AUTOMOTIVE SERVICE TECHNICIAN

Programs

- Certificate in Automotive Service Technician (https://calendar.kpu.ca/programs-az/trades-technology/automotive-service-technician/automotive-service-technician-certificate/)

Courses

Registration in some course sections is restricted to students in particular programs. See Timetables - kpu.ca/registration/timetables (http://www.kpu.ca/registration/timetables/) - for current section information.

Visit the BC Transfer Guide - bctransferguide.ca (https://www.bctransferguide.ca/) - for information about course transfer in B.C.

ASTA 1100 3 credits
Safety, Communication, Tools and Fasteners
Students will learn safe practices in the automotive shop environment. They will learn the proper selection and use of personal protective equipment, shop emergency equipment and procedures. Students will use precision measurement tools, hand tools, and power tools. They will use fasteners, hoists and lifting equipment. Students will also learn to communicate using automotive industry terminology.
Level: VO
Attribute: TRAD (https://calendar.kpu.ca/courses-az/#courseattributestext)

ASTA 1110 1.5 credits
General Automotive Services, Practices and Maintenance
Students will learn to safely service and maintain the automobile. They will learn to assess and repair leaks, select proper fluids and lubricants, and service and replace gaskets, seals and hoses.
Level: VO
Attribute: TRAD (https://calendar.kpu.ca/courses-az/#courseattributestext)

ASTA 1120 6.5 credits
Electrical Fundamentals, Diagnosis and Repair
Students will learn to solve problems related to automotive electrical systems. They will apply scientific principles to understand the fundamentals of magnetism and electricity. Students will service, test and diagnose problems related to batteries and will be able to test and repair simple electrical circuits. They will also learn the operation and diagnostics of starter motors and AC generators.
Level: VO
Attribute: TRAD (https://calendar.kpu.ca/courses-az/#courseattributestext)

ASTA 1130 6.5 credits
Steering, Frames, Suspension and Wheel Alignment
Students will learn to identify various types of frame, suspension, and steering systems. They will use the correct procedures for diagnosing and repairing the different types of steering and suspension systems. Students will also learn to perform wheel alignments.
Level: VO
Attribute: TRAD (https://calendar.kpu.ca/courses-az/#courseattributestext)

ASTA 1140 5 credits
Automotive Braking Systems
Students will learn the scientific principles of the brake system. They will learn to service and repair the hydraulic systems components on both drum and disc brake systems. Students will learn the master brake system diagnosis, service and repair, and the principles and service of antilock braking systems.
Level: VO
Attribute: TRAD (https://calendar.kpu.ca/courses-az/#courseattributestext)

ASTA 1150 1 credit
Welding
Students will learn welding safety and the basic operation of oxy-fuel cutting and welding procedures on mild steel plate, light tubing, and 14-gauge and/or 18-gauge sheet metal. They will also learn Metal Inert Gas (MIG) welding procedures and applications. Students will demonstrate these three processes through a number of shop projects.
Level: VO
Attribute: TRAD (https://calendar.kpu.ca/courses-az/#courseattributestext)

ASTA 1160 1.5 credits
The Internal Combustion Engine
Students will learn the operation of the internal combustion engine. They will learn the theory of engine blocks and their related components as well as crankshafts, friction bearings, pistons, piston rings and connecting rods. Students will also learn the theory of cylinder head and camshaft design and operation.
Level: VO
Attribute: TRAD (https://calendar.kpu.ca/courses-az/#courseattributestext)

ASTA 1170 2.5 credits
Power Train Fundamentals
Students will learn to diagnose, service and repair drivelines, universal joints and constant velocity joints. They will learn to diagnose and repair standard transmissions, clutches and their related components. Students will learn the operation and service of automatic transmissions and transaxles. They will also learn to diagnose, service and repair the automotive differential.
Level: VO
Attribute: TRAD (https://calendar.kpu.ca/courses-az/#courseattributestext)

ASTA 1180 5 credits
Engine Management and Control Systems
Students will learn to diagnose, service and repair automotive fuel delivery and ignition systems, from carburetion to fuel injection, and ignition systems from contact points to direct ignition systems. They will also learn to test and repair emission control devices.
Level: VO
Attribute: TRAD (https://calendar.kpu.ca/courses-az/#courseattributestext)