

These programme regulations should be read in conjunction with the University's [core regulations for postgraduate programmes](#), and the [marking and classification conventions for postgraduate programmes](#).

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

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

### **Programme structure**

3. Candidates shall study and be assessed in EITHER modules to the value of 120 credits from List 2 OR modules to the value of 100 credits from List 1 and one module chosen from List 1.

		<b>Credit value</b>
<b>List 1</b>		
Codes and Cryptography	<a href="#">MATH30120</a>	20
Decision Theory	<a href="#">MATH30220</a>	20
Differential Geometry	<a href="#">MATH30320</a>	20
Dynamical Systems	<a href="#">MATH30720</a>	20
Galois Theory	<a href="#">MATH30420</a>	20
Geometry of Mathematical Physics	<a href="#">MATH31220</a>	20
Mathematical Biology	<a href="#">MATH30920</a>	20
Operations Research	<a href="#">MATH30820</a>	20
Quantum Computing	<a href="#">MATH31020</a>	20
Quantum Mechanics	<a href="#">MATH31120</a>	20
Statistical Methods	<a href="#">MATH30520</a>	20
Topology	<a href="#">MATH30620</a>	20
<b>List 2</b>		
Advanced Quantum Theory	<a href="#">MATH41020</a>	20
Algebraic Topology	<a href="#">MATH41120</a>	20
Analysis	<a href="#">MATH41220</a>	20
Bayesian Statistics	<a href="#">MATH43220</a>	20
Ergodic Theory and Dynamics	<a href="#">MATH43320</a>	20
Fluid Mechanics	<a href="#">MATH41820</a>	20
Functional Analysis and Applications	<a href="#">MATH42920</a>	20
General Relativity	<a href="#">MATH40820</a>	20
Geometry	<a href="#">MATH41920</a>	20
Mathematical Finance	<a href="#">MATH40920</a>	20
Number Theory	<a href="#">MATH41620</a>	20
Partial Differential Equations	<a href="#">MATH41720</a>	20
Probability – NOT AVAILABLE IN 2021/22	<a href="#">MATH42120</a>	20
Representation Theory	<a href="#">MATH42220</a>	20
Riemannian Geometry	<a href="#">MATH41320</a>	20
Solitons	<a href="#">MATH41420</a>	20
Statistical Mechanics	<a href="#">MATH42320</a>	20
Stochastic Processes	<a href="#">MATH43020</a>	20
Topics in Algebra and Geometry	<a href="#">MATH41520</a>	20
Topics in Applied Mathematics	<a href="#">MATH43120</a>	20
Topics in Statistics – NOT AVAILABLE IN 2021/22	<a href="#">MATH42420</a>	20

4. Candidates shall also be assessed in the following module:

		<b>Credit value</b>
Dissertation	<a href="#">MATH51460</a>	60