## PROGRAMME SPECIFICATION

<table>
<thead>
<tr>
<th><strong>Name, title and level of final qualification(s)</strong></th>
<th><strong>PG Certificate Econometrics (Level 7)</strong></th>
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<tbody>
<tr>
<td><strong>Name and title of any exit qualification(s)</strong></td>
<td>N/A</td>
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<tr>
<td><strong>Awarding Body</strong></td>
<td>University of London</td>
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<tr>
<td><strong>Teaching Institution(s)</strong></td>
<td>Birkbeck, University of London</td>
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<tr>
<td><strong>Home school/other teaching departments</strong></td>
<td>Birkbeck Business School</td>
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<tr>
<td><strong>Location of delivery</strong></td>
<td>Central London</td>
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<tr>
<td><strong>Language of delivery and assessment</strong></td>
<td>English</td>
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<tr>
<td><strong>Mode of study, length of study and normal start month</strong></td>
<td>Part-time (1 year) September</td>
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<td><strong>Professional, statutory or regulatory body</strong></td>
<td>N/A</td>
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<td><strong>QAA subject benchmark group(s)</strong></td>
<td>N/A</td>
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<tr>
<td><strong>Higher Education Credit Framework for England</strong></td>
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<tr>
<td><strong>Birkbeck Course Code</strong></td>
<td>TPCEMNTC_C</td>
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<td><strong>HECoS Code</strong></td>
<td>100604</td>
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<tr>
<td><strong>Start date of programme</strong></td>
<td>Autumn 2008</td>
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<tr>
<td><strong>Date of programme approval</strong></td>
<td>Spring 2008</td>
</tr>
<tr>
<td><strong>Date of last programme amendment approval</strong></td>
<td>February 2019</td>
</tr>
<tr>
<td><strong>Valid for academic year and cohorts</strong></td>
<td>2023-24</td>
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<tr>
<td><strong>Date of last revision to document</strong></td>
<td>23/08/2022</td>
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Admissions requirements

A second-class honours degree (2:2) or above, or its equivalent, in either a directly relevant or a highly quantitative subject, or an equivalent qualification such as a merit on the Birkbeck Graduate Diploma. It is assumed that students admitted to the programme are already familiar with introductory statistics and econometrics and are familiar with the mathematical pre-requisites including matrix algebra.

Students must pass the Quantitative Techniques course in September to progress on the programme. We welcome applicants without traditional entry qualifications as we base decisions on our own assessment of qualifications, knowledge and previous work experience. We may waive formal entry requirements based on judgement of academic potential.

Course aims

The Postgraduate Certificate in Econometrics programme provides advanced training in econometrics using modules available on the MSc in Economics. This course is particularly useful to those who already have an MSc in Economics or Data Science, and now need more specialist training in theoretical and applied econometrics for their work. On completing this programme, students should:

- be able to read and provide a critical interpretation of the econometric literature;
- be able to formulate propositions, test them using quantitative techniques and report their conclusions;
- be able to conduct an independent research project and produce a project report;
- have developed an understanding of the process of modelling – making abstractions that yield analytical simplicity while retaining key features of the problem at hand – for analysing issues in economics.

Course structure

<table>
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<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title</th>
<th>Credit</th>
<th>Comp Core/ Option</th>
<th>Likely teaching term(s)</th>
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<tr>
<td>Part-time – 1 year</td>
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| 7 | BUEM007H7 | Quantitative Techniques for Postgraduate Certificate | 15 | Comp | September |
| 7 | EMEC026S7 | Econometrics | 30 | Comp | T1-2 |
| 7 | EMEC035H7 | either Advanced Econometrics or The Economics and Econometrics of Evidence Based Policy | 15 | Option | T2 |
| 7 | BUEM116H7 | or another approved MSc option | 15 | Option | T2 |

Core: Module must be taken and passed by student
Compulsory: Module must be taken but can be considered for compensated credit (see CAS regulations paragraph 24)
Option: Student can choose to take this module
How you will learn

Your learning and teaching is organised to help you meet the learning outcomes (below) of the course. As a student, we expect you to be an active learner and to take responsibility for your learning, engaging with all of the material and sessions arranged for you.

Each course is divided into modules. You will find information on the virtual learning site (Moodle, see Academic Support below) about each of your modules, what to expect, the work you need to prepare, links to reading lists, information about how and when you will be assessed.

Our students study under time constraints and we are offering a large volume of formal material in our courses. To maximise contact time, we use lectures as the primary means of teaching, where academics work through the material and can write up examples and problems to work through including clarifying each step in complex derivations. The lectures provide an opportunity for students to interact and ask questions. The pace of a lecture will vary depending on the complexity of the material, the preparedness of students and the topic under consideration. The sessions are recorded so students can watch them back after attending and participating in person. In some modules pre-recorded lectures are also provided, again giving students the opportunity to watch material at their own pace.

However, while lecturing is the primary method, it is by no means the only one. An important aspect of learning, especially in the core courses, involves solving problems. This is often crucial in ensuring effective learning of theoretical material in core courses. To this end, classes support lectures, and discuss solutions to problem sets.

Learning activity is supported by our Virtual Learning Environment, which serves to convey programme content (lecture handouts, access to readings, possible audio and video recordings) and serves as a communication channel. Courses make use of substantial handouts designed to help digest material for busy students. Specific directions to texts, or extensive lecture notes also help students to obtain a clear idea of material covered in a particular lecture. Lectures also specify precise objectives at the outset. This knowledge is also particularly helpful in calibrating oneself with the state of the course if work commitments force absence at a previous lecture. Regular coursework and a variety of assessment methods are also designed to be formative and promote learning.

Workstation sessions allow students to gain practical experience for themselves in the analysis and modelling of data. They are therefore self-paced and very informal. Students work individually using detailed guidance notes and discuss their results and any difficulties amongst themselves and with the members of staff present to provide tutorial assistance.

The compulsory project is a substantial investigation giving students an extended opportunity to combine their theoretical knowledge with practical skills of data analysis, statistical modelling and computing. An important ingredient of learning is private study. Apart from providing reading lists, the programme requires students to produce independent project work, aiding development of analytical, quantitative as well as written communication skills.

Course content as well as lecturing style of individual lecturers evolves through feedback from student learning experiences. The principal routine feedback channel is a half-termly meeting with student representatives elected from both full time and part time groups. Each course is also evaluated by students through completion of a course assessment form. Lecturers also submit their own assessment of the course as well as that of student evaluations. Comments from external examiners form a further important ingredient in the process of evaluation of individual courses as well as the structure of entire programmes. Programme directors are responsible for collating feedback, identifying problems, making recommendations to department meetings, and describing consequent actions in the annual programme reports.
How we will assess you

The course will use a variety of assessment methods. Assessment is used to enhance your learning rather than simply to test it. For most of the modules associated with this course, your assessment will be through the following types of assessment:

- Unseen two-hour or three-hour examinations
- In-class tests
- Assessed take-home assignments
- Project work
- Class-room presentation and group discussion

For most modules, though not all, 75% or more of the assessment comes from unseen examinations. This allows time for students to assimilate the material and develop a thorough understanding of the course curriculum. The rest of the marks come from course assignments, which give lecturers the opportunity to assess each student’s progress and provide constructive feedback.

Learning outcomes (what you can expect to achieve)

‘Learning outcomes’ indicate what you should be able to know or do at the end of your course. Providing them helps you to understand what your teachers will expect and also the learning requirements upon which you will be assessed.

At the end of this course, you should be able to:

Subject Specific:
1. Understand the basic mathematical and statistical techniques required for studying Econometrics at the Masters level.
2. Derive standard estimators (OLS, ML, and GMM) and tests, understand their properties and be able to use them in practice.
3. Develop and analyse basic univariate and multivariate time-series models for integrated and co-integrated data and know how to choose between alternative models.

Intellectual:
4. Think in a structured manner about economic and financial policy issues.
5. Interpret abstract material couched in formal language into economics.

Practical:
6. Use standard econometrics packages and interpret their output.
7. Collect and interpret data.

Personal and Social:
8. Study independently and complete a sustained and substantial task.
9. Learn from a wide range of sources including journal articles.
10. Transfer knowledge from one context to another.

Careers and further study

Our students go on to build successful careers with a variety of employers in a range of sectors, including government departments, the Bank of England, UK regulatory bodies, commercial banks and teaching, as well as continuing to Masters degrees in economics.

Birkbeck offers a range of careers support to its students. You can find out more on the careers pages of our website.
Academic regulations and course management

Birkbeck’s academic regulations are contained in its Common Award Scheme Regulations and Policies published by year of application on the Birkbeck website.

You will have access to a course handbook on Moodle and this will outline how your course is managed, including who to contact if you have any questions about your module or course.

Support for your study

Your learning at Birkbeck is supported by your teaching team and other resources and people in the College there to help you with your study. Birkbeck uses a virtual learning environment called Moodle and each course has a dedicated Moodle page and there are further Moodle sites for each of your modules. This will include your course handbook.

Birkbeck will introduce you to the Library and IT support, how to access materials online, including using Moodle, and provide you with an orientation which includes an online Moodle module to guide you through all of the support available. You will also be allocated a personal tutor and provided with information about learning support offered within your School and by the College.

Please check our website for more information about student support services. This covers the whole of your time as a student with us including learning support and support for your wellbeing.

Quality and standards at Birkbeck

Birkbeck’s courses are subject to our quality assurance procedures. This means that new courses must follow our design principles and meet the requirements of our academic regulations. Each new course or module is subject to a course approval process where the proposal is scrutinised by subject specialists, quality professionals and external representatives to ensure that it will offer an excellent student experience and meet the expectation of regulatory and other professional bodies.

You will be invited to participate in an online survey for each module you take. We take these surveys seriously and they are considered by the course team to develop both modules and the overall courses. Please take the time to complete any surveys you are sent as a student.

We conduct an annual process of reviewing our portfolio of courses which analyses student achievement, equality data and includes an action plan for each department to identify ongoing enhancements to our education, including changes made as a result of student feedback.

Our periodic review process is a regular check (usually every four years) on the courses by department with a specialist team including students.

Each course will have an external examiner associated with it who produces an annual report and any recommendations. Students can read the most recent external examiner reports on the course Moodle pages. Our courses are all subject to Birkbeck Baseline Standards for our Moodle module information. This supports the accessibility of our education including expectations of what information is provided online for students.

The information in this programme specification has been approved by the College’s Academic Board and every effort has been made to ensure the accuracy of the information it contains.

Programme specifications are reviewed periodically. If any changes are made to courses, including core and/or compulsory modules, the relevant department is required to provide a revised programme specification. Students will be notified of any changes via Moodle.

Further information about specifications and an archive of programme specifications for the College’s courses is available online.