INDUSTRIAL TECHNOLOGY STUDIES

Status ........................................... AUTHORITY-REGISTERED
QCE Credit Points ......................... 4

RECOMMENDED REQUIREMENTS FOR SUCCESS:
For realistic chance of success students should be experiencing an B or higher in Year 10 IDT or ITN. Graphics skills would be highly desirable.

AIMS
The subject has been designed as a project-based or activity-based course that emphasises using current industry practice and safe technological processes to solve problems or complete tasks in a workshop or simulated workplace environment.

COURSE CONTENT
Projects and practical activities set the context within which the key elements of the course are delivered and provide the means for the consolidation and application of skills and knowledge. They are authentic and credible simulations of real manufacturing projects, and are student-centred to promote confident and self-motivated learners. The course is flexible in order to accommodate new and emerging technologies in the manufacturing industries and the wide range of interests and abilities of the students who take the course.

The subject core is designed to equip students with a basic understanding of the following skills and practices:

• **occupational health and safety**, which must be incorporated into the general delivery of projects; specific aspects are elaborated upon within each strand
• **communication skills** — the ability to communicate using the language of the workplace and the ability to adapt the form of communication to the expected audience; this includes knowledge and understanding of technical vocabulary, safety rules, safety regulations, identification of materials, hand tools, equipment, machines, available resources and methods of construction of practical projects
• **mathematical skills** — the ability to perform fundamental measurements and use techniques of estimation and approximation for practical workshop purposes
• **manipulative skills** — the ability to apply technology and combine physical and sensory skills to operate hand and power tools and other equipment
• **organisational skills** — the ability to prioritise and monitor one's own performance and available resources
• **collaborative skills** — the capacity to interact with other people and work effectively as a member of a team
• **problem-solving skills** — the ability to clarify desired outcomes, maintain focus and respond to faults and difficulties as they arise.

ASSESSMENT
There will be various tasks, practical projects and assessment pieces that students will undertake. These will be assessed against criteria.

In Manufacturing there are three criteria from which a student's exit level of achievement is derived:

• **Knowledge & understanding**
• **Applied processes**
• **Practical skills**.

The criteria are of equal weighting in determining a student’s exit level of achievement.

FUTURE PATHWAYS
Student who excel in this subject may chose to follow a career in the manufacturing industry, pursue trade qualification or move onto further tertiary studies in related fields.

COST:  $90 - Subject Consumables Levy (not included in Student Resource Scheme)

The subject levy assist in subsidising the cost associated with the students undertaking meaningful projects. The high end projects and tasks are design as to engage the students and maximise their outcomes. Costs contribute to dressed timber, fibre glass, finishing products, electronics, consumables and various hardware accessories.