

**BSc MATHEMATICS (EUROPEAN STUDIES) (G104)**

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	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. The language requirement does not apply to students spending the year abroad at Trinity College, Dublin.		

**LEVEL 2 (Diploma)**

1	EITHER	Complex Analysis II	<a href="#">MATH2011</a>	20
	OR	Contours and Actuarial Mathematics II	<a href="#">MATH2171</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 Actuarial Mathematics II	<a href="#">MATH2131</a>	20
		Mathematical Physics II	<a href="#">MATH2071</a>	20
		Numerical Analysis II	<a href="#">MATH2051</a>	20
		Probability and Actuarial Mathematics II	<a href="#">MATH2161</a>	20
		Probability and Geometric Topology II	<a href="#">MATH2151</a>	20
		Statistical Concepts II	<a href="#">MATH2041</a>	20

**YEAR 3 (Year Abroad)**

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.

**LEVEL 3 (Degree)**

1	EITHER	Communicating Mathematics III	<a href="#">MATH3131</a>	20
	OR	Mathematics Teaching III	<a href="#">MATH3121</a>	20
2-6	<b>EITHER</b>	Modules to the value of 100 credits chosen from List A		
	<b>OR</b>	Modules to the value of 80 credits chosen from List A		
	AND	one open 20 credit module chosen from those offered by any other Board of Studies		

Note:

The availability of this degree is dependent on the University receiving funding under the EU Socrates-ERASMUS Programme.

**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
Representation Theory and Modules III	<a href="#">MATH3191</a>	20
Stochastic Processes III	<a href="#">MATH3251</a>	20

**List A2 (2010-2011)**

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
Independent Study III	<a href="#">MATH3161</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