

FOUNDATION STAGE

Module code	Module title	Restricted	Credits	Term running	Exam in January or May	Coursework
MTH0001	Principles of Pure Mathematics	RESTRICTED				
MTH0003	Exploring Mathematics	RESTRICTED				
MTH0004	Foundation Statistics	RESTRICTED				
MTH0005	Science: Skills and Culture	RESTRICTED				
MTH0006	Applied Mathematics	RESTRICTED				
MTH0007	Programming Skills	RESTRICTED				

STAGE 1

Module code	Module title	Restricted	Credits	Term running	Exam in January or May	Coursework
MTH1000	Foundations	RESTRICTED				
MTH1001	Mathematical Structures		30	TRM1+2	JANUARY & MAY	YES
MTH1002	Mathematical Methods		30	TRM1+2	JANUARY & MAY	YES
MTH1003	Mathematical Modelling		30	TRM1+2	MAY	YES
MTH1004	Probability, Statistics and Data		30	TRM1+2	MAY (AND IN CLASS TESTS DURING TERMS)	YES
MTH1100	Employability and Preparation for Placement or Internship	RESTRICTED				
EMP1000	Preparing for your placement	RESTRICTED				

STAGE 2

Module code	Module title	Restricted	Credits	Term running	Exam in January or May	Coursework
MTH2003	Differential Equations		15	TERM1	JANUARY	YES
MTH2004	Vector Calculus and Applications		15	TERM2	MAY	YES
MTH2005	Modelling: Theory and Practice		30	TRM1+2	MAY	YES
MTH2006	Statistical Modelling and Inference		30	TRM1+2	MAY	YES
MTH2008	Real Analysis		15	TERM1	JANUARY	YES
MTH2009	Complex Analysis		15	TERM2	MAY	YES
MTH2010	Groups, Rings and Fields		15	TERM1	JANUARY	YES
MTH2011	Linear Algebra		15	TERM2	MAY	YES
MTH2100	Employability and Career Resources	RESTRICTED				
EMP2000	Securing your placement	RESTRICTED				

EMP2001	Ambassadors for Science	RESTRICTED				
STAGE 3						
Module code	Module title	Restricted	Credits	Term running	Exam in January or May	Coursework
MTH3001	Theory of Weather and Climate		15	TERM2	MAY	YES
MTH3004	Number Theory		15	TERM1	MAY	YES
MTH3006	Mathematical Biology and Ecology		15	TERM1	MAY	YES
MTH3007	Fluid Dynamics		15	TERM1	MAY	YES
MTH3008	Partial Differential Equations		15	TERM2	MAY	YES
MTH3011	Nonlinear Systems and Control		15	TERM2	MAY	YES
MTH3013	Applied Differential Geometry		15	TERM2	MAY	YES
MTH3019	Mathematics: History and Culture		15	TERM1	MAY	YES
MTH3022	Graphs, Networks and Algorithms		15	TERM1	MAY	YES
MTH3024	Stochastic Processes		15	TERM2	MAY	YES
MTH3025	Semester of Mathematical Studies Abroad	RESTRICTED				
MTH3026	Cryptography		15	TERM2	MAY	YES
MTH3028	Statistical Inference: Theory and Practice		15	TERM1	MAY	YES
MTH3030	Mathematics of Climate Change		15	TERM1	MAY	YES
MTH3035	Mathematics Group Project	RESTRICTED				
MTH3038	Galois Theory		15	TERM1	MAY	YES
MTH3039	Computational Nonlinear Dynamics		15	TERM1	N/A	YES
MTH3040	Topology and Metric Spaces		15	TERM2	MAY	YES
MTH3041	Bayesian statistics, Philosophy and Practice		15	TERM1	MAY	YES
MTH3042	Integral Equations		15	TERM2	MAY	YES
MTH3045	Statistical Computing		15	TERM2	MAY	YES
MTH3050	Functional Analysis		15	TERM2	MAY	YES

MTH3100	Industrial Placement	RESTRICTED				
EMP3000	Year in industry	RESTRICTED				
EMP3001	Commercial and Industrial Experience	RESTRICTED				
EMP3003	Professional Experience	RESTRICTED				
STAGE 4						
Module code	Module title	Restricted	Credits	Term running	Exam in January or May	Coursework
MTHM002	Methods for Stochastics and Finance	RESTRICTED				
MTHM003	Analysis and Computation for Finance	RESTRICTED				
MTHM005	Mathematical Sciences Project	RESTRICTED				
MTHM006	Mathematical Theory of Option Pricing		15	TERM2	MAY	YES
MTHM007	Engaging with Research	RESTRICTED				
MTHM009	Advanced Topics in Mathematical & Computational Biology		15	TERM2	N/A	YES
MTHM010	Representation Theory of Finite Groups	RESTRICTED				
MTHM014	Metric Number Theory and Diophantine Approximation		15	TERM2	MAY	YES
MTHM015	AI and Data Science Methods for Life and Health Sciences		15	TERM2	N/A	YES
MTHM017	Advanced Topics in Statistics	RESTRICTED				
MTHM018	Dynamical Systems and Chaos		15	TERM2	MAY	YES
MTHM019	Fluid Dynamics of Atmospheres and Oceans		15	TERM2	MAY	YES
MTHM021	Advanced Mathematics Project	RESTRICTED				
MTHM023	Modelling the Weather and Climate		15	TERM2	MAY	YES
MTHM028	Algebraic Number Theory		15	TERM2	MAY	YES

MTHM030	Waves, Instabilities and Turbulence		15	TERM1	MAY	YES
MTHM031	Magnetic Fields and Fluid Flows		15	TERM1	MAY	YES
MTHM032	Mathematics, Business and Finance Project	RESTRICTED				
MTHM033	Statistical Modelling in Space and Time		15	TERM2	MAY	YES
MTHM036	Research in Mathematical Sciences		15	TERM1	N/A	YES
MTHM040	MSci Project	RESTRICTED				
MTHM044	MMATH Project in Statistics	RESTRICTED				
MTHM045	Space Weather and Plasmas		15	TERM2	MAY	YES
MTHM047	Bayesian Statistics, Philosophy and Practice	RESTRICTED				
MTHM048	Ergodic Theory		15	TERM2	MAY	YES
MTHM050	Research Project in Statistics	RESTRICTED				
MTHM051	Fundamentals of Weather and Climate Science		15	TERM1	MAY	YES
MTHM053	MSc Professional Placement	RESTRICTED				
MTHM054	Climate Change Science and Solutions		15	TERM2	N/A	YES
MTHM059	Case Studies in Mathematical Finance		30	TRM1+2	N/A	YES
MTHM060	Actuarial and Mathematical Finance Project	RESTRICTED				
MTHM061	Topics in Analytic Number Theory		15	TERM1	MAY	YES
MTHM063	Uncertainty Quantification		15	TERM1	N/A (IN-CLASS TESTS DURING TERM)	YES
MTHM064	Dissertation Project	RESTRICTED				
MTHM501	Working with Data	RESTRICTED				
MTHM502	Introduction to Data Science and Statistical Modelling	RESTRICTED				

MTHM503	Applications of Data Science and Statistics	RESTRICTED				
MTHM504	Applied Data Science and Statistics Project	RESTRICTED				
MTHM505	Data Science and Statistical Modelling in Space and Time	RESTRICTED				
MTHM506	Statistical Data Modelling	RESTRICTED				
MTHM507	Communicating Data Science	RESTRICTED				
MTHM508	Bayesian Philosophy and Methods in Data Science	RESTRICTED				
MTHM611	Topics in Environmental Intelligence	RESTRICTED				
MTHM612	Environmental Intelligence Research Project	RESTRICTED				