

# **Durham University Faculty Handbook Online**

These programme regulations should be read in conjunction with the University's <u>core regulations for undergraduate programmes</u>.

## **BSc Mathematics (with Placement) (G108)**

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

#### Level 1 (Certificate)

- 2. This programme is only available to students admitted initially to the BSc Mathematics (G100) programme (or equivalent). Candidates wishing to transfer to BSc Mathematics (with Placement) (G108) must:
  - a. successfully complete Level 1 of the BSc Mathematics (G100) programme (or equivalent) with an average mark of 55%, and be eligible to progress to Level 2 of the honours programme;
  - b. before the beginning of the first term of Level 2 study, have applied to the Board of Studies in Mathematical Sciences to be admitted to the BSc Mathematics (with Placement) (G108) and have had their application provisionally approved by that Board;
  - c. during the first term of Level 2 study, have their application formally approved by that Board upon successful completion of the Mathematical Sciences preparatory placement course.

### Level 2 (Diploma)

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

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

**4.** Candidates shall also study and be assessed in modules to the value of 20 or 40 credits from List A1:

List A1:		Credit value
Statistical Concepts II	MATH2041	20
Numerical Analysis II	<u>MATH2051</u>	20

5. Candidates shall also study and be assessed in modules to the value of 40 or 60 credits from List A2:

List A2:		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
Probability II	MATH2647	10
Special Relativity and Electromagnetism II	MATH2657	10

#### Year 3 (Placement Year)

**6.** During the third year candidates shall undertake an approved placement in industry, or in an institution or organisation undertaking research, for 40 weeks.

# Level 3 (Degree)

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

		Credit value
Project III	<u>MATH3382</u>	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 (2018-2019):		Credit value
Numerical Differential Equations III	MATH3081	20
Geometry III	MATH3201	20
Number Theory III	MATH3031	20
Probability III	MATH3211	20
Statistical Mechanics III	MATH3351	20
Topics in Statistics III	MATH3361	20
List B1 (2019-2020):		Credit value
Analysis III	MATH3011	20
Bayesian Statistics III	MATH3341	20
Continuum Mechanics III	MATH3101	20
Representation Theory III	MATH3371	20
Solitons III	MATH3231	20
Stochastic Processes III	MATH3251	20
List B3:		Credit value
	MATH3401	Credit value 20
List B3: Cryptography and Codes III Decision Theory III	MATH3401 MATH3071	
Cryptography and Codes III		20
Cryptography and Codes III Decision Theory III	MATH3071	20 20
Cryptography and Codes III Decision Theory III Differential Geometry III	MATH3071 MATH3021	20 20 20
Cryptography and Codes III Decision Theory III Differential Geometry III Dynamical Systems III	MATH3071 MATH3021 MATH3091	20 20 20 20 20
Cryptography and Codes III Decision Theory III Differential Geometry III Dynamical Systems III Galois Theory III	MATH3071 MATH3021 MATH3091 MATH3041	20 20 20 20 20 20
Cryptography and Codes III Decision Theory III Differential Geometry III Dynamical Systems III Galois Theory III Mathematical Biology III	MATH3071 MATH3021 MATH3091 MATH3041 MATH3171	20 20 20 20 20 20 20
Cryptography and Codes III Decision Theory III Differential Geometry III Dynamical Systems III Galois Theory III Mathematical Biology III Mathematical Finance III	MATH3071 MATH3021 MATH3091 MATH3041 MATH3171 MATH3301	20 20 20 20 20 20 20 20
Cryptography and Codes III Decision Theory III Differential Geometry III Dynamical Systems III Galois Theory III Mathematical Biology III Mathematical Finance III Mathematics Teaching III	MATH3071 MATH3021 MATH3091 MATH3041 MATH3171 MATH3301 MATH3121	20 20 20 20 20 20 20 20 20
Cryptography and Codes III Decision Theory III Differential Geometry III Dynamical Systems III Galois Theory III Mathematical Biology III Mathematical Finance III Mathematics Teaching III Operations Research III	MATH3071 MATH3021 MATH3091 MATH3041 MATH3171 MATH3301 MATH3121 MATH3141	20 20 20 20 20 20 20 20 20 20
Cryptography and Codes III Decision Theory III Differential Geometry III Dynamical Systems III Galois Theory III Mathematical Biology III Mathematical Finance III Mathematics Teaching III Operations Research III Partial Differential Equations III	MATH3071 MATH3091 MATH3091 MATH3041 MATH3171 MATH3301 MATH3121 MATH3141 MATH3291 MATH3391 MATH3111	20 20 20 20 20 20 20 20 20 20 20
Cryptography and Codes III Decision Theory III Differential Geometry III Dynamical Systems III Galois Theory III Mathematical Biology III Mathematical Finance III Mathematics Teaching III Operations Research III Partial Differential Equations III Quantum Information III	MATH3071 MATH3021 MATH3091 MATH3041 MATH3171 MATH3301 MATH3121 MATH3141 MATH3291 MATH3391	20 20 20 20 20 20 20 20 20 20 20

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

**9.** Modules marked with a # must be passed at 40% or above in order to progress to the next Level of the Ordinary degree.

#### **Progression and Award**

10. Students who the Board of Examiners for Mathematical Sciences deem to have made satisfactory progress on the placement year will continue to Level 3 of the BSc Mathematics (with Placement) (G108). Students who have not made satisfactory progress on the placement will not be permitted to continue on the BSc Mathematics (with Placement) (G108) programme, but must instead proceed to Level 3 of the BSc Mathematics (G100) programme.