

# **Welcome to the JMC Degree Programme**

# JMC – Degree Overview

## **Year 1 - levelling the playing field**

providing you with the programming, computing and mathematical foundations needed for the course in later years.

## **Year 2 - big systems and specialising**

learning the principles of engineering large systems, such as operating systems and compilers, and choosing your mathematical specialism(s).

## **Year 3 - breadth of knowledge and experience**

the BEng year gives you lots of choice about what you learn, with the modules in this year getting you to the cutting edge of professional/industry level practices

## **Year 4 - depth of knowledge and experience**

the MEng year also has lots of choice about what you learn, with the modules in this year getting you to the cutting edge of research

# JMC Year 1 - All Core Modules

MATH40009 Introduction to University Maths	Term 1 5ECTS	Intensive 4 week course aimed at getting you to think like a University Mathematician
COMP40009 Computing Practical 1	Terms 1,2&3 20ECTS	Learning to programme following principled and robust techniques (Haskell, Kotlin, Java & C)
MATH40002 Analysis I	Terms 1&2 10ECTS	Introduction to Mathematical Analysis, the core of many pure maths modules in later years
MATH40004 Calculus and Applications	Terms 1&2 10ECTS	Introduction to Calculus, the core of many applied maths and computing modules in later years
MATH40012 Linear Algebra and Groups	Terms 1&2 5ECTS	Introduction to Algebra for applied mathematics and Group Theory for pure mathematics
COMP40012 Logic and Reasoning	Terms 1&2 5ECTS	Learning the language and techniques necessary for formal reasoning and proofs
COMP40008 Graphs and Algorithms	Term 2 5ECTS	Core computing theory forming the basis of many modules in later years

You will end up taking **60ECTS** this year, **30ECTS** from each of **Maths** and **Computing**

# JMC – Year 1 Support Structure

## **PPT (Personalised Programming Tutorials)**

supporting the programming content of COMP40009 Computing Practical 1

## **PMT (Personalised Mathematics Tutorials)**

supporting the theory content of COMP40012 Logic and Reasoning and COMP40008 Graphs and Algorithms

## **JMC Maths Catch-up Tutorials**

supporting the mathematical content of all Year 1 Maths modules

## **PT (Personal Tutor)**

first point of contact for your pastoral care needs (support for settling into Uni life, module options, CV reference and sign-post for other services)

## **ST (Senior Tutor)**

the Department's pastoral care lead, able to provide extensive support/advice

## **Programme Directors (Mark Wheelhouse and David Ham)**

in charge of the academic structure of the degree programme