



CERTIFICATE II IN ENGINEERING PATHWAYS

VET DEPARTMENT



VOCATIONAL CERTIFICATION

Certificate II in Engineering Pathways (MEM20413)

RECOMMENDED ENTRY REQUIREMENTS

2 Semesters of Year 10 ITD
C Standard in Year 10 Mathematics

AIMS AND OBJECTIVES

Certificate II in Engineering Pathways is intended for students 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. Students undertaking this subject should have a keen interest in the engineering field and possess an appreciation of Occupational Health and Safety standards required in a workshop environment.

COURSE OUTLINE

Certificate II in Engineering Pathways will develop trade-like skills but will not attempt to develop trade-level skills. As an example, the outcome level of welding skills from this qualification is not about learning trade-level welding theory and practice; it is about being introduced to welding, how it can be used to join metal and having the opportunity to weld some metal together. Similarly with machining, the outcome will be something produced on a lathe etc, not the theory and practice of machining. The focus will be on using engineering tools and equipment to produce or modify objects. This will be done in a safe manner for each learner and those around them.

Students will be able to have previous experience or study recognised (Recognition of Prior Learning – RPL) which could result in a reduction of nominal hours of study.

To achieve **Certificate II in Engineering Pathways**, students **must** achieve competence in twelve (12) units of competency.

Code	Core Units of Competency
MEM13014A	Apply principles of occupational health and 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
Code	Elective Units of Competency
MEM16006A	Organise and communicate information
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
MSAPMSUP106A	Work in a team

QCE Credits on successful completion – 4.

ADDITIONAL INFORMATION

Safety Requirements:

- Sturdy footwear consisting of an impervious upper are essential to be worn in all classes (non-steel cap safety boots eg T-Boot).
- A long sleeve work shirt must be worn when welding and it is highly recommended that students wear a work shirt for all practical lessons.
- The senior workshops at Ingham State High School require safety glasses to be worn at all times and students are required to supply their own glasses. As an option, students may purchase safety glasses from the department at a nominal cost.

Subject Charges:

- There will be a charge of \$130 to cover the cost of materials and consumables used by students.
- Projects made become the student's own property to take home once all charges have been paid.