MASTER OF MATHEMATICS (G103)

Programme offered at: Durham.

Mode of study: this programme is available full-time.

LEVEL 1 (Certificate)

1-2	Core Mathematics A	MATH1012	40
3	Core Mathematics B1	MATH1051	20
4	Core Mathematics B2	MATH1041	20
5-6	Level 1 open modules to the value of 40 credits chosen from those offered by any Board of Studies		

LEVEL 2 (Diploma)

1	EITHER	Complex Analysis II	MATH2011	20
	OR	Contours and Actuarial Mathematics II	MATH2171	20
2	Linear Algebra II		MATH2021	20
3	Analysis in Many Variables II		MATH2031	20
4-6	Modules to the value of 60 credits chosen from:			
		Algebra and Number Theory II	MATH2061	20
		Codes and Geometric Topology II	MATH2141	20
		Codes and Actuarial Mathematics II	MATH2131	20
		Mathematical Physics II	MATH2071	20
		Numerical Analysis II	MATH2051	20
		Probability and Actuarial Mathematics II	MATH2161	20
		Probability and Geometric Topology II	MATH2151	20
		Statistical Concepts II	MATH2041	20

Notes:
Students who fail to achieve the standard required under the Core Regulations for progression to Level 3 of the MMath but who achieve the standards required for progression to Level 3 of a Bachelors programme may progress to Level 3 of the BSc in Mathematics in the Honours or Ordinary stream in accordance with the Core Regulations;
A student who is qualified to progress from Level 2 to Level 3 of the MMath but wishes to transfer to Level 3 of the BSc in Mathematics shall be permitted to do so.

LEVEL 3 (Degree)

1-6	Modules to the value of 120 credits chosen from List A and Mathematics Teaching III (MATH3121)	

Notes:
Mathematics Teaching III (MATH3121) is a capped module and preference will be given to students on BSc programmes after a preliminary selection process.
Students whose achievement at the end of Level 3 does not qualify them to proceed to Level 4 may be awarded the degree of BSc in Mathematical Sciences at either Honours or Ordinary level in accordance with the Core Regulations for the award of a Bachelors degree.

LEVEL 4 (Degree)

1-2	Mathematics Project IV		MATH4072	40
3-6	EITHER	Modules to the value of 80 credits chosen from List B		
	OR	Modules to the value of 60 credits chosen from List B		
	AND	one open 20 credit module chosen from those offered by any other Board of Studies, subject to the agreement of the Mathematics Board of Studies		

Notes:
Students whose achievement at the end of Level 4 does not qualify them to be awarded the degree of MMath may be awarded the degree of BSc in Mathematical Sciences with Honours in accordance with the Core Regulations for the award of a Bachelors degree.

MODULE LISTS : MATHEMATICAL SCIENCES

LIST A

(Lists A1 and A2 will be offered in alternate years, List A3 will run in both years)

List A1 (2009-2010)

Algebraic Geometry III	MATH3321	20

Analysis III	MATH3011	20
Bayesian Methods III	MATH3311	20
Continuum Mechanics III	MATH3101	20
General Relativity III	MATH3331	20
Representation Theory and Modules III	MATH3191	20
Stochastic Processes III	MATH3251	20

List A2 (2010-2011)

Approximation Theory and Solutions to ODEs III	MATH3081	20
Bayesian Statistics III	MATH3341	20
Elliptic Functions III	MATH3221	20
Geometry III	MATH3201	20
Independent Study III	MATH3161	20
Number Theory III	MATH3031	20
Probability III	MATH3211	20
Solitons III	MATH3231	20
Statistical Mechanics III	MATH3351	20

List A3

Decision Theory III	MATH3071	20
Differential Geometry III	MATH3021	20
Dynamical Systems III	MATH3091	20
Electromagnetism III	MATH3181	20
Galois Theory III	MATH3041	20
Mathematical Biology III	MATH3171	20
Mathematical Finance III	MATH3301	20
Operations Research III	MATH3141	20
Partial Differential Equations III	MATH3291	20
Quantum Mechanics III	MATH3111	20
Statistical Methods III	MATH3051	20
Topology III	MATH3281	20

LIST B

(Lists B1 and B2 will be offered in alternate years, List B3 will run in both years)

List B1 (2009-2010)

Algebraic Geometry IV	MATH4011	20
Analysis IV	MATH4201	20
Bayesian Methods IV	MATH4191	20
Continuum Mechanics IV	MATH4081	20
General Relativity IV	MATH4051	20
Representation Theory and Modules IV	MATH4101	20
Stochastic Processes IV	MATH4091	20

List B2 (2010-2011)

Approximation Theory and Solutions to ODEs IV	MATH4221	20
Bayesian Statistics IV	MATH4031	20
Elliptic Functions IV	MATH4151	20
Geometry IV	MATH4141	20
Number Theory IV	MATH4211	20
Probability IV	MATH4131	20
Solitons IV	MATH4121	20
Statistical Mechanics IV	MATH4231	20

List B3

Advanced Quantum Theory IV	MATH4061	20
Algebraic Topology IV	MATH4161	20
Mathematical Finance IV	MATH4181	20
Partial Differential Equations IV	MATH4041	20
Riemannian Geometry IV	MATH4171	20

2009-2010