

## PROGRAMME SPECIFICATION

Name, title and level of final qualification(s)	<b>BSc Economics and/or with Mathematics</b> (Level 6)
Name and title of any exit qualification(s)	Diploma of Higher Education Economics and/or with Mathematics Certificate of Higher Education Economics and/or with Mathematics
Is this programme offered with a Foundation Year	No
Awarding Body	University of London
Teaching Institution(s)	Birkbeck, University of London
Home school/other teaching departments	Birkbeck Business School
Location of delivery	Central London
Language of delivery and assessment	English
Mode of study, length of study and normal start month	Full-time (3 years) Part-time (4 years) September
Professional, statutory or regulatory body	N/A
<a href="#">QAA subject benchmark group(s)</a> <a href="#">Higher Education Credit Framework for England</a>	Economics
UCAS code	LG11
Birkbeck Course Code	UUBSECMT_C (full-time, 3 years) UBSECMAT_C (part-time, 4 years)
HECoS Code	100450
Start date of programme	Autumn 2017
Date of programme approval	Summer 2016
Date of last programme amendment approval	November 2022
Valid for academic entry year	2023/24
Date of last revision to document	05/08/22

## Admissions requirements

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.

UCAS tariff: 96-128 points; A-levels CCC-ABB

The UCAS tariff score is applicable to you if you have recently studied a qualification that has a UCAS tariff equivalence. UCAS provides a [tariff calculator](#) for you to work out what your qualification is worth within the UCAS tariff.

Students without a Level 3 Maths qualification will be admitted initially to the BSc Economics or the BSc Financial Economics, for which standard admission criteria for these programmes will be applied.

## Course aims

The programme is aimed at two groups of students:

1. Students of economics who want to gain a higher level of quantitative skills in mathematics and statistics to complement their study of economics. These skills are likely to be of particular value for those proceeding on to technical MSc programmes in economics; but will also act as a valuable indicator of high level technical competencies for those proceeding to the job market.
2. Students of mathematics who wish to apply their mathematical skills to economics and finance, and who may also in due course consider a switch into more applications-oriented technical MSc programmes.

A key feature of the programme is that in addition to direct entry on this programme, it is possible to transfer from other programmes, specifically from our BSc Economics, BSc Mathematics and BSc Financial Economics, usually after Year 1.

## Course structure

This is a standard 360 credit programme, of which 120 credits will come in the form of compulsory modules and 240 credits through options (with some restrictions on the choice of options). This structure is deliberately quite flexible with a high number of options to maximise students' choices, depending on their abilities and preferences, which may develop as they move through the programme.

In order to be eligible for an award of BSc in Economics and Mathematics, students must complete at least 180 credits from economics modules and at least 150 from mathematics and statistics modules. Thus with an overall requirement of 360 credits, the permissible splits are either (a) 210 economics / 150 mathematics or (b) 180 economics / 180 mathematics.

In order to be eligible for an award of BSc in Economics with Mathematics, students must gain 270 credits from economics and 90 from mathematics.

## Pathways

*Direct Entry to BSc Mathematics **and** Economics:*

For students admitted directly to the new programme, the first year will consist of the compulsory modules listed below.

*Transfers from other BSc programmes:*

We envisage that significant numbers of students will transfer from other BSc programmes, usually at the end of Year 1 for full-time students. To allow this the programme design allows some flexibility in the order in which modules are taken.

For instance, students who start on our BSc Economics or BSc Financial Economics, who lack sufficient prior mathematical training (usually A level mathematics) but who display strong aptitude for quantitative subjects in their first year may transfer to BSc Economics and Mathematics after year 1.

Similarly, students initially admitted to one of our BSc degrees in mathematics /statistics may transfer to this programme after their first year if they wish to focus more on the applicable skills and enhanced career prospects that economics modules provide.

Beyond year 1 the precise mix will then depend on the balance between economics and mathematics chosen by the student, in consultation with the programme director.

Students transferring from BSc Economics, Financial Economics, and Mathematics will all have taken at least two out of the four compulsory modules listed below during Year 1 of their entry programmes, and each of these programmes will have 60 credits at level 4, and 60 at level 5, in Year 1. They would then take the remaining two compulsory options after transferring to BSc Economics and Mathematics (usually in Year 2).

Level	Module Code	Module Title	Credit	Comp Core/ Option	Likely teaching term(s)
<b>Full-time – 3 years</b>					
<b>Year 1</b>					
4	EMEC058S4	IT and Professional Skills	30	Comp	T3
4	EMEC013S4	Introduction to Economics	30	Comp	T1+T2
4	EMMS097S4	Algebra 1	30	Comp	T1+T2
4	EMMS096S4	Calculus 1	30	Comp	T1+T2
<b>Year 2</b>					
5		Level 5 Option	30	Option	
5		Level 5 Option	30	Option	
5		Level 5 Option	30	Option	
5		Level 5 Option	30	Option	
<b>Year 3</b>					
6		Level 6 Option	2x15/30	Option	
6		Level 6 Option	2x15/30	Option	
6		Level 6 Option	2x15/30	Option	
6		Level 6 Option	2x15/30	Option	
<b>Part-time – 4 years</b>					
<b>Year 1</b>					
4	EMEC058S4	IT and Professional Skills	30	Comp	T3
4	EMEC013S4	Introduction to Economics	30	Comp	T1+T2
4	EMMS097S4	Algebra 1	30	Comp	T2

<b>Year 2</b>					
4	EMMS096S4	Calculus 1	30	Comp	T1
5		Level 5 Option	30	Option	
5		Level 5 Option	30	Option	
<b>Year 3</b>					
5		Level 5 Option	30	Option	
5		Level 5 Option	30	Option	
6		Level 6 Option	2x15/30	Option	
<b>Year 4</b>					
6		Level 6 Option	2x15/30	Option	
6		Level 6 Option	2x15/30	Option	
6		Level 6 Option	2x15/30	Option	
<b>Indicative list of options (subject to timetabling constraints)</b>					
5	BUEM001S5	Calculus 2	30	Option	T3
5	BUEM101S5	Algebra 2	30	Option	T1
5	BUEM130H5	Probability Models	15	Option	T1
5	BUEM131H5	Analysing Data	15	Option	T2
5	EMEC012S5	Microeconomic Theory and Policy	30	Option	T1
5	BUEM107S5	Macroeconomic Theory and Policy	30	Option	T2
5	BUEM097S5	International Economics	30	Option	T3
6	BUEM003S6	Statistics: Theory and Practice	30	Option	T1
6	BUEM105S6	Finite Mathematics	30	Option	T2
6	BUEM009S	Problems in Mathematics	30	Option	T1+T2
6	BUEM104S6	Algebra & Analysis	30	Option	T2
6	EMEC005S6	Economics of Public Policy	30	Option	T2
6	EMEC014S6	Issues in Development Economics	30	Option	T1
6	BUEM016S6	Political Economy	30	Option	T1
6	EMEC022S6	Quantitative Techniques for Economics & Finance III	30	Option	T1
6	EMEC002S6	Applied Statistics & Econometrics	30	Option	T1+T2
6	BUEM070S6	Microeconomics	30	Option	T2
6	EMEC011S6	Macroeconomics	30	Option	T3
6	BUEM073S6	Behavioural Economics and Finance	30	Option	T1
6	BUEM068S6	Financial Markets	30	Option	T2
6	BUEM117S6	Data Science for Economics and Finance	30	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 are 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.

Your learning for this course will be organised around the activities outlined below.

Although some modules (such as IT and Professional Skills, compulsory for the first year) are delivered in distance learning or blended learning formats, teaching is typically via the traditional route of lectures and problem-solving classes. The nature of the subjects means that it requires rapid transfer of vast amount of information, and these well-established methods have proved to be the most efficient way of teaching. However individual lecturers may choose to employ more flexible methods, such as individual and group presentations or case studies. Problem solving is a key aspect of learning, especially in more technical modules, and therefore students will be encouraged to complete exercises in preparation for the problem solving classes.

Lecture notes and problem sets covering lecture material are generally posted on Moodle, to allow student to have access to the material should they unavoidably miss lectures / classes. Increasingly students may have access to audio and video archives of lectures, as a tool to reinforce learning.

An important ingredient of learning is the ability to pursue private study. The programme requires students to produce independent work, aiding development of analytical, quantitative and written communication skills.

Learning is further assisted by revision lectures, which provide guidance on examination preparation.

## **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. We use a variety of assessment methods. 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.

The range of assessments, and the type of questions and problems set within examinations and assignments are structured to balance theory and applications, to address individual learning outcomes and to discriminate between different levels of achievement. However the assessment strategy recognises 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 most course modules;
- (iii) give all students the opportunity to demonstrate their strengths and show what they can do well.

Both the second internal and the external examiners scrutinise all examination papers before they are finalised. Exams are all double marked, and are moderated by an 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. Coursework is marked by the first examiner and moderated by a second internal examiner. For these feedback is provided, and those with failed marks are asked to meet with the lecturer.

The CAS regulations are followed for rules concerning minimum pass marks, number of resits/re-assessments allowed, criteria for academic progression and the weighting between different levels (i.e. weights 0, 1 and 2 for Levels 4, 5 and 6 modules, respectively).

### **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. (economics) understand and apply simple economic concepts
2. (economics) understand and apply the standard methods and analytical tools of microeconomic and macroeconomic analysis
3. (mathematics) Knowledge and understanding of, and the ability to use, mathematical and/or statistical techniques.
4. (mathematics) Knowledge and understanding of a range of results in mathematics, and the ability to follow and construct mathematical arguments.
5. (both) 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.

#### **Intellectual:**

6. formulate testable hypotheses
7. formulate and pursue a small research problem
8. have the ability to comprehend conceptual and abstract material

9. develop a logical and systematic approach to problem solving

Practical:

10. read and comment on the financial and economic pages in the popular press
11. demonstrate general numeracy, writing skills
12. write brief reports
13. produce work under time constraints
14. have acquired IT skills, particularly for presentation and analysis of data
15. use a number of specialised statistical packages
16. problem-solving skills, including the ability to assess problems logically and to approach them analytically
17. highly developed quantitative skills
18. ability to transfer knowledge and expertise from one context to another

Personal and Social:

19. communicate both socially and academically with tutors and other students
20. learn to set up and work in small self-help groups
21. ability to learn independently using a variety of media
22. ability to work independently with patience and persistence.

### **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 graduate studies 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](#).

Copyright, Birkbeck, University of London 2022 ©