

**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	<a href="#">MATH1012</a>	40
3	Core Mathematics B1	<a href="#">MATH1051</a>	20
4	Core Mathematics B2	<a href="#">MATH1041</a>	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	<a href="#">MATH2011</a>	20
	OR	Contours and Probability II	<a href="#">MATH2561</a>	20
2	Linear Algebra II		<a href="#">MATH2021</a>	20
3	Analysis in Many Variables II		<a href="#">MATH2031</a>	20
4-6	Modules to the value of 60 credits chosen from:			
		Algebra and Number Theory II	<a href="#">MATH2061</a>	20
		Codes and Geometric Topology II	<a href="#">MATH2141</a>	20
		Codes and Probability II	<a href="#">MATH2571</a>	20
		Mathematical Physics II	<a href="#">MATH2071</a>	20
		Numerical Analysis II	<a href="#">MATH2051</a>	20
		Statistical Concepts II	<a href="#">MATH2041</a>	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 ( <a href="#">MATH3121</a> )		
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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	<a href="#">MATH4072</a>	40
3-6	Modules to the value of 80 credits chosen from List B		

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	<a href="#">MATH3321</a>	20
Analysis III	<a href="#">MATH3011</a>	20
Bayesian Methods III	<a href="#">MATH3311</a>	20

Continuum Mechanics III	<a href="#">MATH3101</a>	20
General Relativity III	<a href="#">MATH3331</a>	20
Independent Study III	<a href="#">MATH3161</a>	20
Representation Theory and Modules III	<a href="#">MATH3191</a>	20
Stochastic Processes III	<a href="#">MATH3251</a>	20

**List A2 (2008-2009)**

Approximation Theory and Solutions to ODEs III	<a href="#">MATH3081</a>	20
Bayesian Statistics III	<a href="#">MATH3341</a>	20
Elliptic Functions III	<a href="#">MATH3221</a>	20
Geometry III	<a href="#">MATH3201</a>	20
Number Theory III	<a href="#">MATH3031</a>	20
Probability III	<a href="#">MATH3211</a>	20
Solitons III	<a href="#">MATH3231</a>	20
Statistical Mechanics III	<a href="#">MATH3351</a>	20

**List A3**

Decision Theory III	<a href="#">MATH3071</a>	20
Differential Geometry III	<a href="#">MATH3021</a>	20
Dynamical Systems III	<a href="#">MATH3091</a>	20
Electromagnetism III	<a href="#">MATH3181</a>	20
Galois Theory III	<a href="#">MATH3041</a>	20
Mathematical Biology III	<a href="#">MATH3171</a>	20
Mathematical Finance III	<a href="#">MATH3301</a>	20
Operations Research III	<a href="#">MATH3141</a>	20
Partial Differential Equations III	<a href="#">MATH3291</a>	20
Quantum Mechanics III	<a href="#">MATH3111</a>	20
Statistical Methods III	<a href="#">MATH3051</a>	20
Topology III	<a href="#">MATH3281</a>	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	<a href="#">MATH4011</a>	20
Analysis IV	<a href="#">MATH4201</a>	20
Bayesian Methods IV	<a href="#">MATH4191</a>	20
Continuum Mechanics IV	<a href="#">MATH4081</a>	20
General Relativity IV	<a href="#">MATH4051</a>	20
Representation Theory and Modules IV	<a href="#">MATH4101</a>	20
Stochastic Processes IV	<a href="#">MATH4091</a>	20

**List B2 (2008-2009)**

Approximation Theory and Solutions to ODEs IV	<a href="#">MATH4221</a>	20
Bayesian Statistics IV	<a href="#">MATH4031</a>	20
Elliptic Functions IV	<a href="#">MATH4151</a>	20
Geometry IV	<a href="#">MATH4141</a>	20
Number Theory IV	<a href="#">MATH4211</a>	20
Probability IV	<a href="#">MATH4131</a>	20
Solitons IV	<a href="#">MATH4121</a>	20
Statistical Mechanics IV	<a href="#">MATH4231</a>	20

**List B3**

Advanced Quantum Theory IV	<a href="#">MATH4061</a>	20
Algebraic Topology IV	<a href="#">MATH4161</a>	20
Mathematical Finance IV	<a href="#">MATH4181</a>	20
Partial Differential Equations IV	<a href="#">MATH4041</a>	20
Riemannian Geometry IV	<a href="#">MATH4171</a>	20