MEM20422 Certificate II in Engineering Pathways (Formula Student)





Vocational Education Training

| School Code | VEP | | | | |
|---------------------------------|---|---|---------------------|--------------------------------------|--|
| Course Duration | This is a 2 year course delivered in Year 11 and 12 by Formula Student | | QCE Credits | Up to 4 | |
| Subject Type | Vocational Education & Training | | VET Contribution | Certificate II | |
| Entry Requirements | Students must have a passion and/or interest in pursuing a career in the engineering industry. They must have good quality written and spoken communication skills and an enthusiasm/motivation to participate in theory and practical activities. | Registered Training Organisation Provider | | Formula Student RTO Number: 41124 | |
| Course Requirements | | | | | |
| 21 st Century Skills | ICT Skills Communication | | | | |







FORMULA HIGH SCHOOL – RACECAR BUILD PROGRAM

External Registered Training Organisation:

Formula Student®

RTO Number 41124

Subject Description

A course of study in Engineering comprising of a mandatory study area core unit of work, integrated throughout the course of study, and a specified number of units of study, as prescribed by the particular strand or strands chosen, integrated throughout the course of study.

This Engineering course has been designed as a project-based or activitybased course of study with the emphasis on using current industry practice

and safe technological processes to complete tasks through the fabrication and construction of a Formula High School[®] race car in a workshop or simulated workplace environment. 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.

Skills taught are authentic and credible. Students are instructed by the trainers and/or carry out blended learning utilising video instruction to gain an understanding of the task plus underpinning knowledge and skill of what is required as an outcome. The student is assigned a task to manufacture, and the steps required to achieve the outcome. The component manufacture is broken down into the various step by step work tasks. The course is designed to develop knowledge and skills within the engineering and manufacturing industry, from the language used to the processes and methods and the quality assurances around building an item for consumer usage.

This course of study is flexible to accommodate new and emerging technologies in the manufacturing industries and the wide range of interests and abilities of the students who study it.



Course Outline

| Code | Competency | Code | Competency |
|--------------|--|-----------|---|
| MEM13014A | Apply principles of OH&S in the work environment (CORE UNIT) | MEM16006A | Organise and communicate infor- mation |
| MEMPE005A | Develop a career plan for the engineer- ing and manufacturing industry (CORE UNIT) | MEM16008A | Interact with computer technology |
| MEMPE006A | Undertake a basic engineering project (CORE UNIT) | MEM18001C | Use hand tools |
| MSAENV272B | Participate in environmentally sustaina- ble work practices (CORE UNIT) | MEM18002B | Use power tools/hand held opera- tions |
| MEMPE004A | Use fabrication equipment | MEMPE001A | Use engineering workshop machines |
| MSAPMUSP106A | Work in a team | MEMPE002A | Use electric welding machines |

Prerequisites

Students must have completed Year 10. Students must be eligible for VETiS funding. Students will be assessed for eligibility prior to confirmation of enrolment. Students are eligible to complete <u>one</u> VETiS funded qualification whilst at school. For Queensland Government information about VETiS eligibility please see <u>https://desbt.qld.gov.au/training/training-careers/incentives/vetis</u> or contact us for further information.

Assessment Summary

Assessment is carried out taking into account the clustered nature of training and assessment, through observable behaviour assessment by the teacher and questioning either by the trainer or through assessment quizzes. For a student to be assessed as competent in a unit of competency, they must be assessed over time on multiple occasions for each of the Performance Criteria within a Unit of Competency. Students have multiple opportunities for assessment due to the nature of assessment. If it is deemed that the student has had multiple opportunities and is still not able to achieve competency, then the student is determined to be Not Competent.

Safety in the workplace is an important aspect of the course and will be evident in student projects and assessment. Safety glasses must be worn at all times in the workshop. Students must wear steel capped shoes/work boots and supplied PPEs at all times in the workshop. Overalls or long sleeved shirt and trousers will be required for all welding activities.

contact Formula Student for further information:

RTO Code: 41124

Email: info@formulastudent.edu.au; Phone: 0421 751619; https://www.formulastudent.edu.au

Disclaimer: All information contained is accurate at the time of publication.

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Formula High School: Formula Student RTO Code 41124