



ENGINEERING EDUCATION AUSTRALIA

RELEVANT / FLEXIBLE / TRUSTED



AS/NZS 3000 - THE WIRING RULES

Course Duration: One Day

Overview

This course examines the Australian standard for electrical installations, AS/NZS 3000:2018 and how to apply it in the workplace.

The standard is mandatory to follow as it is called up in the legislation of all Australian states and territories. In an effort to continuously improve safety and efficiency, an updated edition was published in June 2018.

During this course, participants will examine the fundamental principles and installation practices outlined in the standard, the changes made to the 2018 edition, and the legislation that makes the standard mandatory.

Target audience

This course is suitable for designers of electrical installations and electrical engineers across all industries.

Benefits

- Comply with Australian legislation
- Ensure designs are safe to implement
- Keep up-to-date with the latest edition of AS/NZS 3000

Learning outcomes

- Understand the core electrical safety concepts outlined in AS/NZS 3000:2018 and associated standards
- Apply the standard in practice and use a range of methods to ensure electrical safety
- Understand the legislation that makes AS/NZS 3000 mandatory

Build Chartered competencies

This workshop builds skills and knowledge in the following Engineers Australia Chartered status competencies*:

6. Identify, assess and manage risks
7. Meet legal and regulatory requirements
12. Advanced engineering knowledge

Full course outline

AS/NZS 3000:

- Review the scope and application
- Examination of the definitions of terms used
- Review the fundamental principles
- Detailing the design requirements
- Specifying how to select electrical equipment
- Detailing the High Level safety requirements
- Establishing the "deemed to comply" status of AS/NZS 3000 Pt. 2 and AS/NZS 3001
- Providing a mechanism for acceptance of alternative designs
- Detailing the responsibilities, documentation and verification criteria for designers
- Review the changes in the 2018 edition

The course will also cover the following areas of designing for electrical installations:

- Requirements for alterations, additions and repairs
- Discrimination/selectivity
- Access
- RCD's
- Achieving safety by using ELV
- Size of neutral conductors
- Voltage drop
- Wiring protection
- Segregation of different circuits
- Preventing spread of fire
- MEN system
- Wet Areas
- Earthing
- Arc faults and their mitigation
- Generators
- Photovoltaic systems
- HV installations and AS2067
- Standards to be complied with
- Earth Fault loop impedance
- DC requirements

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**Completing this workshop does not automatically guarantee a competency, it provides participants with the underpinning knowledge required to develop specific Chartered competencies.*