

These programme regulations should be read in conjunction with the University's [core regulations for undergraduate programmes](#), and the [marking and classification conventions for undergraduate programmes](#).

BSc Mathematics (European Studies) (G104)

1. This programme is available at Durham City, in a full-time mode of study.

Level 1 (Certificate)

2. Candidates shall study and be assessed in the following modules:

		Credit value
Calculus I #	MATH1061	20
Linear Algebra I #	MATH1071	20
Analysis I #	MATH1051	20
Programming I	MATH1587	10
Dynamics I	MATH1607	10
Probability I	MATH1597	10
Statistics I	MATH1617	10

3. Candidates shall also study and be assessed in modules to the value of 20 credits from those offered by other boards 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)

4. Candidates shall study and be assessed in the following modules:

		Credit value
Complex Analysis II	MATH2011	20
Analysis in Many Variables II	MATH2031	20

5. Candidates shall also study and be assessed in modules to the value of 80 credits from List A:

List A:		Credit value
Algebra II	MATH2581	20
Monte Carlo II (*)	MATH2667	10
Elementary Number Theory II	MATH2617	10
Geometric Topology II	MATH2627	10
Mathematical Physics II	MATH2071	20
Mathematical Modelling II	MATH2637	10
Numerical Analysis II	MATH2051	20
Probability II	MATH2647	10
Special Relativity and Electromagnetism II	MATH2657	10
Statistical Concepts II (*)	MATH2041	20

Year 3 (Year Abroad)

6. 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)

7. Candidates shall study and be assessed in the following module to the value of 40 credits:

		Credit value
Project III	MATH3382	40

8. Candidates shall study and be assessed in **EITHER** modules to the value of 80 credits from list B **OR** modules to the value of 60 credits from list B and one open 20 credit module chosen from those offered by any other Board of Studies (including appropriate credit-bearing language modules offered by the University's Centre for Foreign Language Study):

List B2 (2020-2021 only):

Numerical Differential Equations III	MATH3081	20
Probability III	MATH3211	20
Statistical Mechanics III	MATH3351	20
Topics in Statistics III	MATH3361	20

List B1 (2021-2022):

Bayesian Statistics III (^)	MATH3341	20	Credit value
Stochastic Processes III	MATH3251	20	

List B3:

Analysis III	MATH3011	20	Credit value
Cryptography and Codes III	MATH3401	20	
Decision Theory III	MATH3071	20	
Differential Geometry III	MATH3021	20	
Dynamical Systems III	MATH3091	20	
Fluid Mechanics III	MATH3101	20	
Galois Theory III	MATH3041	20	
Geometry III	MATH3201	20	
Mathematical Biology III	MATH3171	20	
Mathematical Finance III	MATH3301	20	
Mathematics Teaching III (\$)	MATH3121	20	
Public Engagement in Mathematical Sciences	MATH3461	20	
Number Theory III	MATH3031	20	
Operations Research III	MATH3141	20	
Partial Differential Equations III	MATH3291	20	
Quantum Computing III	MATH3391	20	
Quantum Mechanics III	MATH3111	20	
Solitons III	MATH3231	20	
Statistical Methods III (≈)	MATH3051	20	
Topology III	MATH3281	20	

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

Assessment, progression and award

9. Modules marked with a # must be passed at 40% or above in order to progress to the Ordinary degree at the next Level.
10. Modules marked with (\$) are not available in 2020-2021.
11. Modules marked with (*) are available in 2020-2021 only.
12. Modules marked with (^) are available in 2021-2022 only.
13. Modules marked with (≈) are available through 2021-2022.
14. The availability of this degree is dependent on the University receiving funding under the EU Socrates-ERASMUS programme.