**Programme Regulations: 2022/23** 

**Programme Titles:** 

BSc (Hons) Mathematics with Finance – UCAS Code: G1N3

BSc (Hons) Mathematics with Finance with Placement Year - Code: G1NZ

BSc (Hons) Mathematics with Business – UCAS Code: G1N4

BSc (Hons) Mathematics with Business with Placement Year -Code: 1556U

#### Notes

- (i) These programme regulations should be read in conjunction with the University's Undergraduate Progress Regulations and Examination Conventions.
- (ii) All optional modules are offered subject to the constraints of the timetable and to any restrictions on the number of students who may be taught on a particular module. Not all modules may be offered in all years and they are listed subject to availability.
- (iii) Unless otherwise stated under 'Type', modules are not core.
- (iv) A compulsory module is a module which a student is required to study.
- (v) A core module is a module which a student must pass, and in which a fail mark may neither be carried nor compensated; such modules are designated by the board of studies as essential for progression to a further stage of the programme or for study in a further module.
- (vi) All modules are delivered in Linear mode unless stated otherwise as Block, eLearning or distance learning.
- (vii) Students are not recruited to G1NZ/1556U. Rather a G1N3/G1N4 candidate may transfer to G1NZ/1556U by the end of week 5 of Semester 2 of Stage 2, subject to the agreement of the Degree Programme Director.
- (viii) Programme transfers for Tier 4 students may be restricted by current Tier 4 rules. Please refer to the Visa Team for advice.

# 1. Stage 1(a) All candidates shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS1605	Introduction to Calculus	20	20	0	4	Core	
MAS1606	Introductory Algebra	20	20	0	4	Core	
MAS1607	Multivariable Calculus &	20	0	20	4	Core	
	Differential Equations						
MAS1608	Introduction to	20	0	20	4	Core	
	Probability & R						

#### (b) G1N3 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ACC1010	Introduction to Financial	20	10	10	4	Core	
	Accounting						
ACC1011	Introduction to Management	20	10	10	4	Core	
	Accounting & Finance						

(c) G1N4 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ACC1000	Introduction to Non-Specialist Accounting & Finance	20	10	10	4		
BUS1001	Introduction to Management & Organisation	20	10	10	4	Core	

## 2. Stage 2

(a) G1N3 candidates shall take the following compulsory module:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS2904	Statistical Inference and	20	10	10	5		
	Stochastic Modelling						

(b) G1N3 candidates shall select optional modules to a total credit value of 60; candidates are required to take all 40 credits from either block (i), block (ii) or block (iii) G1N4 candidates shall select optional modules to a total credit value of 80; this must include all 40 credits from either block (i), block (ii) or block (iii).

(i) Candidates shall select 0, 20 or 40 credits from the following list. If only 20 credits are chosen, it must be MAS2707.

Code	Descriptive Title	Total	Credits	Credits	Level	Type	Subject
		Credits	Sem 1	Sem 2			
MAS2702	Complex Analysis	10	10	0	5		
MAS2703	Algebra	10	0	10	5		
MAS2707	Vector Spaces, Groups &	20	10	10	5		
	Algorithms						

(ii) Candidates shall select 0, 20 or 40 credits from the following list. If only 20 credits are chosen, it must be MAS2804.

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS2803	Fluid Dynamics	10	0	10	5		
MAS2804	Vector Calculus,	20	10	10	5		
	Differential Equations &						
	Transforms						
MAS2806	Scientific Computation	10	10	0	5		
	with Python						

(iii) G1N3 candidates shall select 20 or 40 credits from the following list. G1N4 candidates shall select 0, 20 or 40 credits from the following list. If only 20 credits are chosen, it must be MAS2904. (note: MAS2904 is compulsory for G1N3 candidates – see 2 (a) above).

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS2903	Introduction to Bayesian	10	0	10	5		
	Methods						
MAS2904	Statistical Inference &	20	10	10	5		
	Stochastic Modelling						
MAS2906	Computational	10	10	0	5		
	Probability & Statistics						
	with R						

(c) G1N3 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Type	Subject
		Credits	Sem 1	Sem 2			
ACC2000	Interpreting Company Accounts	20	10	10	5		
ACC2007	Corporate Finance	20	10	10	5	Core	

(d) G1N4 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ACC2000	Interpreting Company Accounts	20	10	10	5		
BUS2000	Human Resource Management	20	10	10	5		

## 3. Year 3 (Placement Year - G1NZ/ 1556U only)

On completion of Stage 2 and before entering Stage 3, candidates may as part of their studies for the degree spend a year in a placement with an approved organisation. Permission to undertake a placement is subject to the approval of the Degree Programme Director. Students who are required to re-sit their Stage 2 assessment must delay the start of their placement until they have done so. Students who fail Stage 2 may not complete a placement year.

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
NCL3000	Careers Service Placement	120	60	60	6		
	Year Module						

### 4. Stage 3

(a) G1N3 candidates shall take the following compulsory module:

Code	Descriptive Title	Total Credits		Credits Sem 2	Level	Type	Subject
MAS3904	Stochastic Financial Modelling	10	10	0	6		

(b) G1N4 candidates shall select 80 credits of optional modules from the following list; G1N3 candidates shall select 70 credits of optional modules from the following list (excluding MAS3904):

Code	Descriptive Title	Total	Credits	Credits	Level	Type	Subject
		Credits	Sem 1	Sem 2			
MAS3701	Foundations of Group Theory	10	10	0	6		
MAS3702	Linear Analysis	10	10	0	6		
MAS3705	Matrix Analysis	10	10	0	6		
MAS3706	Topology	10	0	10	6		
MAS3707	Number Theory and	20	10	10	6		
	Cryptography						
MAS3708	Graphs and Symmetry	10	0	10	6		
MAS3709	Representation Theory	10	0	10	6		
MAS3713	Curves and Surfaces	10	0	10	6		
MAS3802	Quantum Mechanics	10	0	10	6		
MAS3803	Advanced Fluid Dynamics	10	10	0	6		
MAS3804	Relativity	10	10	0	6		
MAS3808	Instabilities	10	10	0	6		
MAS3809	Variational Methods &	10	0	10	6		
	Lagrangian Dynamics						
MAS3810	Methods for Differential	20	10	10	6		
	Equations & Partial						
	Differential Equations						
MAS3815	Mathematical Biology	10	0	10	6		
MAS3902	Bayesian Inference	10	0	10	6		
MAS3904	Stochastic Financial	10	10	0	6		
	Modelling						
MAS3905	Statistical Inference	10	10	0	6		
MAS3907	Big Data Analytics	10	0	10	6		
MAS3910	Discrete Stochastic	10	10	0	6		
	Modelling						
MAS3912	Survival Analysis	10	0	10	6		
MAS3913	Linear & Generalised Linear	20	10	10	6		
	Models						

Note: With the permission of the Degree Programme Director, candidates may replace up to 20 credits of the optional modules above with alternative optional Stage 3 MAS modules in September, if the timetable allows (and if they have taken the relevant pre-requisites).

## (c) G1N3 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ACC3000	Case Studies in Finance, Accounting & Business	20	10	10	6		
ACC3006	International Financial Management	20	10	10	6		

(d) G1N4 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ACC3000	Case Studies in Finance,	20	10	10	6		
	Accounting & Business						
BUS3000	Enterprise & Entrepreneurship	20	10	10	6		
	with Lean Innovation						

#### 5. Assessment methods

Details of the assessment pattern for each module are explained in the module outline.

## 6. Degree classification

Candidates will be assessed for degree classification on the basis of all the modules taken at Stages 2 and 3 with the weighting of the Stages being 1:2 for Stage 2 and Stage 3 respectively. The Placement Year will not be used in the classification of G1NZ/ 1556U candidates.