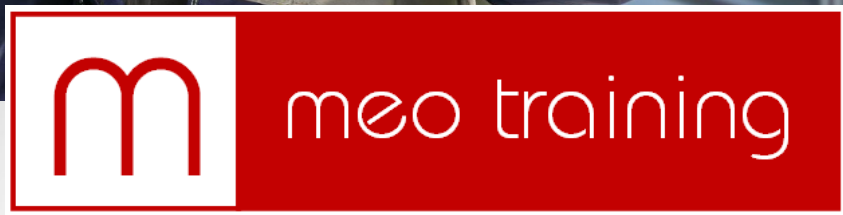




**Certificate III in
Instrumentation
and Control
UEE 31220**

(release 1)



**Course
Brochure**

**Scope:**

This qualification provides competencies to select, install, set up, test, fault find, repair and maintain systems and devices for measurement and recording of physical/chemical phenomenon and related process control. It provides certified electricians with a dual trade in electrical / instrumentation, which is a skill in high demand.

Career Outcomes:

This qualification provides students a dual trade in Electrical / Instrumentation and comprehensive knowledge and skills in Instrumentation, PID Controllers, HMI's, Control Valves and PLC programming. Work pathways include industries such as waste/water management, oil/gas including coal seam gas and coal, mining, pharmaceutical, automotive, breweries, cement, paper industries, and manufacturing.

Entry Requirements / Eligibility:

The entry requirement for this qualification is:

- UEE30820 Certificate III in Electrotechnology Electrician

Or

- a current 'Unrestricted Electricians Licence' or its equivalent issued in an Australian state or territory.

Students must have at least 1 year experience in the field to complete the qualification in the minimum amount of time advertised. Less experienced learners will need more time – contact us to discuss each individual situation. Eligible students must be over 18 years old and have appropriate AQF Level Language, Literacy and Numeracy skills.

Structure

Our flexible delivery allows students to progress at their own pace, therefore the duration will vary with experience and capabilities of different students.

The recommended duration of this qualification is 213h, for students that need to complete all the 17 core units + 3 elective units that are part of this qualification (6 of the core units are always credit transferred from the Australian Electrical Licence).

Students that have a Cert. IV in Electrical instrumentation (UEE40420 or 40411) are eligible for Credit Transfer for 6 more core units, having to complete only 11 core units + 3 elective units.

Price

The price of this qualification is 6000AUD (full qualification).



Course Outline

This qualification is made up of 23 core units and a 3 elective units of competency. from the 23 core units, 6 are credit transferred from the Australian Electrical Licence (UEE30811 or equivalent), leaving a total of 17 core units and 3 elective units to be completed.

For the students that have already completed a Cert. IV in Electrical Instrumentation (UEE40420), 6 more units can be credit transferred, leaving a total of 11 core units and 3 elective units to be completed.

The table below shows the list of units to be completed as part of the Cert. III in Instrumentation and Control. The units highlighted in red are the units that are credit transferred from the electrical licence and the ones in blue are the ones credit transferred from the Cert. IV in Electrical Instrumentation.



Unit Code	Unit Name
Core Units	
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace
UEECD0016	Document and apply measures to control WHS risks associated with electrotechnology work
UEECD0019	Fabricate, assemble and dismantle utilities industry components
UEECD0020	Fix and secure electrotechnology equipment
UEECD0043	Solve problems in direct current circuits
UEECD0045	Solve problems in multiple path extra-low voltage (ELV) a.c. circuits
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications
UEECO0009	Participate in instrumentation and control work and competency development activities
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers
UEEIC0021	Find and rectify faults in process final control elements
UEEIC0022	Install instrumentation and control apparatus and associated equipment
UEEIC0023	Install instrumentation and control cabling and tubing
UEEIC0029	Set up and adjust PID control loops
UEEIC0030	Set up and adjust advanced PID process control loops
UEEIC0031	Set up and configure human-machine interface (HMI) and industrial networks
UEEIC0038	Solve problems in density/level measurement components and systems
UEEIC0039	Solve problems in flow measurement components and systems
UEEIC0041	Solve problems in pressure measurement components and systems
UEEIC0043	Solve problems in temperature measurement components and systems
UEEIC0047	Use instrumentation drawings, specifications, standards and equipment manuals
UEEIC0048	Verify compliance and functionality of instrumentation and control installations
UEERE0001	Apply environmentally and sustainable procedures in the energy sector
UEERL0004	Disconnect - reconnect electrical equipment connected to low voltage (LV) installation wiring
Elective Units Group B	
UEECS0033	Use engineering applications software on personal computers
UEEIC0004	Calibrate, adjust and test measuring instruments
UEEIC0046	Troubleshoot process control systems