

# **Programme Specification**

1	Awarding body	University of London					
2	Teaching Institution	Birkbeck College					
3	Programme Title(s)	BSc Mathematics with Accounting (3 year full-time)					
		BSc Mathematics with Accounting (4 year part-time)					
4	Programme Code(s)	UUBSMWAC_C (3-year full-time)					
		UBSMTWAC_C (4-year part-time)					
5	UCAS code	G1N4					
6	Home Department	Economics, Mathematics and Statistics					
7	Exit Award(s)	Certificate of Higher Education					
		Diploma of Higher Education					
8	Duration of Study (number of years)	3 years full-time/4 years part time					
9	Mode of Study	FT	✓	PT	✓	DL	
10	Level of Award (FHEQ)	6					
11	Other teaching depts or institution	Management					
12	Professional, Statutory Regulatory Body(PSRB) details	N/A					
13	QAA Benchmark Statement	Mathematics, Statistics and Operational Research					

## 14 | Programme Rationale & Aims

The BSc Mathematics with Accounting aims to provide a broad education in and some of the main concepts and methods of accounting. The programme concentrates on the methods and modelling techniques of mathematics, but also provides the theoretical background for these ideas. Students develop knowledge of a range of mathematical skills together with an understanding of accounting.

In line with the College's mission to make high quality education available to students who are not able for whatever reason to study during the day, the programme is delivered by evening, face-to-face study and is offered both in part-time and full-time modes.

## <sup>15</sup> Entry Criteria

A UCAS tariff of at least 112 points, including a grade B, or higher, in A-level mathematics, or the equivalent.

For students who have not recently taken qualifications with a UCAS tariff, A-level mathematics, or the equivalent, is desirable, but students without such a qualification are required to pass an entrance test.

Students can also study this programme after successful completion of the foundation year of the BSc Mathematics with Foundation Year at Birkbeck, by transferring onto the BSc Mathematics with Accounting with Foundation Year route (see BSc Mathematics with Foundation Year specification for entry criteria for this route).



## 16 Learning Outcomes

On successful completion of this programme a student will have attained the following learning outcomes.

## **Subject Specific:**

- LO1 Knowledge and understanding of, and the ability to use, mathematical and/or statistical techniques.
- LO2 Knowledge and understanding of a range of results in mathematics and statistics.
- LO3 Appreciation of the need for proof in mathematics, and the ability to follow and construct mathematical arguments.
- LO4 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.
- LO5 Understand the importance of assumptions and have an awareness of where they are used and the possible consequences of their violation.
- LO6 Ability to present, analyse and interpret data.
- LO7 A deeper knowledge of some particular areas of mathematics.
- LO8 Understand and apply the principles of costing and budgeting.
- LO9 Understand and prepare accounting statements.
- LO10 Develop technical management and accounting skills.
- LO11 Develop knowledge and understanding of the theory and practice of accounting.
- LO12 A deeper knowledge of some particular areas of, or relevant to, accounting.

### Intellectual:

- LO13 Problem-solving skills, including the ability to assess problems logically and to approach them analytically.
- LO14 Ability to comprehend conceptual and abstract material.
- LO15 Highly developed quantitative skills.

#### **Practical:**

- LO16 Ability to use appropriate software packages.
- LO17 Ability to transfer knowledge and expertise from one context to another.

#### **Personal and Social:**

- LO18 Ability to learn independently using a variety of media.
- LO19 Ability to work independently with patience and persistence.
- LO20 Time-management and organizational skills.
- LO23 Good communication skills, including the ability to write coherently.



## 17 | Learning, teaching and assessment methods

Most teaching sessions are lectures or occasionally computing sessions. Lectures present both theory and worked examples. Computing sessions use either spreadsheets or a modern statistical or mathematical software package, 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 notes, problems and worked solutions are provided to accompany lectures on each course. 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 email and telephone.

The methods of assessment used are:

- Unseen examinations.
- Assessed assignments.
- Essays.

For most modules 80% of the assessment comes from unseen examinations in the Summer Term. 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 HE level 5 and 6 examination papers before they are finalized. All examination papers are 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 BSc review meeting.



## 18 Programme Description

The first two years of the programme consist mainly of core and compulsory modules. These modules cover the body of knowledge that every student is expected to know as a key part of university level study in this area.

At level 5 there are 60 credits of compulsory modules, and 60 credits of options, while at level 6 there are 120 credits of options, allowing students to tailor their programme to suit their interests and strengths.

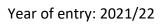
(Note: Students who successfully complete the foundation year of BSc Mathematics with Foundation year, can then transfer to the BSc Mathematics with Accounting with Foundation year route to follow the programme as shown below.)

PI	Programme Structure					
Full-T	Full-Time programme – 3 years					
Year 1	1					
Level	Module Code	Module Title	Credits	Status*		
4	EMMS096S4	Calculus 1	30	Core		
4	EMMS097S4	Algebra 1	30	Core		
4	BUEM096S4	Numbers, Proofs and Counting	30	Core		
4	BUMN138H4	Personal and Academic Skills for Success	15	Core		
4	BUMN131H4	Introduction to Accounting	15	Core		
Year 2	2					
Level	Module Code	Module Title	Credits	Status*		
5	BUEM001S5	Calculus 2	30	Compulsory		
5	BUMN133S5	Financial Reporting	30	Compulsory		
		20 crodits loval 5 from indicative ention list				

Level	Module Code	Module Title	Credits	Status*
5	BUEM001S5	Calculus 2	30	Compulsory
5	BUMN133S5	Financial Reporting	30	Compulsory
5		30 credits level 5 from indicative option list below	30	Option
5/6		One level 5 or 6 <i>mathematics</i> option from indicative list below (students can do a level 6 option at the Programme director's discretion, to increase choice, and if they do this, then they do 30 credits at level 5 in Year 3 to compensate)	30	Option

### Year 3

Level	Module Code	Module Title	Credits	*Status
6/5		One level 6/5 mathematics option from indicative list below (they do a level 5 option only if they did a level 6 in Year 2)	30	Option
6		90 credits of options at level 6 from indicative list below	90	Option





Part-1	Time programm	e – 4 years			
Year 1	1				
Level	Module Code	Module Title	Credits	Status*	
4	EMMS096S4	Calculus 1	30	Core	
4	EMMS097S4	Algebra 1	30	Core	
4	BUMN138H4	Personal and Academic Skills for Success	15	Core	
4	BUMN131H4	Introduction to Accounting	15	Core	
Year 2	2				
Level	Module Code	Module Title	Credits	Status*	
4	BUEM096S4	Numbers, Proofs and Counting	30	Core	
5	BUEM001S5	Calculus 2	30	Compulsory	
5	BUMN133S5	Financial Reporting	30	Compulsory	
Year 3	3				
Level	Module Code	Module Title	Credits	Status*	
5		30 credits level 5 from indicative option list below	30	Option	
5		30 credits level 5 from indicative option list below	30	Option	
6		30 credits level 6 from indicative option list below	30	Option	
Year 4					
6		90 credits level 6 from indicative option list below	90	Options	
Over	Over years 3 and 4 students must do at least 60 credits of level 6 mathematics options, and at				
-		el 6 Accounting options.			
	nal modules (inc	<u> </u>			
Level	Module Code	Module Title	Credits	Status*	
5	EMMS098S5	Probability and Statistics	30	Option	
5	BUEM101S5	Algebra 2	30	Option	
5	BUEM100S5	Number Theory and Cryptography	30	Option	
6	BUEM102S6	Algebra 3	30	Option	
6	BUEM103S6	Analysis	30	Option	
6	BUEM104S6	Ordinary Differential Equations	30	Option	
6	BUEM105S6	Finite Mathematics	30	Option	
6	BUEM106S6			Option	
6	BUEM003S6			Option	
6	MOMN042H6			Option	
6	MOMN040H6	Taxation	15	Option	
6	BUMN132H6	Accounting Theory	15	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	Dr Andrew Bowler
21	Start Date (term/year)	Autumn 2018
22	Date approved by TQEC	Summer 2017
23	Date approved by Academic Board	Summer 2017
24	Date(s) updated/amended	February 2019