



## TECHNOLOGY - CERTIFICATE II IN ENGINEERING PATHWAYS (VEP)

**QCE CREDIT POINTS:** 4 points

**MEM 20413**

**USER PAYS:** \$60 each year approx. - Project materials for construction of take home products  
Year 11 - Tool box, Meat Mallet, Folding Shovel and Ornamental bike  
Year 12 - Quick release clamp and Brazier.



**TRAINING PROVIDER:** Caloundra State High School (RTO No. 30058)

### SUBJECT INFORMATION

The qualification is intended for people interested in exposure to an engineering or related working environment with a view to entering into employment in that area. This qualification will equip graduates with knowledge and skills which will enhance their prospects of employment in an engineering or related working environment. This Certificate II in Engineering Pathways course is the foundation level course in this industry.

Every student **MUST** wear safety glasses and ear muffs (AS/NZS1337) at all times whilst in the workshop. A class set of these items will be provided or students can buy their own through the Uniform Shop or any other provider.

Core Units of Study	Unit Title
MEM13014A	Apply Principles of occupational Health & Safety in the work environment
MEMPE005A	Develop a career plan for the engineering and manufacturing industry
MEMPE006A	Undertake a basic engineering project
MSAENV272B	Participate in environmentally sustainable work practices

Elective Units of Study	Unit title
MEM16006A	Organise and communicate information
MEM16008A	Interact with computing technology
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
MEMPE001A	Use engineering workshop machines
MEMPE002A	Use electric welding machines
MEMPE003A	Use oxy-acetylene and soldering equipment
MEMPE004A	Use fabrication equipment
MEMPE007A	Pull apart and re-assemble engineering mechanisms
MSAPCI101A	Adapt to work in industry
MSAPMSUP106A	Work in a team

### ASSESSMENT

Students will undertake competency-based assessment towards the achievement of the selected certificate. This is the process of gathering evidence and making judgments on whether the student can consistently demonstrate knowledge and skill and the application of that knowledge and skill to the standard of performance required in the workplace. Students may apply for Recognition of Prior Learning.

### RPL INFORMATION

Students may apply for Recognition of Prior Learning. Please refer to the VET Student Handbook for details of RPL and the application process.

### STUDENT ACTIVITIES INCLUDING LEARNING EXPERIENCES:

Students undertake meaningful and authentic tasks, and reflect on what they have achieved. They will be challenged to produce effective solutions to problems, so that skills are developed.

Please note: workmanship of the students' project cannot be guaranteed, as they are manufactured by students during this course as a learning exercise.

*Disclaimer: The school reserves the right to cancel or suspend the vocational component of the course should it not be able to meet the human resources standards as outlined in the Standards for Registered Training Organisations (2015) or the physical resources as detailed in the relevant training packages.*

*Students who commence after the official start date of the course will be required to complete units of competency already delivered to be eligible to be awarded this qualification at the end of the course. All students will be issued with a Statement of Attainment for the units of competency achieved.*

## TECHNOLOGIES - GRAPHICS (GPH)

**QCE CREDIT POINTS:** 4 points

**AUTHORITY SUBJECT**

**USER PAY FEES:** Nil.

### SUBJECT INFORMATION

Graphics develops students' understanding of design factors and design processes in graphical contexts. Design problems provide settings for units of work where students create graphical representations of design solutions for a range of audiences, including corporate and end-user clients. These design settings are based in the real-world design areas of industrial design, graphic design and built environment design (architecture, landscape architecture and interior design).

### SPECIAL FEATURES OF THE COURSE

Extensive use of Autodesk software – AutoCAD, Inventor and Revit.

COURSE OVERVIEW	
SEMESTER 1	SEMESTER 3
<ul style="list-style-type: none"> <li>Graphic Design – Identity (Logos and branding)</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Design – Mechanical (modifying a tool)</li> <li>Built Environment – Landscape Architecture (redesign parkland)</li> </ul>
SEMESTER 2	SEMESTER 4
<ul style="list-style-type: none"> <li>Industrial Design – Furniture and Homewares (modifying an item of furniture)</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Design – Mechanical (modifying a tool)</li> <li>Built Environment – Landscape Architecture (redesign parkland)</li> <li>Graphic Design – Publications (design magazine layout)</li> </ul>
<b>Assessment Techniques</b> <ul style="list-style-type: none"> <li>Design Folio's</li> <li>Examination – Extended Response</li> </ul>	



## TECHNOLOGIES - CERTIFICATE II IN INFORMATION, DIGITAL MEDIA & TECHNOLOGY (VDG)

**QCE CREDIT POINTS:** 4 points

**ICT20115**

**USER PAY FEES:** Nil.

**ADDITIONAL COSTS:** Students will require additional print balance

**TRAINING PROVIDER:** Caloundra State High School (RTO No. 30058)



### SUBJECT INFORMATION

This entry-level qualification provides the foundation skills and knowledge to use Information, Digital Media Technology in any industry. This competency-based subject explores areas of sustainability, word-processing, spreadsheets, web design, photography, video editing and graphic design.

Code	Unit Title	Code	Unit Title
<b>BSBWHS201</b>	Contribute to health and safety of self and others	<b>ICPDMT321</b>	Capture a digital image
<b>BSBSUS201</b>	Participate in environmentally sustainable work practices	<b>ICPDMT322</b>	Edit a digital image
<b>ICTWEB201</b>	Use social media tools for collaboration and engagement	<b>CUADIG303A</b>	Produce and prepare photo images
<b>ICTICT201</b>	Use computer operating systems and hardware	<b>ICTWEB303</b>	Produce digital images for the web
<b>ICTICT202</b>	Work and communicate effectively in an ICT environment	<b>ICTICT207</b>	Integrate commercial computing packages
<b>ICTICT203</b>	Operate application software packages	<b>ICTWEB302</b>	Build simple websites using commercial programs
<b>ICTICT204</b>	Operate a digital media technology package	<b>CUFPOS201A</b>	Perform basic vision and sound editing

### ASSESSMENT

Students will undertake competency-based assessment towards the achievement of the selected certificate. This is the process of gathering evidence and making judgments on whether the student can consistently demonstrate knowledge and skill and the application of that knowledge and skill to the standard of performance required in the workplace.

### LEARNING EXPERIENCES

Assessment is competency based and therefore no levels of achievement are awarded.

\*Projects \*Simulations \*Observations \*Activities \*Case Studies \*Folios \*Quizzes \* Practical Activities

### RPL INFORMATION

Students may apply for Recognition of Prior Learning. Please refer to VET Student Handbook for details of RPL and the application process.

Students undertake meaningful and authentic tasks, and reflect on what they have achieved. They will be challenged to produce effective solutions to problems, so that skills are developed.

**Disclaimer:** The school reserves the right to cancel or suspend the vocational component of the course should it not be able to meet the human resources standards as outlined in the Standards for Registered Training Organisations (2015) or the physical resources as detailed in the relevant training packages.

Students who commence after the official start date of the course will be required to complete units of competency already delivered to be eligible to be awarded this qualification at the end of the course. All students will be issued with a Statement of Attainment for the units of competency achieved.

## TECHNOLOGIES - INFORMATION PROCESSING & TECHNOLOGY (IPT)

**QCE CREDIT POINTS:** 4 points

**AUTHORITY SUBJECT**

**USER PAY FEES:** Nil.

**ADDITIONAL COSTS:** Students will require additional print balance

### SUBJECT INFORMATION

IPT aims to develop an understanding of the underlying principles of information technologies; skills for the analysis and solution of problems using computers; and an ability to make informed judgements about the social, cultural and economic impacts of technology on society. IPT focuses on programming languages and their applications, focusing on developing applications for a web environment.

### SPECIAL FEATURES OF THE COURSE

Concentrates on the programming elements of computing and the “back end” calculations of the programs that we use and develop.

COURSE OVERVIEW	
SEMESTER 1	SEMESTER 3
<ul style="list-style-type: none"> <li>Algorithms</li> <li>Programming - “Effects on Society”</li> <li>Internet &amp; Viruses</li> </ul>	<ul style="list-style-type: none"> <li>Computing Systems Development and Schema Design</li> <li>Database programming for the web</li> <li>Database Design and Information Systems</li> </ul>
SEMESTER 2	SEMESTER 4
<ul style="list-style-type: none"> <li>Computing Systems Development and Schema Design</li> <li>Database programming for the web</li> <li>Database Design and Information Systems</li> </ul>	<ul style="list-style-type: none"> <li>Web Database Project</li> <li>Artificial Intelligence - Expert Systems</li> <li>Privacy &amp; Security</li> </ul>
<b>Assessment Techniques</b> <ul style="list-style-type: none"> <li>Written exams</li> <li>Extended writing tasks</li> <li>Practical projects</li> <li>Project development documents</li> </ul>	



## TECHNOLOGIES - INFORMATION TECHNOLOGY SYSTEMS (ITS)

**QCE CREDIT POINTS:** 4 points

**AUTHORITY SUBJECT**

**USER PAY FEES:** Nil.

**ADDITIONAL COSTS:** Students will require additional print balance

### SUBJECT INFORMATION

Information Technology Systems is a practical discipline which prepares students to meet the rapid changes in IT and to respond to emerging technologies and trends. Students focus on complex problem solving and detailed projects which emphasise management skills, the ability to work individually and in teams, effective communication, the development of productive relationships with clients, and consideration of the social and ethical issues related to their studies.

### SPECIAL FEATURES OF THE COURSE

Concentrates on the design elements of computing and the “front end” of programs that we use and develop.

COURSE OVERVIEW	
SEMESTER 1	SEMESTER 3
<b>Graphic Design</b> <ul style="list-style-type: none"> <li>• Design principles</li> <li>• Logo design</li> <li>• Typography</li> <li>• Colour psychology</li> </ul>	<b>Web Design</b> <ul style="list-style-type: none"> <li>• Responsive web design</li> <li>• HTML, CSS and jQuery programming</li> <li>• Image editing for the web</li> </ul>
SEMESTER 2	SEMESTER 4
<b>Mobile App Design / Animation</b> <ul style="list-style-type: none"> <li>• Animation techniques</li> <li>• ActionScript programming</li> <li>• Mobile app design</li> <li>• User interface &amp; user experience design</li> </ul>	<b>Video Editing</b> <ul style="list-style-type: none"> <li>• Video composition</li> <li>• Video capture and editing</li> <li>• Special FX (e.g. green screen)</li> <li>• Audio capture and editing</li> <li>• Lighting techniques</li> </ul>
<b>Assessment Techniques</b> <ul style="list-style-type: none"> <li>• Written exams</li> <li>• Extended writing tasks</li> <li>• Practical projects</li> <li>• Project development documents</li> </ul>	

## TECHNOLOGIES - CERTIFICATE II IN MANUFACTURING TECHNOLOGY (VMY)

**QCE CREDIT POINTS:** 4 points

**MSA20208**

**USER PAYS:** \$90 per year approx. - Project materials for construction of take home products

Year 11 – Dartboard Cabinet, Cooler Box

Year 12 – Bedside Table, Fishing Rod Rack, Camping Table or similar



**TRAINING PROVIDER:** Caloundra State High School (RTO No. 30058)

### SUBJECT INFORMATION

The Certificate II in Manufacturing Technology course is essentially contextualized in a Furnishing format, where students complete competencies as listed through a wood bias program and delivery.

Every student **MUST** wear safety glasses and ear muffs (AS/NZS1337) at all times whilst in the workshop. A class set of these items will be provided or students can buy their own through the Uniform Shop or any other provider.

COURSE INFORMATION	
<b>Core</b>	
<b>MSAENV272B</b>	Participate in environmentally sustainable work practices
<b>MSAPOHS200A</b>	Work safely
<b>MSS402001A</b>	Apply competitive systems and practices
<b>MSS402051A</b>	Apply quality standards
<b>MSS402080A</b>	Undertake root cause analysis
<b>Electives</b>	
<b>MSS402002A</b>	Sustain process improvements
<b>MSAPC11295A</b>	Operate manufacturing equipment
<b>MSAPC11296A</b>	Make a small furniture item from timber
<b>CPCCOHS1001A</b>	Work safely in the construction industry
<b>LMFFM2001B</b>	Use Furniture making sector hand and power tools

### ASSESSMENT

Students will undertake competency-based assessment towards the achievement of the selected certificate. This is the process of gathering evidence and making judgments on whether the student can consistently demonstrate knowledge and skill and the application of that knowledge and skill to the standard of performance required in the workplace.

### RPL INFORMATION

Students may apply for Recognition of Prior Learning. Please refer to VET Student Handbook for details for RPL and the application process.

### STUDENT ACTIVITIES INCLUDING LEARNING EXPERIENCES:

Students will undertake competency-based assessment towards the achievement of the selected certificate. This is the process of gathering evidence and making judgements on whether the student can consistently demonstrate knowledge and the application of that knowledge and skill to the standard of performance required in the workplace.

Please note: workmanship of the students' project cannot be guaranteed, as they are manufactured by students during this course as a learning exercise.

**Disclaimer:** The school reserves the right to cancel or suspend the vocational component of the course should it not be able to meet the human resources standards as outlined in the Standards for Registered Training Organisations (2015) or the physical resources as detailed in the relevant training packages.

Students who commence after the official start date of the course will be required to complete units of competency already delivered to be eligible to be awarded this qualification at the end of the course. All students will be issued with a Statement of Attainment for the units of competency achieved.