

OUTDOOR POWER EQUIPMENT TECHNICIAN (OPET)

This is a list of the Outdoor Power Equipment Technician (OPET) courses available at Kwantlen.

OPET 1100 CR-2.5

Safety, Math, & Science for Outdoor Power

Students will learn the basic elements of safe practices in the outdoor power equipment work environment. They will learn the Worker's Compensation Act and WHMIS legislation applications, shop safety, extinguishing fires, using safe body mechanics, personal safety equipment and occupational first aid. Students will also learn and or verify information on the application of mathematics and science concepts used in the outdoor power equipment trade.

OPET 1116 CR-4.5

Maintaining Good Working Relations

Students will learn about legislation, both provincial and federal, applicable to work and working conditions. They will also become aware of the importance of proper inventory and record keeping. Students will learn to use the resources related to the trade and to apply them with effective communication and interpersonal skills to the workplace environment in a variety of roles, with emphasis on the importance of monitoring, analyzing, and correcting.

Prerequisites: OPET 1100

OPET 1120 CR-3

Tools, Fasteners and Fittings

Students will learn the effective and safe operation of a variety of shop hand and power tools. They will also be able to apply appropriate tools to a variety of mechanical applications where they relate to fastening devices. Students will learn the safe operation of various types of equipment used in the outdoor power equipment trade. They will be required to obtain a lift-truck operator certification.

Prerequisites: OPET 1100

OPET 1130 CR-2.5

Electricity & Welding, Cutting, & Brazing

Students will explore and describe the basic fundamentals of electricity, including Ohm's Law, DC and AC current, induction, basic motor theory, and the use of digital multi-meters. They will construct several projects to illustrate the electrical theory. Students will learn welding safety and the basic operation of oxy-fuel cutting, welding, and brazing procedures on mild steel plate, light tubing, and 14/18 gauge sheet metal. They will also learn arc and Mig welding procedures and applications. Students will demonstrate these three processes through a number of shop projects.

Prerequisites: OPET 1100

OPET 1140 CR-1.5

Lubrication and Fuel Systems

Students will learn the principles of lubrication and the fundamentals of fuel system components and theory including different types of oil and fuel pumps. They will dismantle, inspect, and reassemble various types of lubrication and fuel systems including carburetors.

Prerequisites: OPET 1100

OPET 1150 CR-2.5

Engines & Service and Repair Equipment

Students will learn the basic mechanical fundamentals, lubrication, and cooling systems of two- and four-stroke cycle reciprocating internal combustion engines. They will dismantle, measure, reassemble, and run single-cylinder examples of two types. Students will demonstrate their competence by servicing, diagnosing, and repairing a range of hand-held power products.

Prerequisites: OPET 1100 and 1120 and 1130 and 1140