COURSE DETAIL

MATHEMATICAL COMPUTING
Country Australia
Host Institution University of Sydney
Program(s) University of Sydney
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mathematics
UCEAP Course Number 127
UCEAP Course Suffix
UCEAP Official Title MATHEMATICAL COMPUTING
UCEAP Transcript Title MATH COMPUTING
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course provides an introduction to programming and numerical methods. Topics covered include computer arithmetic and computational errors, solution of nonlinear equations, systems of linear equations, numerical integration and differentiation, interpolation and approximation, initial value problems for ordinary differential equations. This course will cover basic concepts of numerical optimization and applications such as for instance numerical optimization in the rapidly evolving domain of machine learning.

Language(s) of Instruction
English

Host Institution Course Number
MATH3076

Host Institution Course Title
MATHEMATICAL COMPUTING

Host Institution Course Details
https://www.sydney.edu.au/courses/units-of-study/2020/math/math3076.html

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

Course Last Reviewed
2024-2025

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