

# COURSE DETAIL

## MATHEMATICS AND COMPUTING 1

**Country**

United Kingdom - England

**Host Institution**

Imperial College London

**Program(s)**

Imperial College London

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Mechanical Engineering Mathematics Engineering

**UCEAP Course Number**

112

**UCEAP Course Suffix**

Y

**UCEAP Official Title**

MATHEMATICS AND COMPUTING 1

**UCEAP Transcript Title**

MATH&COMPUTING 1

**UCEAP Quarter Units**

12.00

**UCEAP Semester Units**

8.00

### **Course Description**

This course develops key mathematical and computational skills relevant to the wider mechanical engineering program. Topics include vector algebra, real analysis, limits, curve sketching, series, applications of integration, complex analysis, functions of more than one variable, matrix algebra, second order ordinary differential equations, and vector calculus. Practical implementation through programming is studied to solve problems selected from the topic areas.

### **Language(s) of Instruction**

English

### **Host Institution Course Number**

MECH40008

### **Host Institution Course Title**

MATHEMATICS AND COMPUTING 1

### **Host Institution Course Details**

<https://www.imperial.ac.uk/mechanical-engineering/study/undergraduate/detailed-...>

### **Host Institution Campus**

Imperial College London

### **Host Institution Faculty**

Faculty of Engineering

### **Host Institution Degree**

### **Host Institution Department**

Department of Mechanical Engineering

### **Course Last Reviewed**

2021-2022

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