## Programme Specification

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<td><strong>1</strong></td>
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<td><strong>Teaching Institution</strong></td>
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<td><strong>3</strong></td>
<td><strong>Programme Title(s)</strong></td>
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<td><strong>4</strong></td>
<td><strong>Programme Code(s)</strong></td>
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<tr>
<td><strong>5</strong></td>
<td><strong>UCAS code (if applicable)</strong></td>
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<td><strong>6</strong></td>
<td><strong>Home Department</strong></td>
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<td><strong>Exit Award(s)</strong></td>
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<td><strong>8</strong></td>
<td><strong>Duration of Study (number of years)</strong></td>
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<td><strong>9</strong></td>
<td><strong>Mode of Study</strong></td>
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<td><strong>10</strong></td>
<td><strong>Level of Award (FHEQ)</strong></td>
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<tr>
<td><strong>11</strong></td>
<td><strong>Other teaching depts or institution (or not applicable)</strong></td>
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<td><strong>12</strong></td>
<td><strong>Professional, Statutory Regulatory Body(PSRB) details (or not applicable) (include URL to PSRB)</strong></td>
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<td><strong>13</strong></td>
<td><strong>QAA Benchmark Group (or not applicable)</strong></td>
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### Programme Rationale & Aims

The Graduate Certificate in Statistics is aimed at students with a first degree who need or desire to develop specialist knowledge in statistics, or to “top up” their existing skills. The Graduate Certificate can also act as a qualifying course for the MSc in Applied Statistics.

Distinctive features: Part-time, evening, face to face study. Regular coursework forms a part of all modules, to further develop independent learning.

### Entry Criteria

The entry requirement is a first degree and an A-level, or equivalent, in Mathematics. In exceptional circumstances candidates without a first degree may be admitted, provided they have equivalent level qualifications or professional experience that convinces the admissions team that the programme is suitable for them.

### Prospectus Entry

This programme introduces you to the methods of statistical analysis, together with the underlying theory and some of the associated mathematics. The Graduate Certificate is a standard qualifying course for Birkbeck’s MSc Applied Statistics programmes.

You will gain an understanding of statistical methods and will be able to apply them to the analysis of real-world data sets. You will also learn how to use statistical computer packages.
## Learning Outcomes

On successful completion of this programme a student will be expected to be able to:

### Subject Specific
LO1 Knowledge and understanding of, and the ability to use, mathematical and statistical methods, results and techniques.

LO2 Knowledge of the use of statistical techniques to analyse data sets and the ability to collate and analyse data using a statistical computer package, and draw appropriate conclusions.

LO3 Awareness of the use of mathematics and/or statistics to model problems in the natural and social sciences, and the ability to formulate such problems using appropriate notation.

LO4 Understand the importance of assumptions and an awareness of where they are used and the possible consequences of their violation.

LO5 A deeper knowledge of some particular areas of statistics.

### Intellectual
LO6 Ability to comprehend conceptual and abstract material.

LO7 Develop a logical and systematic approach to problem solving.

### Practical
LO8 Problem-solving skills, including the ability to assess problems logically and to approach them analytically.

LO9 Highly developed quantitative skills

LO10 Ability to transfer knowledge and expertise from one context to another.

### Personal and Social
LO11 Ability to work independently with patience and persistence.

LO12 Time-management and organizational skills, including the ability to complete work in a limited time period.

LO13 Good communication skills, including the ability to write coherently and present conclusions from statistical analysis in an accessible way.

## Learning, teaching and assessment methods

Most teaching sessions are either lectures or computing sessions. Lectures present both theory and worked examples. Computing sessions use statistical software packages, such as S-Plus, and enable students to learn about these packages and allow them to develop a greater understanding of the course material. The computing sessions are usually self-paced and informal.

Detailed course notes, problems and worked solutions are provided to accompany lectures on each module. This facilitates the independent study necessary to understand and assimilate the
material. Regular coursework and a variety of assessment methods are also designed to be formative and promote learning.

Individual tutorials are provided as required and are an integral part of the teaching provision. Students may also consult staff by telephone and email.

The methods of assessment used are:
- Unseen 3 hour examinations in May/June.
- Assessed assignments.

For modules on this programme 80% of the assessment comes from unseen examinations in May/June. This allows time for students to assimilate the material and develop a thorough understanding of the course curriculum. The 20% contribution from coursework enables students to get practice in tackling and solving problems independently, without the time pressure of examinations, and gives staff an opportunity to give relevant feedback.

The range of assessments, and the type of questions and problems set within examinations and assignments are structured to balance theory and practice, to address the individual learning outcomes and to discriminate between different levels of achievement. However the assessment strategy recognizes that students may exhibit very different aptitudes and abilities in different aspects of the course and in different forms of assessment. This is particularly relevant to Birkbeck students who vary considerably in terms of academic background, prior work experience, current career and future career plans. The assessment strategy is therefore designed to: (i) ensure a good coverage of the curriculum and address the range of learning outcomes, (ii) perform an on-going formative function via the theoretical and practical assignments associated with all course modules; (iii) give all students the opportunity to demonstrate their strengths and show what they can do well.

Both the external and the second internal examiner normally scrutinize all examination papers before they are finalized. Exams and Essays are all double marked. Coursework is marked by the first examiner and moderated by the second internal examiner. All marks are moderated by the External Examiner, who is invited to comment on the suitability of the assessment methods, criteria and procedures. These comments influence any changes that are recommended at the programme review meeting.

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<th>Programme Description</th>
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The programme comprises two year-long 30 credit level 6 modules (level 6 roughly corresponds to final year study on a BSc programme). You will take the modules Mathematics for Statistics and Statistics: Theory and Practice. To qualify for the MSc Applied Statistics at Birkbeck, you would need to gain at least a merit - corresponding to an average grade of at least 60%.
## Programme Structure

### Part Time programme

<table>
<thead>
<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title</th>
<th>Credits</th>
<th>Status</th>
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<tbody>
<tr>
<td>6</td>
<td>BUEM003S6</td>
<td>Statistics: Theory and Practice</td>
<td>30</td>
<td>Comp</td>
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<tr>
<td>6</td>
<td>BUEM004S6</td>
<td>Advanced Mathematical Methods</td>
<td>30</td>
<td>Comp</td>
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### Regulations

- **Admissions**
  
  This programme adheres to the College Admissions Policy: [http://www.bbk.ac.uk/mybirkbeck/services/rules/AdmissionsPolicy.pdf](http://www.bbk.ac.uk/mybirkbeck/services/rules/AdmissionsPolicy.pdf)

  The Admissions Statement covering this programme is available to download from the admissions page on the website for the Department of Economics, Mathematics and Statistics: [http://www.ems.bbk.ac.uk/courses/admissions_index_html](http://www.ems.bbk.ac.uk/courses/admissions_index_html)

- **Credit Transfer**
  
  Accredited Prior Learning will be considered in line with the College Policy on Accredited Prior Learning: [http://www.bbk.ac.uk/mybirkbeck/services/rules/AccreditedPriorLearning.pdf](http://www.bbk.ac.uk/mybirkbeck/services/rules/AccreditedPriorLearning.pdf)

- **Programme Regulations**
  
  This programme adheres to the College Common Awards Scheme: [http://www.bbk.ac.uk/mybirkbeck/services/rules/casregs.pdf](http://www.bbk.ac.uk/mybirkbeck/services/rules/casregs.pdf)

- **Programme Specific Regulations** N/A

### Student Support and Guidance

All Birkbeck students have access to a range of student support services, details can be found on our website here: [http://www.bbk.ac.uk/mybirkbeck/services/facilities](http://www.bbk.ac.uk/mybirkbeck/services/facilities)

### Methods of Enhancing Quality and Standards

The College has rigorous procedures in place for the monitoring and enhancing its educational provision. This includes regular monitoring of programmes drawing on feedback from various sources including external examiner’s reports, student feedback, student achievement and progression data. In addition, departments are reviewed every four to five years through the internal review process that includes external input.

For more information please see the Quality Enhancement and Validation website: [www.bbk.ac.uk/qev](http://www.bbk.ac.uk/qev)

### Programme Director

Andris Abakuks

### Start Date (term/year)

Autumn 2009

### Date approved by TQEC

Summer 2009

SUMMER 2015
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<thead>
<tr>
<th></th>
<th>Date approved by Academic Board</th>
<th>Spring 2009</th>
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<tbody>
<tr>
<td>27</td>
<td>Date(s) updated/amended</td>
<td>Summer 2015</td>
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