UNIVERSITY OF CAMBRIDGE

Faculty of Mathematics

NOTES FOR

SCOTTISH APPLICANTS

This guide is intended for students who are considering applying to Cambridge to read mathematics.

The information contained here is only a rough guide. Further general information about admissions can be found in the University Undergraduate Admissions Prospectus obtainable from the Cambridge Admissions Office, Student Services Centre, New Museums Site, Cambridge, CB2 3PT, telephone 01223 333 308, e-mail: admissions@cam.ac.uk, or from individual colleges,
see http://www.undergraduate.study.cam.ac.uk/

More specific information can be obtained by writing to or e-mailing individual colleges.

Further information about the mathematics course can be found in the *Guide to Admissions* booklet
see http://www.maths.cam.ac.uk/undergraduate-admissions

All the documentation is available on the Mathematics Faculty website http://www.maths.cam.ac.uk/.

Introduction

Although Cambridge happens to be situated in the south-east of England, it is one of the major European universities and has a world-wide reputation in most subjects. Cambridge maintains its high academic standards by attracting good students from around the world, regardless of national or social background. Cambridge is particularly strong in mathematics, and even though it is demanding, the mathematics course (called the Mathematical Tripos) is widely recognised as one of the best mathematics courses.

Cambridge is keen to encourage able Scottish applicants, and indeed some of Cambridge's greatest mathematicians, such as Kelvin, Maxwell and (more recently) Hodge, have come from Scotland.

The advice that follows is written for candidates from Scotland's educational system thinking of applying for an offer of a place conditional on Scottish qualifications. Despite the challanging and exhilarating nature of the course, it is not impossibly difficult to get a place. Cambridge welcomes enthusiastic students who are good at maths, but nobody is expecting another Newton.

Scottish qualifications

Some Scottish schools (not many) follow the English A-level curriculum. If you are at such a school, you need not read the following.

The Scottish Highers provide an excellent background for coming to university, but you will need more mathematics to start at Cambridge than is in the Mathematics Higher syllabus. The Scottish system also has Advanced Higher qualifications, also excellent, which do provide a very sound basis for Cambridge mathematics.

There are three Advanced Higher qualifications in mathematics, called Mathematics, Mathematics of Mechanics, and Statistics. Each consists of three compulsory units. It is most important, from the point of view of our mathematics course, for you to do as much mathematics as possible. Advanced Higher Mathematics covers most of the pure mathematics to be found in a tyoical Further Mathematics A-level course: for example, complex numbers (oncluding De Moivre's theorem) and differential equations. In some important areas (number theory, for example), it goes beyond a typical Further Mathematics A-level course. However, there is no material from 'applied' mathematics such as Mechanics or Statistics. It is therefore useful to take, if possible, one of the other Advanced Highers, either Mechanics or Statistics. If you have the choice, Mechanics is probably the more useful of the two as far as our course is concerned. It is almost unheard of for anyone to take all three of these Advanced Highers.

Note that we recognise that the Scottish secondary school sector is undergoing significant curriculum reform. Please see that University's admissions policy statement on Curriculum for Excellence at `http://www.undergraduate.study.cam.ac.uk/files/publications/cfe_statement.pdf` for information.

Make me an offer

As is explained in the *University Prospectus*, undergraduate admissions are handled separately by the 28 colleges of the university A college will make an offer to fit your particular circumstances, taking into account your examination record, your school's report about you, and an interview, as well as the range of courses ofered by your school.

Almost all of our offers include STEP (Sixth Term Examination Paper) papers 1 and 2. Paper 2 is based on A-level mathematics and AS-level Further Mathematics and would therefore be comfortably accessible to Scottish students having taken an Advanced Higher in mathematics. If you have taken two Advanced Highers, you will be well-prepared (as far as knowledge is concerned) for STEP 3.

The level of the offer is likely to include top grades in any Scottish mathematics examination you take, and 1.1 in your STEPs.

What to do to apply

The closing date for applications is usually 15th October of the year before entry. You should check the *University Prospectus* for details. You should also look at the *Guide to Admissions* produced by the Faculty of Mathematics. You may well be unable to visit Cambridge for an open day, in which case you should make contact with your preferred college to check that your choice of courses could form the basis of a conditional offer.

Almost all applicants are interviewed in December. If your Highers are good and you have a strong reference from your school (and your interview does not go too badly) then you will have a good chance of receiving an offer; after that, it's up to you.