Programme Regulations: 2024/25

Programme Titles:

Degree of Bachelor of Science with Honours in Mathematics with Finance – UCAS Code: G1N3 Degree of Bachelor of Science with Honours in Mathematics with Finance with Placement Year –

Code: G1NZ

Degree of Bachelor of Science with Honours in Mathematics with Finance with International Study

Year - Code: 1845U

Degree of Bachelor of Science with Honours in Mathematics with Business – UCAS Code: G1N4 Degree of Bachelor of Science with Honours in Mathematics with Business with Placement Year –

Code: 1556U

Degree of Bachelor of Science with Honours in Mathematics with Business with International Study Year – Code: 1844U

Notes

- (i) These programme regulations should be read in conjunction with the University's Taught Programme Regulations.
- (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			
MAS1606	Introductory Algebra	20	20	0	4	Core	М
MAS1612	Introductory Calculus and Differential Equations	20	20	0	4	Core	M
MAS1613	Multivariable Calculus	10	0	10	4	Core	M
MAS1614	Real Analysis	10	0	10	4	Core	М
MAS1616	Introduction to Probability and Statistics	20	0	20	4	Core	S

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

Code	Descriptive Title	Total	Credits	Credits	Level	Type	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	20	10	10	4		
	Accounting & Finance				_	_	
BUS1001	Introduction to Management &	20	10	10	4	Core	
	Organisation						

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			
MAS2901	Introduction to Statistical Inference	10	10	0	5		S
MAS2902	Introduction to Regression & Stochastic Modelling	10	0	10	5		S

(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	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS2701	Linear Algebra	10	10	0	5		М
MAS2702	Complex Analysis	10	10	0	5		М
MAS2703	Algebra	10	0	10	5		М
MAS2708	Groups & Discrete	10	0	10	5		M
	Mathematics						

(ii) Candidates shall select 0, 20 or 40 credits from the following list. If only 20 credits are chosen, it must be MAS2801 and MAS2802.

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS2801	Vector Calculus	10	10	0	5		M
MAS2806	Scientific Computation	10	10	0	5		М
	with Python						
MAS2802	Differential Equations	10	0	10	5		М
	Transforms and Waves						
MAS2803	Fluid Dynamics I	10	0	10	5		М

(iii) G1N3 candidates shall select 0 or 20 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 MAS2901 and MAS2902) (note: MAS2901 and MAS2902 are compulsory for G1N3 candidates – see 2 (a) above).

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS2901	Introduction to	10	10	0	5		S
	Statistical Inference						
MAS2902	Introduction to	10	0	10	5		S
	Regression & Stochastic						
	Modelling						
MAS2903	Introduction to Bayesian	10	0	10	5		S
	Methods						
MAS2906	Computational	10	10	0	5		S
	Probability & Statistics						
	with R						

(c) G1N3 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		
ACC2007	Responsible 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 – Intercalating Year

(a) Career Placement Year

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 Sem 2	Level	Туре	Subject
NCL3000	Careers Service Placement Year Module	120	60	60	6		

(b) <u>International Study Year</u>

On completion of Stage 2 and before entering Stage 3, candidates may spend the equivalent of one academic year abroad at an appropriate exchange partner institution. Permission to undertake a year abroad 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 year abroad until they have done so. Students who fail Stage 2 may not complete a year abroad.

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Туре	Subject
ISY3000	International Study Year Module	120	60	60	6		

4. Stage 3

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

Code	Descriptive Title	Total	Credits	Credits	Level	Type	Subject
		Credits	Sem 1	Sem 2			
MAS3904	Stochastic Financial Modelling	10	10	0	6		S

(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	Туре	Subjec
		Credits	Sem 1	Sem 2			t
MAS3701	Foundations of Group Theory	10	10	0	6		М
MAS3702	Linear Analysis	10	0	10	6		М
MAS3704	Coding Theory	10	0	10	6		М
MAS3705	Matrix Analysis	10	10	0	6		М
MAS3706	Metric Spaces and Topology	10	10	0	6		М
MAS3707	Number Theory and Cryptography	20	10	10	6		М
MAS3709	Representation Theory	10	0	10	6		М
MAS3713	Curves and Surfaces	10	0	10	6		М
MAS3801	Methods for Differential Equations	10	10	0	6		М
MAS3802	Quantum Mechanics	10	0	10	6		М
MAS3803	Fluid Dynamics II	10	10	0	6		М
MAS3804	Relativity and Fundamental	10	10	0	6		М
	Particles						
MAS3806	Partial Differential Equations	10	0	10	6		М
MAS3808	Hydrodynamic and Climate	10	10	0	6		М
	Instabilities						
MAS3809	Variational Methods & Lagrangian	10	0	10	6		M
	Dynamics						
MAS3815	Mathematical Biology	10	0	10	6		M
MAS3902	Bayesian Inference	10	0	10	6		S
MAS3903	Linear Models	10	10		6		S
MAS3904	Stochastic Financial Modelling	10	10	0	6		S
MAS3905	Statistical Inference	10	10	0	6		S
MAS3906	Generalized Linear Models	10	0	10	6		S
MAS3907	Big Data Analytics	10	0	10	6		S
MAS3917	Stochastic Processes	10	10	0	6		S
MAS3918	Topics in Statistical Modelling A	20	0	20	6		S

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,	20	10	10	6		
	Accounting & Business						
ACC3006	International Financial	20	10	10	6		
	Management						

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

Code	Descriptive Title	Total	Credits	Credits	Level	Type	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.