ENGINEERING

QEGS ENGINEERING WORKSHOP PROGRAMME

Why study this Engineering Workshop Programme?
Our own in-house Engineering Workshop Programme will allow exposure to a variety of technical areas and skill sets used on a typical shop floor engineering environment. You will become competent in workshop practice including marking out, sheet metal fabrication, MIG welding, CNC, CAD design and secondary machining such as lathe work

Course Content	
The topics studied are: 1) Manufacturing Secondary Machining Processes In this unit you will: • Examine the technology and characteristics of secondary processes that are widely used in industry • Set up traditional secondary processing machines to manufacture a component safely • Carry out traditional secondary machining processes to manufacture a component safely • Review the processes used to machine a component and reflect on personal performance 2) Engineering Product Design and Manufacture In this unit learners will explore engineering product design and manufacturing processes and will complete activities that consider function, sustainability, materials and form. You will: • Learn about the properties and characteristics of a range of ferrous / non-ferrous / polymer and composite materials • Engage with the 5 steps of the Engineering design and make process • Carry out a design and make exercise	3) Basic Bench work skills In this module you will: • Learn how to measure and mark out across a range of materials accurately using a range of tools and equipment such as angle plate / V-block /surface plate / surface gauge • Apply correct technique to cut and work with both hand tools and power tools such as scribes, jenny calipers, angle grinders, air saws, nibblers • Understand the requirement for appropriate fasteners, fixtures and components, screw thread systems, screw thread nomenclature. • MIG welding / spot welding fabrication • Apply safe working procedure as to HASAWA law