MASTER OF MATHEMATICS (EUROPEAN STUDIES) (G101)

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, of which at least 20 credits must be an appropriate language module.		

LEVEL 2 (Diploma)

1	Complex Analysis II	MATH2011	20
2	Analysis in Many Variables II	MATH2031	20
3-6	Modules to the value of 80 credits chosen from:		
	Algebra II	MATH2581	20
	Codes and Geometric Topology II	MATH2141	20
	Codes and Actuarial Mathematics II	MATH2131	20
	Elementary Number Theory and Cryptography II	MATH2591	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	MMath (Euro) Level 3 Year Abroad	MATH3986	120

Notes:
During the third year students must study and be assessed in a mathematics programme (together, possibly, with other topics) in a European university under the Socrates-ERASMUS Programme. The student is also required to write an essay (about 2000 words, i.e., 4 pages) at the end of year 3 in a non-English language approved by the Director of Learning and Teaching. The essay will be assessed independently by two members of the Durham Department of Mathematical Sciences fluent in the language, and the mark will count 10% of the overall mark of the year. The results obtained will count fully towards the award of the MMath(Euro).

Students whose achievement at the end of Level 3 does not qualify them to proceed to Level 4 may transfer to BSc (European Studies) in accordance with the Core Regulations for the award of that 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:
The choice of modules at Level 4 is subject to the approval of the course director.

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 B

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

List B1 (2011-2012)

Algebraic Geometry IV	MATH4011	20
Analysis IV	MATH4201	20
Bayesian Statistics IV	MATH4031	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
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
Topics in Statistics IV	MATH4071	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