Mathematical Methods 2 (MATH0011)

Description
This module consists of two parts. First an introduction to programming for the mathematical sciences (4 weeks) and then an introduction to multivariable calculus (5 weeks). Programming is becoming an increasingly important tool for a mathematician both in industry and in research. In view of this some elements of basic scientific computation should be part of any modern undergraduate curriculum in Mathematics. Multivariable calculus on the other hand is of fundamental importance in a variety of fields of pure and applied mathematics such as electromagnetism, uid mechanics, differential geometry, integration theory etc. The aim of the first part is to introduce the students to the ideas of computer programming and its uses in scientific computing for science and applications. The programming language Python will be considered in the course, but the underlying principles are general. They should learn how to write accurate programs for the computational solution of mathematical problems. The aim of the second part is to introduce the students to the ideas of calculus of several variables and to develop their understanding of functions of several variables, their derivatives and integrals.

Key information
- Year: 2019/20
- Credit value: 15 (150 study hours)
- Delivery: UG L4, Campus-based
- Reading List: View on UCL website
- Tutor: Prof Helen Wilson
- Term: Term 2
- Timetable: View on UCL website

Assessment

Find out more
For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk

Disclaimer: All information correct as of June 2019. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.