

UEE31211 - CERTIFICATE III IN INSTRUMENTATION AND CONTROL

WHO IS THIS COURSE AIMED AT?

The Certificate III course is aimed at those who would like to enhance their PLC, HMI and process instrumentation skills giving them the edge to work in oil & gas or mineral processing or food any other industry of preference –with a focus field instrumentation and PLC and HMI interfaces. The candidate will need to complete a log sheet documenting hours of work experience in the instrumentation field to attain this full qualification.



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.

ELIGIBILITY FOR COURSE ENROLMENT:

Candidates must hold a current Unrestricted Electrical licence.

LOCATION

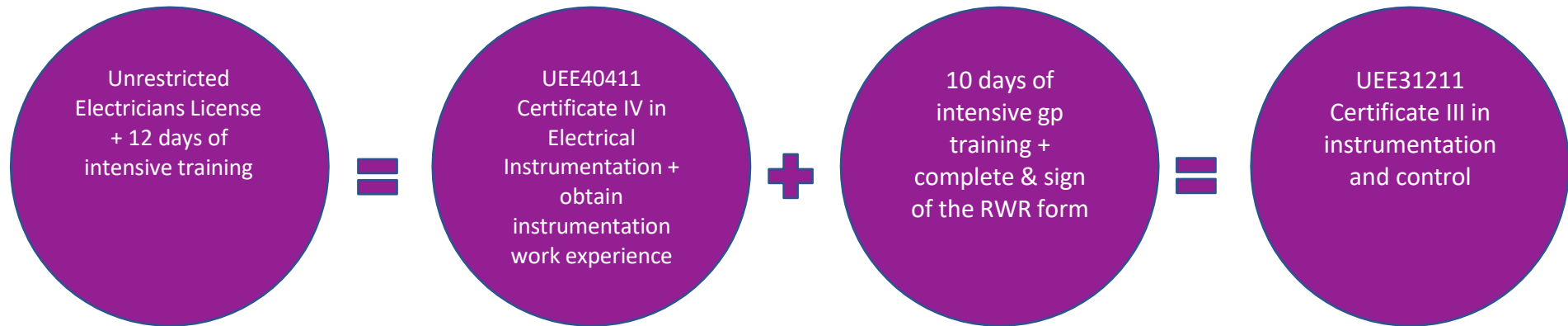
Delivered at one of PMV's national training centres (Perth and Brisbane), or at a client's facility.

COURSE DURATION

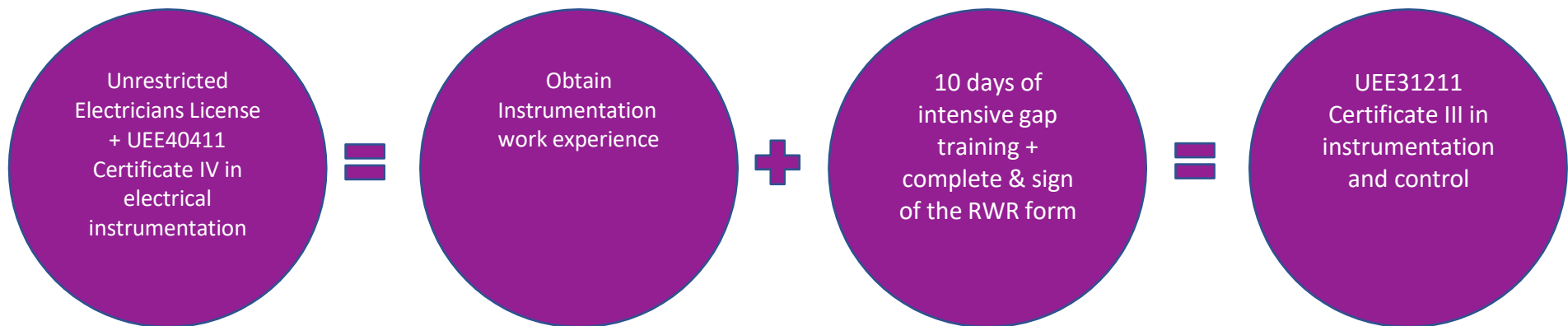
Six days + Break + Six days intensive format

PATHWAYS:

1) If you are an Electrician with limited / no Instrumentation experience we recommend you complete UEE40411 Certificate IV in Electrical Instrumentation. This will give you the exposure you require to apply for work in Instrumentation and then proceed onto UEE31211 Certificate III in Instrumentation and Control:

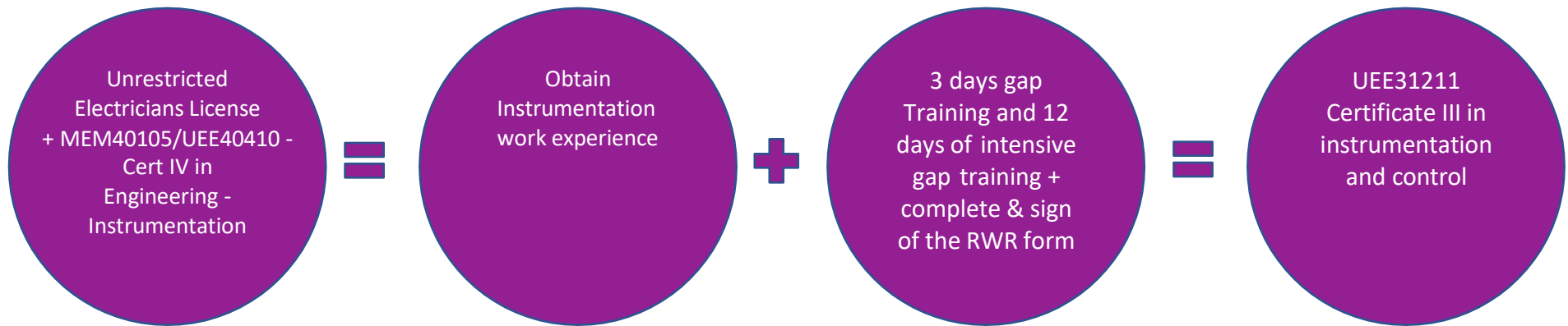


2) If you currently hold UEE40411 - Certificate IV in Electrical Instrumentation:





3) If you currently hold MEM40105- Cert IV in Engineering Instrumentation OR :UEE40410 Cert IV in Electrical Instrumentation



4) If you can show evidence of extensive Instrumentation experience: ie more than 10 years





Course Cost: \$4,000.00 (GST Free)

WHY CHOOSE PROJECT MANAGEMENT VISION (PMV)?

- Our courses are fast tracked (12 days) to cater for your busy schedule.
- All our courses have been developed in consultation with the industry experts.
- You will undergo one on one practical training with industry experienced, qualified Instrument and Electrical Professional Trainers
- You will be undertaking hands on practical training in the following technologies on a purpose-built instrumentation skid/ facilities *and control system, in the following format:*
 1. Pressure (suppression/elevation of transmitter)
 2. Level Radar / Ultrasonic configuration
 3. Capacitance level configuration
 4. Flow - configuration and control
 5. Calibration of valves
 6. Temperature (RTD / Thermocouples)
 7. Program digital and analog PLC **and HMI**. Download, test and fault find PLC program on PLC hardware **and HMI**
 8. Configuration of smart devices via HART Modem and Hand-Held Configurator,
 9. Reading P&ID and 2 and 4 Wire loop drawings. Verify the drawings against as installed equipment
 10. Calibration of the field instruments; installing instruments; fault finding; tuning loops from a control system
 11. Understanding how to test that Magnetic flow meter are operational

TRAINING METHODS:

Blended delivery of theory and practical training with what you are likely to see in a typical industrial environment.

COURSE CONTENT:

UEENEEG105A - Those holding an 'Unrestricted Electrical Licence' or equivalent issued in an Australian State or Territory meets the requirements of this unit and its pre-requisite requirements.

I.E All units' annotated "Electrical licence" will be Credit Transferred.

<http://training.gov.au/Training/Details/UEE31211>

Core Competency Standard Units All Core competency standard units to be achieved		Delivery Method
UEENEEC024B	Participate in instrumentation and control work and competency development activities	Training and experience



UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace	Electrical licence
UEENEEE102A	Fabricate, assemble and dismantle utilities industry components	Electrical licence
UEENEEE104A	Solve problems in d.c. circuits	Electrical licence
UEENEEE105A	Fix and secure electrotechnology equipment	Electrical licence
UEENEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications	Electrical licence
UEENEEE119A	Solve problems in multiple path extra low voltage (ELV) a.c. circuits	Training and experience
UEENEEE137A	Document and apply measures to control OHS risks associated with electrotechnology work	Electrical licence
UEENEEI101A	Use instrumentation drawings, specification, standards and equipment manuals	Cert IV E&I
UEENEEI102A	Solve problems in pressure measurement components and systems	Cert IV E&I
UEENEEI103A	Solve problems in density/level measurement components and systems	Cert IV E&I
UEENEEI104A	Solve problems in flow measurement components and systems	Cert IV E&I
UEENEEI105A	Solve problems in temperature measurement components and systems	Cert IV E&I
UEENEEI106A	Set up and adjust PID control loops	Training and experience
UEENEEI107A	Install instrumentation and control cabling and tubing	Training and experience
UEENEEI108A	Install instrumentation and control apparatus and associated equipment	Training and experience
UEENEEI110A	Set up and adjust advanced PID process control loops	Training and experience

UEENEEI111A	Find and rectify faults in process final control elements	Training and experience
UEENEEI112A	Verify compliance and functionality of instrumentation and control installations	Training and experience
UEENEEI113A	Setup and configure human-machine interface (HMI) and industrial networks	Training and experience
UEENEEI150A	Develop, enter and verify discrete control programs for programmable controllers	Cert IV E&I
UEENEK142A	Apply environmentally and sustainable procedures in the energy sector	Electrical licence
UEENEEP013A	Disconnect - reconnect control devices connected to low voltage installation wiring	Training and experience
Group B - Qualification Elective Units		Delivery Method
UEENEEI104A	Use engineering applications software on personal computers	Training and experience
UEENEEI114A	Trouble shoot process control systems	Training and experience
UEENEEI117A	Calibrate, adjust and test measuring instruments	Training and experience

COURSE OUTCOMES:

A) Full qualification - UEE31211 Certificate III in Instrumentation and Control

Candidates who are successfully competent in both theoretical and practical training, completing all units of competency in the training package and providing their 'Unrestricted Electrical licence, Credit transfer from UEE40411 Certificate IV in Electrical Instrumentation and their Requisite Work Experience form (signed off by their work supervisor and verified by PMV) will receive this qualification.

B) Statement of Attainment (SOA) - UEE31211 Certificate III in Instrumentation and Control

This Statement is issued to a student who has successfully completed one or more units of competency but does not meet the requirements for a full qualification (as specified in the training package) and to Graduate Electrical Engineers.