

MEM30319

## Certificate III in Engineering – Fabrication Trade

(Welding)



**DURATION**  
Up to 48 Months  
over 4 Stages



**DELIVERY MODEL**  
Workplace

### Course Description

Offered as a trade recognition option, this apprenticeship pathway provides the skills and knowledge to work with heavy gauge steel: cutting, shaping, assembling and welding. It also includes the production, fabrication and development of items manufactured from plate materials, generally in steel of varying thickness but can also involve non-ferrous materials. It also requires the construction or repair of metal products by joining parts using a variety of welding methods either manually or by machine.

Job outcomes may include 1st Class Welder; Boilermaker

The pathway selected by ASG contains 31 units of competency but this can be adjusted to meet individual learner needs, provided packaging rules are met. It is available as a Recognition of Prior Learning (RPL) pathway.

### Course Fees

A student co-contribution fee is required in accordance with QLD Government User Choice Policy.

### Course Structure

12 Core Units  
19 Elective Units

### Core Units

- **MEM09002:** Interpret technical drawing
- **MEM11011:** Undertake manual handling
- **MEM12023:** Perform engineering measurements
- **MEM12024:** Perform Computations
- **MEM13015:** Work safely and effectively in manufacturing and engineering
- **MEM14006:** Plan work activities
- **MEM16006:** Organise and communicate information
- **MEM16008:** Interact with computing technology
- **MEM17003:** Assist in the provision of on the job training
- **MEM18001:** Use hand tools
- **MEM18002:** Use power tools/hand held operations
- **MSMENV272:** Participate in environmentally sustainability work practices

### Elective Units

- **MEM05004:** Perform routine oxy fuel gas welding
- **MEM05005:** Carry out mechanical cutting
- **MEM05007:** Perform manual heating and thermal cutting
- **MEM05011:** Assemble fabricated components
- **MEM05012:** Perform routine manual metal arc welding
- **MEM05015:** Weld using manual metal arc welding process
- **MEM05016:** Perform advance manual metal arc welding process
- **MEM05017:** Weld using gas metal arc welding process
- **MEM05018:** Perform advanced welding using gas metal arc welding process
- **MEM05019:** Weld using gas tungsten arc welding process
- **MEM05020:** Perform advanced welding using gas tungsten arc welding process
- **MEM05049:** Perform routine gas tungsten arc welding
- **MEM05050:** Perform routine gas metal arc welding
- **MEM05051:** Select welding processes
- **MEM05052:** Apply safe welding practices
- **MEM12007:** Mark off/out structural fabrications and shapes
- **MEM05008:** Perform advanced manual thermal cutting, gouging and shaping
- **MEM05036:** Repair, replace and/or modify fabrications
- **MEM18055:** Dismantle, replace and assemble engineering components