Overview

Several Variable Calculus: Vectors, differential calculus of curves in R3 and surfaces, Taylor series for functions of two variables, critical points, local maxima and minima. Lagrange multipliers, integral calculus for functions of several variables using various co-ordinate systems, conservative vector fields and line integrals, Green's Theorem in the plane, divergence and curl, surface integrals, Stokes' Theorem, Gauss' divergence Theorem. Complex Analysis: Complex numbers, simple mapping problems, differentiation theory for complex functions, Cauchy Riemann equations, analytic functions, the elementary functions, Integration Theory for complex functions, Cauchy's Theorem and the Cauchy integral formulae, Taylor series and Laurent Series, residues, evaluating real integrals and trigonometric integrals using residues. Note: Available only to students for whom it is specifically required as part of their program.
Faculty of Science

School of Mathematics & Statistics

Study Level
Undergraduate

Offering Terms
Term 3

Campus
Kensington

Delivery Mode
Fully on-site

Indicative contact hours
6

Timetable
Visit timetable website for details
Conditions for Enrolment

Prerequisite: MATH1231 or DPST1014 or MATH1241 or MATH1251; Exclusion: MATH2011, MATH2111, MATH2510, MATH2610, MATH2520 & MATH2620
Course Outline

To access course outline, please visit:

MATH2069 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
© UNSW Sydney (CRICOS Provider No.: 00098G), 2019. The information contained in this Handbook is indicative only. While every effort is made to keep this information up-to-date, the University reserves the right to discontinue or vary arrangements, programs and courses at any time without notice and at its discretion. While the University will try to avoid or minimise any inconvenience, changes may also be made to programs, courses and staff after enrolment. The University may also set limits on the number of students in a course.

Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179