

MATERIALS AND TECHNOLOGIES SPECIALISATION

INDUSTRIAL TECHNOLOGY ENGINEERING

STATUS:	ELECTIVE SUBJECT
COURSE OVERVIEW:	Industrial Technology Engineering provides a range of learning experiences for students pursuing either a vocational or professional career in the engineering industry. This subject provides a sound basis for further vocational studies such as Certificate II in Engineering Pathways in Years 11 and 12 or similar pre-vocational courses.
COURSE OUTLINE:	<p>Students study sheet metalworking, fitting, metal machining and light fabrication. Students will learn to use hand and power tools plus a variety of engineering machines and equipment.</p> <p>Throughout the course students learn about the safe use of appropriate fabrication, finishing and maintenance methods.</p> <p>Practical work is supplemented by the study of underlying principles of tools and equipment and the properties and characteristics of materials.</p> <p>Opportunities to integrate new technologies will be offered to students throughout the course.</p> <p>Unit 1 – Sheet Metalworking (Tool Box Project and OH&S Theory)</p> <p>Unit 2 – Fitting and Fabrication (Fabrication Project and Hand and Power Tools Theory)</p> <p>Unit 3 – Metal Machining (Injection Molding Project and Metalwork Machines Theory)</p> <p>Unit 4 – Light Fabrication (Fabrication Project and Jobs in Engineering Assignment).</p>
COURSE ASSESSMENT:	<p>Students will be assessed through a variety of assessment tasks. These include practical projects, student workbooks, theory tests and assignment.</p> <p>Students will be required to perform online assessment.</p>
STUDY REQUIREMENTS:	<p>Approximately 1-2 hours per week</p> <p>This subject requires a commitment by students to complete all tasks to a satisfactory standard to continue with Vocational Engineering Courses in year 11 and 12.</p> <p>Research of safety induction of tools and equipment and completion of online "On-Guard" Software.</p> <p>Completion of all workshop projects and theory within the nominated timeframe.</p> <p>Regular attendance at tutorials.</p>
SPECIAL REQUIREMENTS:	<p>Due to OH&S requirements ALL students participating in this subject are required to wear enclosed leather upper shoes, safety aprons, and safety glasses at all times.</p> <p>Long hair MUST be restrained.</p> <p>Note: Students undergo a routine safety program and throughout the course will be instructed in various safety procedures.</p> <p>Students MUST comply with all safety requirements and procedures to remain in this subject.</p>
POSSIBLE CAREER PATHWAYS:	<p>This subject leads to the Engineering Industry such as Fitter, Machinist, Diesel Fitter, Welder, Boiler Maker, Mechanic, Tool Maker etc.</p>