

## PROGRAMME SPECIFICATION DOCUMENT

(Refer to the University's document: Graduate Standards and Programme Specification Requirements  
for further guidance and to the University's Learning and Teaching Policy)

*June 2011*

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|---|--|-----------------------------|--|
| <b>1. Qualification</b><br>BA/BSc (Hons)  | <b>2. Programme Title</b><br>Mathematics | <b>3. UCAS Code</b><br>G100 | <b>4. Programme Type</b><br>Modular (Single, Major, Joint,<br>Minor) Full-time & Part-time |
| <b>5. Main Purposes and Distinctive Features of the Programme</b>   |  |                             |  |
| <p>To open up a flexible range of opportunities for the study of Mathematics to honours degree level, and particularly to encourage mature, female and part-time students to study the subject either as single honours or in combination with one of a wide range of other subjects.</p> |  |                             |  |

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| <b>6. What a graduate should know and be able to do on completion of the programme</b><br>(objectives and learning outcomes)  |   |
| <p>To gain the qualification the learner will have demonstrated: i) subject knowledge and understanding ii) cognitive skills iii) discipline-related practical and professional skills and iv) other general skills and capabilities (e.g. key/transferable/common) as specified in the learning objectives/outcomes for approved modules in the programme. Further details of module outcomes can be found in the programme document.</p>  |   |
| <p>The Learning Outcomes for the programme have been informed by the Quality Assurance Agency's Subject Benchmark for Mathematics Statistics and Operational Research of 2007 (abbreviated hereafter as <i>SBMSOR</i>).</p> <p>Upon completion of the Mathematics programmes students will have:</p> <p style="text-align: center;"><b>The Mathematics Pathway</b></p> <p>At Part 1</p> <p>(i) knowledge and understanding of, and the ability to use, mathematical methods and techniques, including calculus, abstract algebra and programming (<i>SBMSOR</i>, 3.9)</p> <p>(ii) knowledge and understanding of the role of logical mathematical argument and deductive reasoning (<i>SBMSOR</i>, 3.14)</p> <p>(iii) general communication, IT and study skills, including the word processing and use of the Internet, and the ability to write coherently and communicate results clearly (<i>SBMSOR</i>, 3.27).</p> | <p style="text-align: center;">At Part 2</p> <p>(iv) knowledge and understanding from a range of major areas of mathematics chosen from abstract and linear algebra, analysis, topology, differential equations, mechanics, probability theory and statistics (<i>SBMSOR</i>, 3.12).</p> <p>(v) an understanding of mathematical models, and their conditions and limitations. (<i>SBMSOR</i>, 3.19).</p> <p>(vi) general study skills, particularly including the ability to learn independently using a variety of media, including books and the Internet. (<i>SBMSOR</i>, 3.27).</p> <p>(vii) been prepared for a wide choice of career options through the academic content of the programme and the transferable skills it imparts (<i>SBMSOR</i>, 1.24).</p> |

### 7. Subjects Studied, Levels, Credits & Qualifications

(Duration and structure of programme/modes of study/credit volume of study units)

3 years full time, 4½ years part time organised on 2 semesters per year basis.

Part 1 comprises 120 credits of level 1 modules. Part 2 comprises 120 credits of level 2 modules and 120 credits of level 3 modules

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|----------------------------|-------------|--|--|
| Part 2<br>Levels H2 and H3 | H3          | Dissertation (compulsory for single and major modes)   | <i>Bachelor Honours Degree 360 Credits</i> |
|                            | H3 options  | Complex Analysis, Incompressible Fluid Dynamics, Differential Equations and Applications, Probability, Ring Theory, Topology, Greek Geometry and Analysis, Group Theory, Further Linear Algebra. |  |
|                            | H2 options  | Discrete Maths, Linear Maths, Further Mathematical Methods, Vector Analysis, Dynamics, Numerical Analysis, Real Analysis, Statistical Theory, Survey Design and Analysis.                        | <i>HE Diploma 240 credits</i>              |
| Part 1<br>Level H1         | <u>Core</u> | Algebra, Maths Methods 1, Maths Methods 2, Structured Programming for Mathematics,   | <i>HE Certificate 120 Credits</i>          |
|                            |             | Foundation Studies in Mathematics (compulsory for single & major modes)<br>Algorithms & Logic (compulsory for single honours)  |  |

| 8. Learning, Teaching and Assessment Strategy   | 9. Other Information                                   |
|---|--|
| <u>Learning and Teaching Methods</u>  | <u>Date programme first offered</u>                    |
| Classroom based, with variety of activities including one-to-one tutorial and computer labs             | October 1994   |
| <u>Assessment Methods</u>   | <u>Admissions Criteria</u>                             |
| Unseen written examinations and continuous assessment by coursework (see detailed assessment strategy). | <i>Standard Requirements</i>                           |
| <u>Assessment Classification System</u>   | 230 UCAS points including A2 in Mathematics            |
| Pass mark for individual assessments – 40%  | <i>Non Standard Entry</i>                              |
| Final degree classification based on aggregated performance in Part 2 modules.                          | Polymaths  |
| <u>Honours Classification Bands</u>   | HNC, HND or GNVQ in subject with mathematical content. |
| 70 – 100 First class  | Technology foundation or access course.                |
| 60 – 70 Upper second class  | Mature students considered on individual merits        |
| 50 – 60 Lower second class  |  |
| 40 – 50 Third class   |  |
| with consideration of borderline cases via modal analysis of grades.                                    |  |