ELEC 2014 MATHEMATICS FOR ELECTRICAL ENGINEERS 1

Credit Points 10

Legacy Code 301338

Coordinator Stephen Weissenhofer (https://directory.westernsydney.edu.au/search/name/Stephen Weissenhofer/)

Description This unit will be offered at Engineering Innovation Hub - Hassall St, Parramatta campus. The unit combines two maths components, Vector Calculus and Complex Analysis, both of which incorporate calculus and linear algebra and have many applications to physics, engineering and mathematics, particularly electrical engineering. Vector Calculus involves calculus in two and three dimensions, theory of curves, vector functions and partial derivatives, two- and three-dimensional integration, line integrals and curl and divergence. Complex Analysis extends calculus from real numbers to complex numbers, and develops the theory of analytic functions, complex integration and Cauchy's theorem, series expansions, the residue theorem and applications to real improper integrals and trigonometric integrals.

School Eng, Design & Built Env

Discipline Electrical Engineering

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 2 subject

Pre-requisite(s) MATH 1035

Teaching Periods