

COURSE DETAIL

MATHEMATICAL METHODS IN PHYSICS I

Country

Singapore

Host Institution

National University of Singapore

Program(s)

National University of Singapore

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics Mathematics

UCEAP Course Number

134

UCEAP Course Suffix

A

UCEAP Official Title

MATHEMATICAL METHODS IN PHYSICS I

UCEAP Transcript Title

MATH MTHD/PHYSICS I

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course provides the necessary mathematical skills for other physics courses. Topics include: complex numbers and hyperbolic functions; single-variable calculus; Taylor series; first order and second order ordinary differential equations; vectors and matrices; eigenvalues and eigenvectors; partial differentiation; multiple integrals; and physical applications. The course requires students to take prerequisites.

Language(s) of Instruction

English

Host Institution Course Number

PC2174A

Host Institution Course Title

MATHEMATICAL METHODS IN PHYSICS I

Host Institution Course Details

<https://nusmods.com/courses/PC2174A/mathematical-methods-in-physics-i>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Physics

Course Last Reviewed

2024-2025

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