

University of Cambridge: Programme Specifications

Every effort has been made to ensure the accuracy of the information contained in this programme specification. At the time of publication, the programme specification has been approved by the relevant teaching Faculty or Department. It is, however, natural for courses to develop and change over time and we reserve the right, without notice, to withdraw, update or amend this programme specification at any time.

Parts IA, IB, and II of the MATHEMATICAL TRIPOS

Awarding Institution	University of Cambridge
Teaching Institution	University of Cambridge
Programmes accredited by	<i>not applicable</i>
Final Award	B.A. (Hons)
Programme Title	Mathematical Tripos
UCAS Code	G100 BA/MPA
Relevant Benchmark Statements	Mathematics, Statistics and Operational Research
Date of Programme Specification	July 2002

Aims and Objectives

The relevant material is covered on **page 2** of the annually-produced Schedule for the Tripos.

Transferable Skills

At Cambridge, as at any institution of higher education, mathematical skills are highly transferable. The courses arranged by the Statistical Laboratory are perhaps the most immediately transferable, but mathematics underpins all the Natural Sciences, Computing, Engineering, Economics, Business and Management Studies and a whole range of industrial and commercial processes and enterprises.

The Mathematical Tripos lays particular emphasis on problem-solving skills which easily transfer to non-mathematical contexts and are highly valued by employers.

Transferable computing skills are fostered via the CATAM (Computer-Aided Teaching of All Mathematics) Computational Projects which provide an education in solving mathematical problems using a computing environment. The aim is for students to learn to use basic computational techniques and software packages to solve interesting problems, many of which are analytically intractable or algebraically messy, thus preparing students for the real, untidy world. CATAM projects develop highly transferable skills of widespread value in industrial and commercial work, as well as in scientific research.

Attention is also drawn to the University statement on transferable skills:

<http://www.admin.cam.ac.uk/offices/education/skills/>

Learning, Teaching and Assessment Methods

General relevant material for is covered on **pages 1-2** of the annually-produced Schedule for the Tripos. Further specific details of course options and combinations are covered for each year on the following pages:

first year (Part IA): page 4 (with detailed course outlines on pages 5-8)
second year (Part IB): pages 9-10 (with detailed course outlines on pages 11-19)
third year (Part II): pages 20-21 (with detailed course outlines on pages 22-46)

Further details on all courses are included in the Schedule and informal guides ("Courses in Part IA", "Courses in Part IB", "Courses in Part II") are provided for each student.

Support for Students and their Learning

The annually-produced Schedule is provided to all students; further information is also available from the Faculty office and on the Faculty website.

Students have access to appropriate textbooks and other materials through the University and College libraries and computing facilities.

Students are assigned a Director of Studies and, normally, a personal Tutor by their College. Small group tutorials (supervisions) are arranged through the Colleges.

In addition, the Faculty provides a specially written booklet, "Study Skills in Mathematics".

Criteria for Admission

It is essential for students to have obtained at least three GCE A levels or an equivalent qualification, one of which must be Mathematics. A-level Further Mathematics and STEP papers in Mathematics are considered to be highly desirable, although admissions policy is determined by the individual Colleges. Typical offers from Colleges would be three GCE A levels at grade A and a STEP qualification in Mathematics.

See the Faculty's booklet, "Guide to Admissions in Mathematics".

Mechanisms for evaluating and improving the quality of student learning support

Students have termly meetings with their College Tutor and/or Director of Studies to monitor and review their progress in the Tripos. This is facilitated by reports submitted to the Colleges by the student's supervisors on each course.

The Faculty has a teaching committee and a curriculum committee, which regularly review the syllabus and content of the Tripos, student feedback and comments from examiners. Students have representation on these committees.

All Parts of the Tripos have External Examiners, who are required to submit a report to the University. This is normally responded to by the Faculty Board in consultation with the Teaching Committee. The report and response is scrutinised by the General Board's Education Committee.

The Faculty is reviewed by the General Board once every six years.

Employment and Careers

The General Board considers that preparation for any specific branch of employment is not the main objective of most educational courses provided by the University, and takes the view that the requirement to include specific employers' needs and opinions in programme specifications would distort the aims and objectives of many Cambridge courses. Preparation for employment in general is provided in the opportunities for acquisition of relevant transferable skills outlined in programme specifications.

The Careers Service maintains links with relevant employers and takes into account employer needs and opinions in the services which it provides for students. Details of its services can be found at:

<http://www.careers.cam.ac.uk/>.

The Careers Service also allocates a Careers Adviser to each College, Faculty and Department to act as a point of contact.