Durham University
Undergraduate Modules Online
https://apps.dur.ac.uk/faculty.handbook/

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)

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 (Maths Hons) #	MATH1081	20
Linear Algebra I (Maths Hons) #	MATH1091	20
Analysis I #	MATH1051	20
Programming I	MATH1587	10
Dynamics I **(students starting before 2025)**	MATH1607	10
Dynamics and Relativity I **(students starting in 2025 onwards)**	MATH1627	10
Probability I	MATH1597	10
Statistics I	MATH1617	10

3. Candidates shall also study and be assessed in EITHER the module

		Credit value
Discrete Mathematics	MATH1031	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)

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

		Credit value
Mathematical Methods II	MATH2811	20
Complex Analysis II	MATH2791	20

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

List 2A:		Credit value
Algebra II	MATH2781	20
Computational Mathematics II	MATH2731	20
Statistical Inference II	MATH2761	20
List 2B:		
Data Science and Statistical Modelling II	MATH2801	20
Methods of Mathematical Physics II	MATH2741	20
Probability II	MATH2751	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)

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

	Credit value

Group Project III ~	MATH3531	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.

List 3X:		**Credit value**
Analysis and Topology III	MATH3551	20
Codes and Knots III	MATH3501	20
Decision Theory III	MATH3071	20
Differential Geometry III	MATH3021	20
Fluid Mechanics III	MATH3101	20
Machine Learning and Neural Networks III	MATH3431	20
Mathematical Biology III	MATH3171	20
Mathematics into Schools	MATH3481	20
Operations Research III	MATH3141	20
Partial Differential Equations III	MATH3291	20
Quantum Mechanics III	MATH3111	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
List 3A:		
General Relativity III	MATH3521	20
Solitons III	MATH3231	20
List 3B:		
Advanced Statistical Modelling III	MATH3411	20
Bayesian Computation and Modelling III	MATH3421	20
List 3C:		
Galois Theory, Groups and Geometry III	MATH3511	20
Number Theory III	MATH3031	20
List 3D:		
Mathematical Finance III	MATH3301	20
Stochastic Processes III	MATH3251	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.