



# Electrical Installation Testing

## Pre-Requisites

Electrician's Licence, Electrical (supervised) worker's licence. or 4th yr Electrical Apprentice.

## Course Duration

1 day (8am-4pm)

## Mode of Study

On-campus

## Course Requirements

You are required to provide your own testing equipment which you are familiar with.

## Dates, Cost and Registration

Course dates, fee information including NECA member discounts and registration can be found at [www.necaeducation.com.au/electricaltesting](http://www.necaeducation.com.au/electricaltesting)

## State of the art facilities

NECA Education & Careers has a purpose built state-of-the-art training facility. Boasting cutting edge technology and equipment to support today's interactive learning environment giving you access to the current tools of the trade.

## Industry Connection

NECA Education & Careers is the only Victorian Registered Training Organisation (RTO) that is electrical industry owned and operated. This allows for industry input into curriculum ensuring you are industry ready.

## Course Information

Electricians and RECs have a legal obligation to test and certify that their electrical work complies with relevant standards. It is essential that you or your employees have the essential testing skills so that you can test and sign off on COES with confidence.

This course is designed to refresh the testing skills and provide a clear understanding and methodology for testing of the 6 mandatory tests required under AS/NZS 3000: 2007 which now includes IR testing of electronic equipment in electrical installations, Residual Current Devices and Fault Loop Impedance. The course also covers Voltage Drop, Faults on the MEN system and Fault Current.

It involves both a theory and practical component. *The testing course forms part of the three day Construction Wiring course, however, can still be undertaken as a one day course.*

The course covers, but not limited to:

- Understanding the standards and regulations
- Why test for correct circuit connections, Earth Fault Loop Impedance and RCD's
- Earth continuity choices, testing main earth using trailing lead
- Testing protective earths and bonds using trailing lead
- Earth conductor values and equipotential bonding of water and pipes
- Testing options, and why to test
- Mandatory tests
- Why test earth continuity
- Why test insulation resistance and polarity
- Fault loop examples and testing insulation resistance
- Testing mains polarity using fixed resistors
- Testing metered mains polarity using fixed resistors
- Testing main switch/circuit breaker operation/interconnections
- Testing socket outlet polarity/earthing/switching/legend/interconnections
- Testing earthed or bonded items from a socket outlet and testing circuit neutral interconnections
- Finalise dead testing and live testing
- Using fixed resistors
- Checking voltage drop, Fault current ratings, RCD's.