anti-lock brake systems. An emphasis is placed on hands-on experience. This course is repeatable 1 time. (1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$735 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall and Spring

**AUT 180 Fuel & Ignition System Fundamentals (7) 5,4**

An introductory course that will provide knowledge and service skills involving fuel and ignition systems. Included is instruction on fuel injection, infrared exhaust emission testing, electronic ignition systems, diagnostic engine analyzers, basic computer controls and an introduction to OBD II. Basic fuel injection service, oscilloscope testing, and ignition service will be part of the lab experiences. (1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$1011 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** AUT 160 or consent of instructor

**Semester(s) Offered:** Fall and Spring

**AUT 253 Automatic Transmissions (5) 3,4**

An introductory course that covers the operation, service and troubleshooting of front and rear-wheel drive automatic transmissions. Included are units on torque converters, transmission maintenance, basic overhaul, removal and installation. Disassembly and basic overhaul techniques are practiced on selected models of transmissions. This course is repeatable 1 time. (1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$735 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall and Spring

**AUT 271 Diagnostics & Engine Performance (7) 5,4**

A continuation of AUT 180, this course provides and integration of fuel and ignition systems to provide an advanced understanding of operation and service. Diagnosis of fuel injection, computer-controlled DI, EI, CNP and COP ignition systems, and computerized engine controls is included. Emphasis is placed on operation and diagnosis of on-board computers as they relate to engine performance. OBD II and IEPA vehicle testing and failure analysis is included along with advanced scan tool diagnosis. This course is repeatable 1 time. (1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$1011 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** AUT 160 and AUT 180 or consent of instructor

**Semester(s) Offered:** Spring

**AUT 290 Auto Heating & Air Conditioning (5) 3,4**

A lecture/lab approach provides a working knowledge of the automotive cooling, heating, and air conditioning systems. Hands-on experiences reinforce an understanding of system operation, diagnostic procedures, and service. Air conditioning system performance testing, evacuation, and recharging is emphasized. This course is repeatable 1 time; only five semester hours may apply toward a degree or certificate. (1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$740 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Spring and Summer