

## 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 Campus**

### **Host Institution Faculty**

### **Host Institution Degree**

### **Host Institution Department**

Physics

[Print](#)