Programme Regulations: 2025/26

Programme Titles:
BSc (Hons) Mathematics - UCAS Code: G100
BSc (Hons) Mathematics with International Study Year – Code 1608U
BSc (Hons) Mathematics with Placement Year – Code: G10X
BSc (Hons) Mathematics and Statistics – UCAS Code: GG13
BSc (Hons) Mathematics and Statistics with Placement Year – Code: GG1X
BSc (Hons) Mathematics and Statistics with International Study Year – Code: 1803U
BSc (Hons) Statistics - UCAS Code: G300
BSc (Hons) Statistics with Placement Year – Code: G30X

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 who have completed Stage 0 of the BSc Honours in Mathematical Sciences (with Foundation Year) - UCAS code: G101, will normally be permitted to progress to Stage 1 of one of G100 or GG13.

viii Where a module is subject specific, code M refers to modules in Mathematics and code S refers to modules in Statistics.

ix Students are not recruited to G10X/G30X/GG1X. Rather a G100/G300/GG13 candidate may transfer to G10X/G30X/GG1X by the end of week 5 of Semester 2 of Stage 2, subject to the agreement of the Degree Programme Director.

x If a candidate meets the requirements for the four year degree, MMath (G103), they may transfer to that programme at any time between the end of Stage 1 and the start of the Semester 2 examination period in Stage 3, provided they attained an average of at least 60 in the previous Stage.

xi Programme transfers for Student Visa students may be restricted. Please refer to the Visa Team for advice.

xii Programmes coded G300 and G30X are withdrawn from entry effective September 2023.

1. Stage 1

All candidates shall take the following compulsory modules:

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Subject
MAS1606	Introductory Algebra	20	20	0	4	Core	
MAS1614	Real Analysis	10	0	10	4	Core	
MAS1616	Introduction to Probability and Statistics	20	0	20	4	Core	
MAS1701	Logic, Sets & Counting	10	10	0	4		
MAS1702	Number Systems	10	0	10	4		
MAS1803	Problem Solving with Python	10	10	0	4		
MSP1612	Introductory Calculus and Differential Equations	20	20	0	4	Core	
MSP1613	Multivariable Calculus	10	0	10	4	Core	
MSP1804	Dynamics	10	0	10	4		

2. Stage 2

(a) All candidates shall take the following compulsory modules:

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Subject
MAS2701	Linear Algebra	10	10	0	5		M
MAS2702	Complex Analysis	10	10	0	5		M
MAS2703	Groups and Rings	10	0	10	5		M
MAS2901	Statistical Inference	10	10	0	5		S
MAS2909	Probability	10	10	0	5		S
MAS2910	Regression	10	0	10	5		S
MSP2801	Vector Calculus	10	10	0	5		M
MSP2802	Differential Equations, Transforms and Waves	10	10	0	5		M
MSP2803	Fluid Dynamics I	10	0	10	5		M

(b) GG13 candidates shall take the following compulsory modules:

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Subject
MAS2907	Stochastic Processes	10	0	10	5		S
MAS2908	Data Visualisation	10	0	10	5		S

(c) G100 candidates shall take 30 credits of optional modules and GG13 candidates shall take 10 credits of optional modules, normally selected from the following lists.

G100 candidates must not select more than 20 credits from each list (i), (ii) and (iii):

(i)

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Subject
MAS2713	Curves and Surfaces	10	0	10	6		M
MAS2714	Coding Theory	10	0	10	6		M

(ii)

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Subject
MSP2020	Principles of Quantum Mechanics	10	0	10	5		M
MAS2806	Numerical Methods with Python	10	0	10	5		M
MSP2815	Mathematical Biology	10	0	10	5		M

(iii)

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Subject
MAS2907	Stochastic Processes	10	0	10	5		S
MAS2908	Data Visualisation	10	0	10	5		S
DSC2001*	Frontiers in Data Science A	10	0	10	5		S

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

3. Year 3 - Intercalating Year

(i) Career Placement

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 1	Credits Sem 2	Level	Type	Subject
NCL3000	Careers Service Placement Year Module	120	60	60	6		

(ii) International Study Year

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 Sem 1*	*Credits Sem 2*	*Credits Sem 3*	*Level*	*Type*	*Mode*
ISY3000	*International Study Year*	*120*	*60*	*60*	*0*	*6*		

3. Stage 3

(a) All candidates shall take the following module:

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Subject
MAS3094	Mathematical and Skills Group Project	20	10	10	6		

(b) All candidates shall take 100 credits of optional modules, normally selected from the following list:

(Note: G100 students must select at least 60 credits of M modules; G300 students must select at least 60 credits of S modules; GG13 students must select at least 40 credits of M modules and at least 40 credits of S modules)

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Subject
HSC3100	Clinical Trials	10	0	10	6		S
HSC3101	Decision Modelling for Health Data Science	10	0	10	6		S
HSC3102	Topics in Medical Statistics and Health Data Science	10	0	10	6		S
MAS2713	Curves and Surfaces	10	0	10	6		M
MAS2714	Coding Theory	10	0	10	6		M
MAS3701	Group Theory	10	10	0	6		M
MAS3702	Linear Analysis	10	0	10	6		M
MAS3705	Matrix Analysis	10	10	0	6		M
MAS3706	Metric Spaces and Topology	10	10	0	6		M
MAS3707	Number Theory & Cryptography	20	10	10	6		M

MAS3716	Measure Theory	10	10	0	6		M
MAS3904	Stochastic Financial Modelling	10	0	10	6		S
MAS3908	Experimental Design	10	0	10	6		S
MAS3919	Foundations of Machine Learning	10	0	10	6		S
MAS3921	Extreme Value Theory	10	0	10	6		S
MAS3923	Time Series	10	0	10	6		S
MAS3924	Survival Analysis	10	0	10	6		S
MAS3925	Statistical Genetics	10	0	10	6		S
MAS3927	Mathematical Statistics	10	10	0	6		S
MAS3928	Statistical Modelling	10	10	0	6		S
MAS3929	Bayesian Statistics and Decision Theory	10	10	0	6		S
MSP3020	Advanced Quantum Mechanics	10	10	0	6		M
MSP3044	Quantum Information	10	10	0	6		M
MSP3801	Methods for Differential Equations	10	10	0	6		M
MSP3803	Fluid Dynamics II	10	10	0	6		M
MSP3804	Relativity and Fundamental Particles	10	10	0	6		M
MSP3808	Hydrodynamic and Climate Instabilities	10	10	0	6		M
MSP3809	Variational Methods & Lagrangian Dynamics	10	0	10	6		M

Notes
(ii) Optional modules will not necessarily be available in all combinations. In particular, we anticipate that only one module can be chosen from each of the following pairs of modules:

MAS3716 & MAS3921;

MAS3702 & MAS3908;

MSP2020 & MAS3925.

(c) Alternative optional modules to those listed above may be selected with a total value of not more than 20 credits. A module that has been taken at a previous stage cannot be taken again in Stage 3. In particular, modules may be selected from the following:

Code	Descriptive Title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Subject
NCL3007*	Career Development for Final Year Students	20	10	10	6		
MAS3092*	Global Education in Mathematics and Statistics	10	0	10	6		
MSP2020	Principles of Quantum Mechanics	10	0	10	5		M
MSP2815	Mathematical Biology	10	0	10	5		M

(*) Note: Approval of the Degree Programme Director must be given to select these modules. There are limited places on these modules and therefore there is no guarantee that students will be accepted.

4. Assessment methods

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

5. 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.