

# UEE42211 Certificate IV in Instrumentation and Control

This course is designed for qualified electricians holding a current Electrical licence looking to upgrade their qualifications to work in the instrumentation and control industry as instrument technicians.

You will learn how to select, install, set up, test, fault find, repair, maintain and commission systems and devices for measurement and recording of physical/chemical phenomenon and related process control systems.

The course is delivered through classroom and via a state of the art workshop with purpose built instruments for undertaking measurements and assessment exercises

## Course Delivery

The course is typically delivered in a series of one or two week blocks of face to face classroom and workshop instruction.

## Course costs

A Statement of Fees and Charges for all LE Industry Services courses is available for download at: <http://www.leindustrieservices.com/page6.aspx>

Participants undertaking study in Victoria may be eligible for funding assistance. Information about government eligibility can be found at <http://www.education.vic.gov.au/training/learners/vet/pages/funding.aspx>

## Prerequisites

There are no entry requirements for this qualification. Ideally participants will be qualified electricians holding a current Electrical licence and a minimum of 5 years on the job experience in their trade or similar.

## Skills Recognition

The Skills Recognition process (RPL and Credit Transfer) is designed to recognise current skills and knowledge as they are applied to relevant work situations in line with the particular competency. To obtain recognition you must present evidence that is valid and verified as being an accurate representation of your workplace competency.

See “How to apply for RPL” on LE Industry Services web page for further information.

## Recommended Course Structure

This is a post trade qualification targeted at providing specialist electrical instrumentation skills and knowledge for licensed electricians, having said that, this course is made up of a total of twenty seven (27) core units of which a number are specific to instrumentation as outlined below.

UEENEEE038B	Participate in Instrumentation and control work and competency development activities
UEENEEE101A	Apply OHS regulations, codes and practices in the workplace
UEENEEE102A	Fabricate, dismantle and assemble utilities industry components
UEENEEE104A	Solve problems in DC circuits
UEENEEE105A	Fix and secure electro technology equipment
UEENEEE107A	Use drawings, diagrams, schedules and manuals
UEENEEE117A	Implement and monitor energy sector OHS policies and procedures
UEENEEE119A	Solve problems in multiple path extra low voltage (ELV) a.c. circuits
UEENEEE124A	Compile and produce an energy sector detailed report
UEENEEE137A	Document and apply measures to control OHS risks associated with electrotechnology work
UEENEEI101A	Use instrumentation drawings, specifications, standards and equipment manuals
UEENEEI102A	Solve problems in pressure measurement component and systems
UEENEEI103A	Solve problems in density/level measurement components and systems
UEENEEI104A	Solve problems in flow measurements components and systems
UEENEEI105A	Solve problems in temperature measurement components and systems
UEENEEI106A	Set up and adjust PID control loops
UEENEEI107A	Install process instrumentation and control cabling and tubing
UEENEEI108A	Install process control apparatus and associated equipment
UEENEEI110A	Set up and adjust advanced PID process control loops
UEENEEI111A	Find and rectify faults in process final control elements
UEENEEI112A	Verify compliance and functionality of instrumentation and control installations
UEENEEI113A	Setup and configure human-machine interface (HMI) and industrial networks
UEENEEI124A	Fault find and repair analogue circuits and components in electronic control systems
UEENEEI139A	Diagnose and rectify faults in digital controls systems
UEENEEI150A	Develop, enter and verify discrete control programs for programmable controllers
UEENEEK145A	Implement and monitor energy sector environmental and sustainable policies and procedures
UEENEEP013A	Disconnect – reconnect control devices connected to low voltage installation wiring

## Typical Elective Units:

UEENEEE009B	Comply with scheduled and preventative maintenance program processes
UEENEEI104A	Use engineering applications software on personal computers
UEENEEI122A	Assist in commissioning process and instrumentation control systems
UEENEEI117A	Calibrate, adjust and test measuring instruments
UEENEEI151A	Develop, enter and verify word and analogue control programs for programmable logic controllers.

## Assessment

Participants will be required to complete written and practical assessment tasks within and outside of classroom training time. Each Unit of Competency requires assessment activities which fully addresses all Elements and Performance Criteria. The activities are both theoretical and practical to confirm the participants required skills and underpinning knowledge

## Opportunities for Further Study

Diploma of Instrumentation and Control Engineering  
Diploma of Electronics and Communications Engineering

## Certification

This qualification is recognised within the Australian Qualifications Framework.

A certificate will be awarded and a transcript of results will be issued upon successful completion of the course.

Any participant who withdraws or does not complete the course for any reason will be issued with a Statement of Attainment for the units which they have demonstrated competence

For more information please contact

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