

# CERTIFICATE II IN ENGINEERING

## Caloundra SHS

TAS version: **27/01/2017**

Delivery period: 2019 – 2020

Approval School RTO training and assessment strategy			
School RTO name	Caloundra SHS	QCAA number	198
Qualification code	MEM20413	National provider number	30058
RTO manager		Chief executive (principal)	
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Date	<b>27/01/2017</b>	Date	<b>27/01/2017</b>

QCAA draft template as at October 2016

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# Section 1 Program overview

1.1 National requirements			
School name	Caloundra SHS		
RTO ID	30058		
QCAA no.	198		
Qualification code	MEM20413		
Qualification title	Certificate II in Engineering Pathways		
Relevant standards	1.1–1.7, 1.8(a), 1.9–1.19, 1.26, 2.2, 5, 8.4		
Training package code	MEM05		
Current release date	15/Dec/2013	Release number:	1
Training package title	Metal and Engineering Training Package		
National register	<a href="http://training.gov.au/home/tga">http://training.gov.au/home/tga</a>		
Companion volume	Enter the hyperlink to the companion volume/s (if relevant). <a href="http://vetnet.education.gov.au/Pages/TrainingPackages.aspx">vetnet.education.gov.au/Pages/TrainingPackages.aspx</a>		
Qualification status	Current	<p><i>Note Standards 1.26b and 1.26a (extracts below).</i></p> <p><b>1.26 b)</b> Where an AQF qualification is <b>no longer current and has not been superseded</b>, all [students'] training and assessment is completed and the relevant AQF certification documentation issued <b>within a period of two years</b> from the date the AQF qualification was removed or deleted from the National Register.</p> <p><b>1.26 a)</b> Where a [qualification] on [the RTO's] scope of registration is <b>superseded</b>, all [students'] training and assessment is completed and the relevant AQF certification documentation is issued or [students] are transferred into its replacement, <b>within a period of one year</b> from the date the replacement [qualification] was released on the National Register.</p>	
Superseded, deleted, or no longer current date	15/12/2014		
Latest date for student completion and AQF certification (Complete only if qualification status ≠ current)	15/11/2020		
TAS development date	27/01/2017	TAS expiry date	15/11/2020
Date of latest industry engagement	16/11/2017	Date of validation	26/11/2018
Delivering and assessing information			
Developed for (Select one only)	Individual student/s <input type="checkbox"/>	If yes, name/s of student/s	

	OR Class cohort <input checked="" type="checkbox"/>	If yes, current number of students enrolled	80
Total number of assessment tools for this qualification	10	Delivery period Start End	30/01/2019 15/11/2020

## 1.2 Qualification

Requirement	Packaging rules	Confirmed by RTOM
Qualification description and job roles	<p>This qualification delivers broad-based underpinning skills and knowledge in a range of engineering and manufacturing tasks which will enhance the graduates' entry-level employment prospects for apprenticeships, traineeships or general employment in an engineering-related workplace.</p> <p>Achievement of competence in units MEM13014A Apply principles of occupational health and safety in a work environment, MSAPMSUP106A Work in a team, MEM16006A Organise and communicate information, MEM16008A Interact with computing technology, MSAENV272B Participate in environmentally sustainable work practices, MEM18001C Use hand tools and MEM18002B Use power tools/hand held operations will provide credit towards a range of manufacturing and engineering trade and production qualifications.</p> <p>Achievement of competence in all of the other units will provide advanced progress towards reaching competence in units contained in other metal and engineering qualifications.</p> <p><a href="http://training.gov.au/Training/Details/MEM20413">http://training.gov.au/Training/Details/MEM20413</a></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## 1.2 Qualification

Packaging rules

The minimum requirements for achievement of the Certificate II in Engineering Pathways are completion of a minimum of twelve (12) units of competency as described below:

- all of the core units of competency listed below
- a **minimum of seven (7)** Group A electives
- a **maximum of one (1)** Group B elective.

### Core units

- select all of the units from this list

Unit code	Unit title
MEM13014A	Apply principles of occupational health and safety
MEMPE005A	Develop a career plan for the engineering and manufacturing industry
MEMPE006A	Undertake a basic engineering project
MSAENV272B	Participate in environmentally sustainable work

### Group A electives

Unit code	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

### Group B Electives

Unit code	Unit title
MSAPCI101A	Adapt to work in industry
MSAPMSUP106A	Work in a team

- Yes  
 No

## 1.3 Delivery and assessment

Requirement	Pre-enrolment information		Confirmed by RTOM
<b>Entry requirements and reasonable adjustments</b> (Adjust as appropriate)	There are no formal qualification entry requirements. Entry requirements for this program include the student's agreement and ability to undertake the following: <ul style="list-style-type: none"> <li>• Demonstrate evidence of language, literacy and numeracy skills at the requisite ACSF level.</li> <li>• Attend and participate in scheduled training and assessment.</li> <li>• Participate in workplace tasks to employer expectations.</li> <li>• Be able to work in an industry environment and handle industry standard equipment.</li> <li>• Comply with the RTO code of conduct requirements, directions on work, and health and safety matters.</li> </ul>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	NA		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	NA		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Mode of delivery</b> (Adjust as appropriate)	<ul style="list-style-type: none"> <li>• Registered Training Organisations (RTOs) offering this qualification will need to have access to basic engineering equipment and facilities, as well as sufficient open plan workshop facilities where long-term projects, perhaps spanning the duration of the learning, can be completed. The teachers/trainers must be experienced with the knowledge and trade skills to successfully facilitate and motivate skills development in the learners. Trainers and assessors must meet the NVR/AQTF trainer and assessor requirements for training and assessment, vocational competency and professional development.</li> </ul> <ul style="list-style-type: none"> <li>• The learning program should be centred around the major project.</li> </ul>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Delivery location</b> (Adjust as appropriate)	Caloundra State High school 88 Queen Street Caloundra 4551 QLD	<i>If work experience is mandatory and travel to another location is required, this information must be included in Section 4.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Program duration</b> (Adjust as appropriate)	Total program duration is 2 years of delivery and assessment. <i>Also include information on timetable allocations for this qualification and independent study time.</i>	<i>School RTOs may only deliver to students enrolled in a Queensland school in Years 10–12.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## 1.3 Delivery and assessment

Requirement	Pre-enrolment information	Confirmed by RTOM
Amount of learning	<p>The 'amount of learning' identifies the notional duration of all activities required for the achievement of the learning outcomes of this program.</p> <p>The nominal volume of learning for this program is:</p> <p><input type="checkbox"/> 1 year <input checked="" type="checkbox"/> 2 years <input type="checkbox"/> 3 years.</p> <p>This includes:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 110 hours <input checked="" type="checkbox"/> 220 hours <input type="checkbox"/> 330 hours of scheduled training and assessment activity</li> <li>one-on-one instruction as required</li> <li>personal study time, either off the job or at home</li> <li>additional language, literacy and numeracy training while enrolled and undertaking full-time school-based studies</li> <li>online learning activities</li> </ul> <p>Total amount of learning: <input type="checkbox"/> 600–1200 hours <input checked="" type="checkbox"/> 1200–2400 hours</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Learning resources	<p>There are sufficient learning resources, equipment and facilities to:</p> <ul style="list-style-type: none"> <li>enable students to meet the requirements for each unit of competency</li> <li>support the number of students undertaking the training and assessment.</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Assessment resources (Adjust as appropriate)	<p>Assessments will be formative and conducted on the job, where skills, knowledge and understanding may be demonstrated in the simulated workplace environment. That is, assessment of knowledge and skills will be integrated with assessment of their practical application.</p> <p>Projects/tasks and work evidence will be progressively gathered by the assessor for units of competency until sufficient valid evidence is gathered to make assessment decisions on competency. Submission of written work is based on the performance requirements of the units of competency. Evidence of skills and knowledge will be gathered simultaneously.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Evidence-gathering conditions (Adjust as appropriate)	<ul style="list-style-type: none"> <li>Will be progressively gathered for groups of units simultaneously.</li> <li>Methods will confirm consistency of performance over time and in a range of workplace-relevant contexts, rather than a single assessment event.</li> <li>Will be by observation of relevant tasks with questioning on underpinning knowledge and, where applicable, training journals and reviews of work products/folios and third party reports.</li> <li>Will be done under the specific assessment conditions required by the units</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No
Work placement arrangements for students	No work placement required	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	No work placement required	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## 1.3 Delivery and assessment

Requirement	Pre-enrolment information	Confirmed by RTOM
<p>Third party arrangements (Adjust as appropriate)</p>	<p>No services are delivered on behalf of the RTO.</p> <p><i>'Third party' means any party that provides services on behalf of the RTO, but does not include a contract of employment between an RTO and its employee.</i></p> <p><i>The RTO ensures that where services are provided on its behalf by a third party the provision of those services is the subject of a written agreement.</i></p> <p><i>The RTO must disclose to the student the name and contact details of any third party that will provide training and/or assessment, and related educational and support services to the student on the RTO's behalf.</i></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Educational and support services</p>	<p>Learners in this cohort are school students.</p> <p>The RTO will schedule supervised training and assessment sessions based on the timetable. Students may negotiate support in addition to scheduled hours, to develop the required skills and knowledge.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Early termination of program</p>	<p>In the event that the RTO loses suitably qualified trainers and assessors and is unable to deliver this program:</p> <ul style="list-style-type: none"> <li>• students will be issued with a statement of attainment for any successfully completed units of competency</li> <li>• any fees paid toward the program will be refunded on a pro rata basis.</li> </ul>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
	<p><a href="https://caloundrashes.eq.edu.au/Curriculum/VocationalEducation/Pages/VocationalEducation.aspx">https://caloundrashes.eq.edu.au/Curriculum/VocationalEducation/Pages/VocationalEducation.aspx</a> VET Student Handbook</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>



## 1.3 Delivery and assessment

Requirement	Pre-enrolment information	Confirmed by RTOM
Transition	<p>This qualification's status on TGA is current at the time of this strategy's expected start date.</p> <p>If this qualification is superseded with a new version before the end of the expected duration of the program, then:</p> <ul style="list-style-type: none"><li>• if practical, students will complete training and assessment and receive any appropriate certificates in the old qualification within 12 months of the release of the new version</li><li>• if this is not practical, students will transition to the new qualification within 12 months and complete their training and assessment in the new version within the expected duration of the program. Credit will be arranged for units completed and deemed as equivalent.</li></ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## 1.4 Certification

Requirement	Description	Confirmed by RTOM
Certificates and Statements of Attainment	<p>If a student is assessed as meeting the requirements of the qualification, and all agreed fees the student owes to the RTO have been paid, then within 30 calendar days of all conditions being met:</p> <ul style="list-style-type: none"> <li>• an <b>AQF certificate and record of results</b> will be issued if the qualification in which the learner is enrolled is complete</li> <li>• a <b>statement of attainment</b> will be issued if the qualification in which the learner is enrolled is partially complete</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Credit arrangements	<p><b>Transitioning from an old version to a new version of a training product</b></p> <p>If the national register (training.gov.au) deems a superseded unit of competency to be equivalent to its new replacement, students may claim credit for a successfully completed superseded unit.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<p><b>If a student already holds a unit of competency</b></p> <p>If a student has a statement of attainment for a unit of competency and it has the same code as a unit of competency making up this program, the student may make a claim for a credit transfer.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Recognition of prior learning (RPL) arrangements	<p>Students may request recognition of prior learning (RPL) assessment. Students are advised of the opportunity to apply for RPL and, if requested, will be provided with an RPL document allowing them to provide verifiable details of prior learning. The evidence will be assessed for currency and against requirements of the units of competency, and an amended program strategy will be prepared, taking into account the student's prior learning.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<p><a href="https://caloundrashes.eq.edu.au/Curriculum/VocationalEducation/Pages/VocationalEducation.aspx">https://caloundrashes.eq.edu.au/Curriculum/VocationalEducation/Pages/VocationalEducation.aspx</a>  <a href="#">VET Student Handbook</a></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reissuing of Certificates and Statements of Attainment	<p>The RTO maintains an auditable-quality register of all AQF qualifications (including statements of attainment) issued and authorised to issue. The register contains sufficient information to identify correctly the holder of the qualification, the AQF qualification by its full title, and date of issue/award/conferral.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<p>The RTO has a policy that permits the replacement of certification documentation, and maintains responsibility for authentication and verification of any replacement certification documentation.</p>	<p><i>The Standards require compliance with the AQF Register and Issuance policies. All RTOs will:</i></p> <ul style="list-style-type: none"> <li>• <i>Maintain an auditable-quality register of AQF qualifications issued (including Statements of Attainment). containing sufficient information to identify correctly</i> <ul style="list-style-type: none"> <li>– <i>the holder of the qualification</i></li> <li>– <i>the AQF qualification by its full title</i></li> <li>– <i>date of issue/award/conferral.</i></li> </ul> </li> <li>• <i>have a policy that permits replacement of certification documentation.</i></li> <li>• <i>be responsible for authentication and verification of any replacement certification documentation.</i></li> </ul> <p><a href="http://www.aqf.edu.au/resources/aqf/">http://www.aqf.edu.au/resources/aqf/</a></p>

## 1.4 Certification

	<a href="http://www.caloundrashes.ed.edu.au/curriculum/seniorsecondary/Year11CurriculumHandbook">www.caloundrashes.ed.edu.au/curriculum/seniorsecondary/Year11CurriculumHandbook</a>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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## 1.4 Certification

Unique Student Identifier (USI)	<p>The school RTO will not issue an AQF certificate, record of results or statement of attainment to a student without having a verified USI for that individual.</p> <p>The consequences of not providing the RTO with a USI have been explained to the student. Each student's USI will be recorded by the RTO in SLIMS before issuance of any AQF credentials.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<p>A student may access their training records and results (transcript) by accessing their USI account online from a computer, tablet or smart phone. For more information, see:  <a href="http://usi.gov.au/Students/pages/default.aspx">http://usi.gov.au/Students/pages/default.aspx</a></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## 1.5 Reporting

Requirement	Description	Confirmed by RTOM
<b>Recording results</b> (Adjust the first three points as appropriate)	<ul style="list-style-type: none"> <li>Evidence-gathering tools are used as evidence of a student's progress toward competency.</li> <li>The interim outcome descriptors of 'Satisfactory' or 'Unsatisfactory' will be used on students' projects and evidence documents.</li> <li>Students may continue to submit evidence until they exit the program.</li> <li>Assessor may determine final outcomes for units of competency at any time, but only after sufficient valid evidence has been gathered and assessed and any pre-requisite units have been successfully completed.</li> <li>RTO management will record final outcomes (usually using the descriptors Competent, Not Competent, Credit Transfer, Superseded or Withdrawn) in Student Data Capture System (SDCS).</li> <li>All final outcomes must be entered into SDCS before the end of the last term of the VET program or immediately after a student exits the program.</li> <li>RTO management reports student enrolment data to QCAA within the first term of the student's commencement of the VET program.</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Student profiles</b> (Adjust the first two points as appropriate)	<ul style="list-style-type: none"> <li>Student profiles are updated by the assessor and are accessible to students on request.</li> <li>Assessors update the profile to confirm an individual student's submission of evidence and record interim and final outcomes.</li> <li>RTO management uses final outcomes recorded in student profiles to update SDCS and/or SLIMS.</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Projects and evidence-gathering instruments</b>	<ul style="list-style-type: none"> <li>All assessment activities, including projects and evidence-gathering tools, are identified by a code and listed in this document.</li> <li>A mapping document provides evidence of how assessment activities, projects and evidence-gathering tools meet the requirements for each unit of competency.</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## Section 2 Core and elective components

List the units that are going to be delivered and assessed as part of this strategy. Engage with industry to confirm the relevance of elective units selected, and record this in Section 7.

**Relevant standards:** 1.1, 1.2, 1.4, 1.7, 1.8(a), 1.12, 3.5, Schedule 5

**Note:** A prerequisite unit may be delivered through an integrated approach with the secondary unit; it does not have to be fully completed before starting the secondary unit. However, to satisfy formal requirements, the prerequisite unit must be signed off prior to the secondary unit

Core and elective units being offered	Unit type	Pre-requisite unit required?
MEM13014A Apply principles of occupational health and safety in the work environment	Core Unit	<input type="checkbox"/>
MEMPE005A Develop a career plan for the engineering and manufacturing industry	Core Unit	<input type="checkbox"/>
MEMPE006A Undertake a basic engineering project	Core Unit	<input type="checkbox"/>
MSAENV272B Participate in environmentally sustainable work practices	Core Unit	<input type="checkbox"/>
MEM16008A Interact with computing technology	Listed Elective	<input type="checkbox"/>
MEM18001C Use hand tools	Listed Elective	<input type="checkbox"/>
MEM18002B Use power tools/hand held operations	Listed Elective	<input type="checkbox"/>
MEMPE001A Use engineering workshop machines	Listed Elective	<input type="checkbox"/>
MEMPE002A Use electric welding machines	Listed Elective	<input type="checkbox"/>
MEMPE003A Use oxy-acetylene and soldering equipment	Listed Elective	<input type="checkbox"/>
MEMPE004A Use fabrication equipment	Listed Elective	<input type="checkbox"/>
MSAPMSUP106A Work in a team	Listed Elective	<input type="checkbox"/>