Nationally Recognised Training

Diploma of Electrical and Instrumentation

UEE 50220

(release 1)

meo training

Course Brochure

Scope:

This qualification covers competencies to develop, select, install, commission, maintain and diagnose faults/malfunctions on electrical, instrumentation and control equipment and systems.

Career Outcomes:

This course provides comprehensive knowledge and skills in instrumentation, PID Controllers, HMI's, Control Valves, PLC programming, microcontrollers and specification writing. 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 20 units that are part of this qualification.

Students that have a Certificate III in Instrumentation and Control (UEE31220 or UEE31211) will have Credit transfer to 13 units, so they will only need to complete a total of 7 units.

Students that have a Cert. IV in Electrical Instrumentation (UEE40220 or UEE40411) + a Certificate III in Instrumentation and Control (UEE31220 or UEE31211) will have Credit transfer to 13 units, so they will only need to complete a total of 3 units.

Price

The price of this qualification is 8000AUD (full qualification – 20 units).

Course Outline

This qualification is made up of 18 core units and 2 elective units.

Students that have a Certificate III in Instrumentation and Control (UEE31220 or UEE31211) will have Credit transfer to 13 units (in red at table below), so they will only need to complete a total of 7 units (units in white + units in blue).

Students that have a Cert. IV in Electrical Instrumentation (UEE40220 or UEE40411) + a Certificate III in Instrumentation and Control (UEE31220 or UEE31211) will have Credit transfer to 13 units(in red + blue at table below), so they will only need to complete a total of 3 units (units in white).

Unit Code	Unit Name
Core Units	
UEECD0010	Compile and produce an energy sector detailed report
UEECD0024	Implement and monitor energy sector WHS policies and procedures
UEECD0027	Participate in development and follow a personal competency development plan
UEECD0060	Write specifications for electrotechnology engineering projects
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
UEERE0013	Develop strategies to address environmental and sustainability issues in the energy sector
Elective Units Group C	
UEEIC0015 OR UEEIC0026	Develop, enter and verify word and analogue control programs for programmable logic controllers OR Provide solutions to fluid circuit operations
Elective Units Group D	
UEEIC0010	Develop and test code for microcontroller devices