

What the Russell Group says about A Level Mathematics and Further Mathematics

What is the Russell Group?

The Russell Group represents 24 leading UK universities that are committed to the highest levels of academic excellence in both teaching and research:

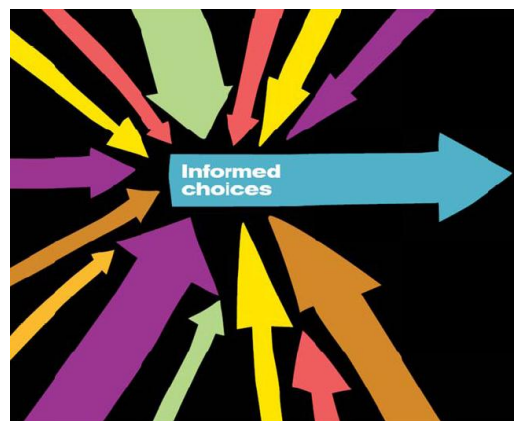
University of Birmingham	London School of Economics & Political Science
University of Bristol	University of Manchester
University of Cambridge	Newcastle University
Cardiff University	University of Nottingham
Durham University	University of Oxford
University of Edinburgh	Queen Mary, University of London
University of Exeter	Queen's University Belfast
University of Glasgow	University of Sheffield
Imperial College London	University of Southampton
King's College London	University College London
University of Leeds	University of Warwick
University of Liverpool	University of York

The Informed Choices Guide

In spring 2011 the Russell Group produced a guide to help students to make decisions about post-16 education called 'Informed Choices'.

The full guide can be viewed online on the Russell Group website www.russellgroup.ac.uk. It can also be accessed from the news section of www.furthermaths.org.uk.

Under 'What subjects can give me the most options', the guide lists *facilitating subjects*, i.e. those that are required for university courses more often than others. These are:



Mathematics; Further Mathematics; English (Literature); Physics; Biology; Chemistry; Geography; History and Languages (Classical and Modern).

What does the Informed Choices Guide say about A level Mathematics?

The guide also identifies the most common essential and useful A levels for 60 of the most popular university courses. A level **Mathematics** is listed as **essential** for:

Accountancy; Actuarial Studies; Aeronautical Engineering; Chemical Engineering; Chemistry (occasionally); Computing (for some courses); Dentistry (for some courses); Economics (usually); Electrical/Electronic Engineering; Engineering; Management Studies (sometimes); Mathematics; Mechanical Engineering; and Physics.

Some courses have a choice of **essential** subjects. A level **Mathematics** is one of these choices for:

Biochemistry; Biomedical Sciences; Environmental Science; Geology/Earth Sciences; Materials Science; Medicine; Optometry; Pharmacy; Physiotherapy; Psychology; Sports Science/Physical Education; Teacher Training; and Veterinary Science.

A level **Mathematics** is listed as **useful** for:

Accountancy; Architecture; Biochemistry; Biology; Biomedical Sciences; Business Studies; Chemistry; Computing; Dentistry; Dietetics; Geography; Management Studies; Orthoptics; Pharmacy; Philosophy; Physiotherapy; and Psychology.

What does the Informed Choices Guide say about A level Further Mathematics?

A level **Further Mathematics** is listed as **useful** for:

Actuarial Science/Studies; Aeronautical Engineering; Biochemistry; Biomedical Sciences (including Medical Science); Chemical Engineering; Chemistry; Computing; Dentistry; Electrical/Electronic Engineering; Engineering (General); Mathematics; Mechanical Engineering; Medicine; Optometry (Ophthalmic Optics); Physics; and Veterinary Science.

In addition, A level **Further Mathematics** is listed as sometimes **essential** for Mathematics.

What do other universities say about Further Mathematics?

University of Plymouth

Mathematics: *"AS or A2 Further Mathematics are not essential but will be helpful to our students. We are therefore generally more flexible with applicants who have studied Further Mathematics. We also have a Mathematics and Statistics Entrance Scholarship of £500 for each grade A in Mathematics or Further Mathematics A-level."*

University of Reading

Mathematics-related: *"In my experience, students who have taken Further Maths are much better prepared for university study of any degree programme which has a significant mathematical content, including mathematics, engineering and economics. In terms of exposure to important mathematical concepts, support for core mathematics, improvement in general mathematical skills and maturity, together with the enhanced ability to study independently, Further Maths students definitely have an advantage over regular A level students."*

University of Sheffield

Mathematics: *"A grade C in Further Mathematics might count as equivalent to a grade B in a non-mathematical subject."*

Further examples

For further examples of what universities say about Further Mathematics, please see www.furthermaths.org.uk/universities.php.