

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 (G100)**

*(for candidates admitted from October 2024)*

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

### **Level 1 (Certificate)**

- Candidates shall study and be assessed in the following modules:

		<b>Credit value</b>
Calculus I (Maths Hons) #	<a href="#">MATH1081</a>	20
Linear Algebra I (Maths Hons) #	<a href="#">MATH1091</a>	20
Analysis I #	<a href="#">MATH1051</a>	20
Programming I	<a href="#">MATH1587</a>	10
Dynamics I (students starting before 2025)	<a href="#">MATH1607</a>	10
Dynamics and Relativity I (students starting in 2025 onwards)	<a href="#">MATH1627</a>	10
Probability I	<a href="#">MATH1597</a>	10
Statistics I	<a href="#">MATH1617</a>	10

- Candidates shall also study and be assessed in EITHER the module

		<b>Credit value</b>
Discrete Mathematics	<a href="#">MATH1031</a>	20

OR module(s) to the value of 20 credits offered by any other Boards of Studies (including up to 20 credits of appropriate language modules offered by the University's Centre for Foreign Language Study).

### **Level 2 (Diploma)**

- Candidates shall study and be assessed in the following modules:

		<b>Credit value</b>
Mathematical Methods II	<a href="#">MATH2811</a>	20
Complex Analysis II	<a href="#">MATH2791</a>	20

- Candidates shall also study and be assessed in modules to the value of 40 credits from List 2A and 40 credits from List 2B:

<b>List 2A:</b>		<b>Credit value</b>
Algebra II	<a href="#">MATH2781</a>	20
Computational Mathematics II	<a href="#">MATH2731</a>	20
Statistical Inference II	<a href="#">MATH2761</a>	20
<b>List 2B:</b>		
Data Science and Statistical Modelling II	<a href="#">MATH2801</a>	20
Methods of Mathematical Physics II	<a href="#">MATH2741</a>	20
Probability II	<a href="#">MATH2751</a>	20

Open module(s) to the value of 20 credits offered by any other Board of Studies (including a language module offered by the University's Centre for Foreign Language Study) may be substituted for one module in either List 2A or List 2B.

### **Level 3 (Degree)**

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

		<b>Credit value</b>
Group Project III ~	<a href="#">MATH3531</a>	20

Individual Project III ~ [MATH3541](#) 20

7. Candidates shall study and be assessed in modules to the value of 80 credits from List 3X and at most one of Lists 3A, 3B, 3C or 3D.

<b>List 3X:</b>		<b>Credit value</b>
Analysis and Topology III	<a href="#">MATH3551</a>	20
Codes and Knots III	<a href="#">MATH3501</a>	20
Decision Theory III	<a href="#">MATH3071</a>	20
Differential Geometry III	<a href="#">MATH3021</a>	20
Fluid Mechanics III	<a href="#">MATH3101</a>	20
Machine Learning and Neural Networks III	<a href="#">MATH3431</a>	20
Mathematical Biology III	<a href="#">MATH3171</a>	20
Mathematics into Schools	<a href="#">MATH3481</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
An open Level 3 module(s) offered by another Board of Studies (subject to timetable compatibility, including appropriate credit-bearing language modules offered by the University's Centre for Foreign Language Study)		20

<b>List 3A:</b>		
General Relativity III	<a href="#">MATH3521</a>	20
Solitons III	<a href="#">MATH3231</a>	20

<b>List 3B:</b>		
Advanced Statistical Modelling III	<a href="#">MATH3411</a>	20
Bayesian Computation and Modelling III	<a href="#">MATH3421</a>	20

<b>List 3C:</b>		
Galois Theory, Groups and Geometry III	<a href="#">MATH3511</a>	20
Number Theory III	<a href="#">MATH3031</a>	20

<b>List 3D:</b>		
Mathematical Finance III	<a href="#">MATH3301</a>	20
Stochastic Processes III	<a href="#">MATH3251</a>	20

8. Modules marked with the # symbol must be passed at 40% or above in order to progress to the next level of study.
9. Modules marked with the ~ symbol must be passed at 40% or above for the award of an honours degree. A mark of 30-39% cannot be compensated.

### Year Abroad/Placement

10. Students admitted to the BSc Mathematics (G100) are able to apply to transfer to the BSc Mathematics (with Year Abroad/Placement) programme (G109/G108). Students undertaking the BSc Mathematics (with Year Abroad) programme (G109) will undertake an approved exchange in an overseas university taking a course of study chosen in consultation with the programme director and the host institution. Students undertaking the BSc Mathematics (Placement) programme (G108) will undertake an approved work or training placement in consultation with the programme director and placement provider.