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.

Master of Mathematics (European Studies) (G101)

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 and Probability I #	MATH1061	20
Linear Algebra I #	MATH1071	20
Analysis I #	MATH1051	20
Programming and Dynamics	MATH1041	20

3. Candidates shall also study and be assessed in modules to the value of 40 credits from those offered by other boards of studies, of which at least 20 credits must be an appropriate language module.

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 20 or 40 credits from List A1:

List A1:		Credit value
Statistical Concepts II	MATH2041	20
Numerical Analysis II	MATH2051	20

6. 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

Level 3 (Degree)

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

		Credit value
MMath (Euro) Level 3 Year Abroad	MATH3986	120

Level 4 (Degree)

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

		Credit value
Mathematical Project IV	MATH4072	40

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

List C2 (2016-2017):		**Credit value**
Numerical Differential Equations IV	MATH4221	20
Geometry IV	MATH4141	20
Number Theory IV	MATH4211	20
Probability IV	MATH4131	20
Statistical Mechanics IV	MATH4231	20
Topics in Statistics IV	MATH4071	20

List C1 (2017-2018):		**Credit value**
Analysis IV	MATH4201	20
Bayesian Statistics IV	MATH4031	20
Continuum Mechanics IV	MATH4081	20
Representation Theory IV	MATH4241	20
Solitons IV	MATH4121	20
Stochastic Processes IV	MATH4091	20

List C3:		**Credit value**
Advanced Quantum Theory IV	MATH4061	20
Algebraic Topology IV	MATH4161	20
Elliptic Functions IV	MATH4151	20
General Relativity IV	MATH4051	20
Mathematical Finance IV	MATH4181	20
Partial Differential Equations IV	MATH4041	20
Riemannian Geometry IV	MATH4171	20
Modules up to the value of 20 credits from another board of studies, subject to the agreement of the Mathematics Board of Studies		20

Lists C1 and C2 will be offered in alternate years. List C3 will run in both years.

Assessment, progression and award

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

11. Students who fail to achieve the standard required under the Core Regulations for progression to Level 3 of the MMath but who achieve the standard required for progression to Level 3 of a Bachelors programme may progress to Level 3 of the BSc in Mathematics at either Honours or Ordinary level in accordance with the Core Regulations.

12. A student who is qualified to progress from Level 2 to Level 3 of the MMath but wishes to transfer to Level 3 of the BSc Mathematics shall be permitted to do so.

13. 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. The student is also required to write an essay (about 2000 words, i.e. 4 pages) at the end of year 3 in a non-English language approved by the Director of Education. The essay will be assessed independently by two members of the Durham Department of Mathematical Sciences fluent in the language, and the mark will count 10% of the overall mark of the year. The results obtained will count fully towards the award of the MMath(Euro).

14. Students whose achievement at the end of Level 3 does not qualify them to proceed to Level 4 may transfer to BSc Mathematics (European Studies) in accordance with the Core Regulations for the award of that degree.

15. The choice of modules at Level 4 is subject to the approval of the course director.

16. Students whose achievement at the end of Level 4 does not qualify them to be awarded the degree of MMath may be awarded the degree of BSc Mathematics with Honours in accordance with the Core Regulations for the award of a Bachelors degree.