

# COURSE DETAIL

## COMPUTER FUNDAMENTALS AND PROGRAMMING

**Country**

United Kingdom - England

**Host Institution**

Imperial College London

**Program(s)**

Imperial College London

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Bioengineering

**UCEAP Course Number**

103

**UCEAP Course Suffix****UCEAP Official Title**

COMPUTER FUNDAMENTALS AND PROGRAMMING

**UCEAP Transcript Title**

COMP FUNDMT & PROGM

**UCEAP Quarter Units**

10.00

**UCEAP Semester Units**

6.70

## Course Description

This course instils the principles of digital logic design and computer fundamentals. It provides a basis for students to understand what happens inside digital computers and how they communicate with the real world. It illustrates how both digital computers and complex medical instrumentation are built up from simple logic circuit elements. It relates logic and digital systems to the fundamentals of computer programming. Lastly, it provides the basic skills of programming in the ANSI C language and Matlab to convey a sense of the professionalism required of programmers in order to write reliable C code for safety-critical applications, such as medicine.

### Language(s) of Instruction

English

### Host Institution Course Number

BIOE40002

### Host Institution Course Title

COMPUTER FUNDAMENTALS AND PROGRAMMING

### Host Institution Campus

South Kensington

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

Bioengineering

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