



Course

Power System Protection

ELEC4617 | 6 Units of Credit

Overview

This course is ideally suited to electrical engineering students planning to pursue a career in Power Engineering. It provides an in-depth coverage on the fundamental aspects of power system protection against electrical faults, vital for the reliable, secure and safe operation of the electricity generation / transmission / distribution networks.

Topics covered include: Fundamental protection concepts, protection schemes for various power system configurations. Fault current calculations: review of sequence components, symmetrical and unsymmetrical faults. Protection devices: fuses, circuit breakers, relays; operating principles, device rating determination, relay setting and coordination. Instrument transformers (CTs and VTs): selection, transient performance. Distance protection, protection signalling. Protection of generators, transformers, transmission lines, busbars, feeders. The class will also discuss emerging issues and challenges in the power system protection field related to increasing penetrations of distributed generation and intelligent, self-healing networks.

Faculty

Faculty of Engineering

School

School of Electrical Engineering & Telecommunications

Study Level

Undergraduate

Offering Terms

Term 2

Campus

Kensington

Delivery Mode

Fully on-site

Indicative contact hours

6

Timetable

[Visit timetable website for details](#)

Conditions for Enrolment

Pre-Requisite: elec4612

Course Outline

To access course outline, please visit:

[ELEC4617 Course Outline](#)

Fees

Commonwealth Supported Students \$1191

Domestic Students \$5970

International Students \$5970

DISCLAIMER

Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the [fee website](#).

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.

Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

[Pre-2019 Handbook Editions](#)

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Authorised by Deputy Vice-Chancellor (Academic)

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