Programme Titles:

Degree of Bachelor of Science with Honours in Mathematics and Economics - UCAS Code: GL11 Degree of Bachelor of Science with Honours in Mathematics and Economics with Placement Year - Code: 1138U

Degree of Bachelor of Science with Honours Mathematics and Economics with International Study Year: Code 1802U

Degree of Bachelor of Science with Honours in Mathematics and Accounting - UCAS Code: NG41 Degree of Bachelor of Science with Honours in Mathematics and Accounting with Placement Year - Code: 1139U

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 not be 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 1138/1139U. Rather a GL11/NG41 candidate may transfer to 1138/1139U 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	Μ
MAS1612	Introductory Calculus and	20	20	0	4	Core	М
	Differential Equations						
MAS1613	Multivariable Calculus	10	0	10	4	Core	М
MAS1614	Real Analysis	10	0	10	4	Core	Μ
MAS1616	Introduction to	20	0	20	4	Core	S
	Probability and Statistics						

(b) GL11 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ECO1100	Economic Analysis	30	15	15	4	Core	E
ECO1118	Economic Applications	10	5	5	4		E

(c) NG41 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 Accounting	20	10	10	4	Core	
ACC1011	Introduction to Management Accounting & Finance	20	10	10	4	Core	

2. Stage 2

(a) All candidates shall select optional modules to a total credit value of 60. This must include all 40 credits from either block (i) (the Pure Mathematics Pathway), block (ii) (the Applied Mathematics Pathway) or block (iii) (the Statistics Pathway).

(i) Candidates may select 0, 20 or 40 credits from the following list. If only 20 credits are chosen, it must be MAS2701 and MAS2708.

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS2701	Linear Algebra	10	10	0	5		Μ
MAS2702	Complex Analysis	10	10	0	5		Μ
MAS2703	Algebra	10	0	10	5		Μ
MAS2708	Groups & Discrete	10	0	10	5		М
	Mathematics						

(ii) Candidates may 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		Μ
MAS2802	Differential Equations &	10	0	10	5		Μ
	Transforms and Waves						
MAS2803	Fluid Dynamics	10	0	10	5		Μ
MAS2806	Scientific Computation with	10	10	0	5		Μ
	Python						

(iii) Candidates may select 0, 20 or 40 credits from the following list. If only 20 credits are chosen, it must be MAS2901 and MAS2902.

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

(b) GL11 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Туре	Subject
ECO2101	Microeconomic Analysis	30	15	15	5	Core	
ECO2102	Macroeconomic Analysis	30	15	15	5	Core	

(c) NG41 candidates shall taking the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ACC2003	Financial Control	20	10	10	5	Core	
ACC2005	Intermediate Financial	20	10	10	5	Core	
	Accounting						

(d) NG41 candidates shall take one further module (20 credits) from the following list:

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

Note: ACC2007 is a pre-requisite for ACC3006 in Stage 3.

3. Year 3 (Placement Year)

(i) Career Placement (1138U 1139U)

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 year until they have done so. Students who fail Stage 2 may not complete a placement year.

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

(ii) International study Year (1802U)

On completion of Stage 2 and before entering Stage 3, candidates may as part of their studies for the degree spend a 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 placement until they have done so. Students who fail Stage 2 may not complete a year abroad.

Code	Descriptive title	Total	Credits	Credits	Credits	Level	Туре	Mode
		Credits	Sem 1	Sem 2	Sem 3			
ISY3000	International Study Year	120	60	60	0	6		

4. Stage 3

(a) (i) Candidate studying the Pure Mathematics Pathway shall take the following compulsory module:

Code	Descriptive Title	Total Credite	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS3707	Number Theory and	20	10	10	6		
	Cryptography						

(a) (ii) Candidates studying the Pure Mathematics Pathway shall select 40 additional credits from the following list:

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Туре	Subject
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
MAS3709	Representation Theory	10	0	10	6		М
MAS3713	Curves and Surfaces	10	0	10	6		М

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).

(b) (i) Candidates studying the Applied Mathematics Pathway shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS3801	Methods for Differential	10	10	0	6		М
	Equations						
MAS3806	Partial Differential Equations	10	0	10	6		М

(b) (ii) Candidates studying the Applied Mathematics Pathway shall select 40 additional credits from the following list:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS3802	Quantum Mechanics	10	0	10	6		Μ
MAS3803	Fluid Dynamics II	10	10	0	6		Μ
MAS3804	Relativity and Fundamental Particles	10	10	0	6		Μ
MAS3808	Hydrodynamic and Climate Instabilities	10	10	0	6		Μ
MAS3809	Variational Methods & Lagrangian Dynamics	10	0	10	6		М
MAS3815	Mathematical Biology	10	0	10	6		М

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) (i) Candidates studying the Statistics Pathway shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS3903	Linear Models	10	10		6		S
MAS3906	Generalised Linear Models	10	0	10	6		S

(c) (ii) Candidates studying the Statistics Pathway shall select 40 additional credits from the following list:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
MAS3902	Bayesian Inference	10	0	10	6		S
MAS3904	Stochastic Financial Modelling	10	10	0	6		S
MAS3905	Statistical Inference	10	10	0	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).

(d) (i) GL11 candidates shall take the following compulsory module:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ECO3001	Advanced Microeconomics	20	10	10	6		E

(d) (ii) GL11 candidates shall select 40 credits of optional modules from the following list:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ECO3002	Advanced Macroeconomics	20	10	10	6		E
ECO3004	Labour Economics	20	10	10	6		E
ECO3005	Behavioural Economics and	20	10	10	6		Е
	Experimental methods						
ECO3006	Economics of Banking	10	0	10	6		Е
ECO3010	Monetary Economics	10	10	0	6		E
ECO3014	Public Economics	20	10	10	6		E
ECO3018	Financial Economics	10	0	10	6		E
ECO3021	Economics of Risk and	10	10	0	6		E
	Uncertainty						
ECO3022	Health Economics	10	0	10	6		E
ECO3026	Industrial Economics and Policy	20	10	10	6		E
ECO3032	Game Theory	10	0	10	6		E
ECO3033	Development Economics	20	10	10	6		E
ECO3066	Environmental Economics	10	10	0	6		E

(e) (i) NG41 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total	Credits	Credits	Level	Туре	Subject
		Credits	Sem 1	Sem 2			
ACC3001	Advanced Financial Accounting and Reporting	20	10	10	6		
ACC3002	Management Accounting	20	10	10	6		

(e) (ii) NG41 candidates shall take one further module (20 credits) from the following list:

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		

(f) With the approval of the Degree Programme Director, alternative optional modules to those listed above may be selected with a total value of not more than 20 credits. In particular, students may select:

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Туре	Subject
NCL3007	Career Development for Final Year Students	20	10	10	6		

Note: There are limited places on this module and therefore there is no guarantee that students will be accepted.

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.