

These programme regulations should be read in conjunction with the University's [core regulations for modular taught master's degrees, postgraduate diplomas and postgraduate certificates](#) .

### **MSc Mathematical Sciences (G1K509)**

1. Location: Durham City
2. Duration: 12 months (full-time)

#### **Programme structure**

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

		<b>Credit value</b>
Dissertation	<a href="#">MATH51460</a>	60
Mathematical Sciences I	<a href="#">MATH51860</a>	60
Mathematical Sciences II	<a href="#">MATH51760</a>	60

For Mathematical Sciences I and II candidates must choose six modules from the following lists (Please note candidates can only take two courses from those marked with \*):

#### **List 1**

Advanced Quantum Theory  
 Algebraic Topology  
 Codes and Cryptography\*  
 Decision Theory\*  
 Differential Geometry\*  
 Dynamical Systems\*  
 Galois Theory\*  
 General Relativity  
 Mathematical Biology\*  
 Mathematical Finance  
 Number Theory\*  
 Operations Research\*  
 Partial Differential Equations  
 Quantum Information\*  
 Quantum Mechanics\*  
 Representation Theory  
 Riemannian Geometry  
 Statistical Methods\*  
 Topics in Algebra and Geometry  
 Topology\*

#### **List 2 (2019-2020)**

Analysis  
 Bayesian Statistics  
 Continuum Mechanics  
 Solitons  
 Stochastic Processes

#### **List 3 (2020-2021)**

Geometry  
 Probability  
 Topics in Statistics  
 Numerical Differential Equations  
 Statistical Mechanics

*Lists 2 and 3 will be offered in alternate years. List 1 will run in both years.*

#### **Assessment, progression and award**

4. Modules MATH 51860 and MATH 51760 will be assessed by written examinations.