Year of entry: 2022/23

Programme Specification

1	**Awarding body**	University of London						
2	**Teaching Institution**	**Birkbeck College**						
3	**Programme Title(s)**	**BSc Economics and Mathematics** **BSc Economics with Mathematics**						
4	**Programme Code(s)**	UUBSECMT_C (3-year full-time) UBSECMAT_C (4-year full-time)						
5	**UCAS code**	LG11						
6	**Home Department**	Economics, Mathematics and Statistics						
7	**Exit Award(s)**	Certificate of Higher Education (120 credits) Diploma of Higher Education (240 credits)						
8	**Duration of Study** (number of years)	3 (FT), 4 (PT)						
9	**Mode of Study**	FT	**x**	PT	**x**	DL		
10	**Level of Award (FHEQ)**	6						
11	**Other teaching depts or institution**	N/A						
12	**Professional, Statutory Regulatory Body(PSRB) details**	N/A						
13	**QAA Benchmark Group**	Economics; Mathematics, Statistics and Operational Research						

14	**Programme Rationale & Aims**
	Rationale: This combined honours BSc programme is designed to allow students to benefit from the strong interdisciplinary synergies of the Department of Economics, Mathematics and Statistics. **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.

15	**Entry Criteria**
	For direct entry to the programme in Year 1: 112-128 points, A-levels: BBC-ABB The UCAS tariff score is applicable where applicants have recently studied a qualification that has a UCAS tariff equivalence. 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. 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.

16	**Learning Outcomes**
	On successful completion of this programme a student will be expected to 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.

17	**Learning, teaching and assessment methods**
	Although a few modules are delivered in distance learning or blended learning formats, most teaching is via the traditional route of lectures and problem-solving classes. The nature of the both 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. The usual methods of assessment used are: • 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, a high proportion of assessment marks come 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 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 external and the second internal examiner normally 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, barriers to academic progression (in particular, all core modules must be passed before a student is allowed to progress to the following year) and the weighting between different levels (i.e. weights 0, 1 and 2 for Levels 4, 5 and 6 modules, respectively).

18	**Programme Description**
	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 & 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 & 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 & Mathematics (usually in Year 2).

19	**Programme Structure**

COMPULSORY MODULES:

Compulsory modules for BSc Economics and Mathematics will be:

Level	Module code	Module title	Credits
4	EMEC013S4	Introduction to Economics	30
4	EMEC058S4	IT and Professional Skills	30
4	EMMS096S4	Calculus 1	30
4	EMMS097S4	Algebra 1	30

OPTIONS:

In consultation with the Programme Director, students will be allowed to choose optional modules from lists of all approved undergraduate modules in economics, mathematics and statistics, offered throughout the department at the appropriate level (and subject to module-specific prerequisites). Choice may however be limited by scheduling constraints.

Students will also be able to do one 30-credit project instead of an option under one of the approved module codes for BSc projects: EMEC025S6 in lieu of one economics option OR EMMS086S6 in lieu of one mathematics option.

Status*

CORE – Module must be taken and passed by student; COMPULSORY – Module must be taken, mark can be reviewed at sub-exam board; OPTIONAL – Student can choose to take this module

20	**Programme Director**	Professor Stephen Wright
21	**Start Date *(term/year)***	Autumn 2017
22	**Date approved by TQEC**	Summer 2016
23	**Date approved by Academic Board**	Summer 2016
24	**Date(s) updated/amended**	June 2016