

FACULTY OF SCIENCE

DEPARTMENT OF MATHEMATICS AND STATISTICS

APPLIED STATISTICS

Master of Science in Applied Statistics
Master of Science in Applied Statistics (Online)
Master of Science in Applied Statistics in Health Sciences
Master of Science in Applied Statistics in Health Sciences (Online)
Master of Science in Applied Statistics with Data Science
Master of Science in Applied Statistics with Data Science (Online)
Master of Science in Applied Statistics in Finance
Master of Science in Applied Statistics in Finance (Online)
Postgraduate Diploma in Applied Statistics
Postgraduate Diploma in Applied Statistics (Online)
Postgraduate Diploma in Applied Statistics in Health Sciences
Postgraduate Diploma in Applied Statistics in Health Sciences (Online)
Postgraduate Diploma in Applied Statistics with Data Science
Postgraduate Diploma in Applied Statistics with Data Science (Online)
Postgraduate Diploma in Applied Statistics in Finance
Postgraduate Diploma in Applied Statistics in Finance (Online)
Postgraduate Certificate in Applied Statistics
Postgraduate Certificate in Applied Statistics (Online)
Postgraduate Certificate in Applied Statistics in Health Sciences
Postgraduate Certificate in Applied Statistics in Health Sciences (Online)
Postgraduate Certificate in Applied Statistics with Data Science
Postgraduate Certificate in Applied Statistics with Data Science (Online)
Postgraduate Certificate in Applied Statistics in Finance
Postgraduate Certificate in Applied Statistics in Finance (Online)
Master of Science in Medical Statistics

These regulations are to be read in conjunction with the [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).

Admission

1. The General Academic Regulations - Postgraduate Taught Degree Programme Level shall apply subject to the following requirements. Applicants shall possess:
 - i. a first or second class Honours degree from a United Kingdom university; or
 - ii. a qualification deemed by the Head of Department acting on behalf of Senate to be equivalent to (i) above.

Duration of Study

2. The [General Academic Regulations - Postgraduate Taught Degree Programme Level](#) shall apply.

Mode of Study

3. The programmes are available by full-time (on-campus versions only) or part-time study (online versions and MSc Medical Statistics).

Curriculum

4. All students shall undertake an approved curriculum as follows:
- i. for the Postgraduate Certificate no fewer than 60 credits
 - ii. for the Postgraduate Diploma no fewer than 120 credits
 - iii. for the degree of MSc no fewer than 180 credits including a research project

Compulsory Modules for on-campus MSc Applied Statistics

Module Code	Module Title	Level	Credits
MM914	Foundations of Probability and Statistics	5	20
MM916	Data Analytics in R	5	20
MM953	Experimental Design	5	10
MM954	Multivariate Analysis	5	10
MM550	MSc Project	5	60

With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University (with the exception of MM550 which cannot be substituted) up to a maximum of 40 credits.

Compulsory Modules for online MSc Applied Statistics (September Start)

Module Code	Module Title	Level	Credits
MM922	Foundations of Probability and Statistics	5	20
MM923	Data Analytics in R	5	20
MM924	Statistical Modelling and Analysis	5	20
MM930	MSc Project	5	60

With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University (with the exception of MM930 which cannot be substituted) up to a maximum of 40 credits.

Compulsory Modules for online MSc Applied Statistics (January Start)

Module Code	Module Title	Level	Credits
MM959	Foundations of Probability and Statistics	5	20
MM957	Data Analytics in R	5	20
MM958	Statistical Modelling and Analysis	5	20
MM930	MSc Project	5	60

With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University (with the exception of MM930 which cannot be substituted) up to a maximum of 40 credits.

Compulsory Modules for on-campus MSc Applied Statistics with Data Science

Students for the 'with Data Science' version of the programme take the on campus compulsory modules listed above for on-campus MSc Applied Statistics plus the following additional compulsory modules.

Module Code	Module Title	Level	Credits
CS988	Big Data Tools and Techniques	5	10
CS989	Big Data Fundamentals	5	10

With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University for one or more of the modules listed above.

Compulsory Modules for online MSc Applied Statistics with Data Science (September and January starts)

Students for the 'with Data Science' version of the programme take the online compulsory modules listed above for online MSc Applied Statistics (September start or January start as appropriate) plus the following additional compulsory modules.

Module Code	Module Title	Level	Credits
CS817	Big Data Tools and Techniques	5	10
CS818	Big Data Fundamentals	5	10

With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University for one or more of the modules listed above.

Compulsory Modules for on-campus MSc Applied Statistics in Finance

Students for the 'in Finance' version of the course take the on campus compulsory modules listed above for on-campus MSc Applied Statistics plus the following additional compulsory modules.

Module Code	Module Title	Level	Credits
MM904	Financial Stochastic Processes	5	10
MM905	Financial Econometrics	5	10

With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University for one or more of the modules listed above.

Compulsory Modules for on-line MSc Applied Statistics in Finance (September and January starts)

Students for the 'in Finance' version of the programme take the online compulsory modules listed above for the online MSc Applied Statistics (September or January start as appropriate) plus the following additional compulsory modules.

Module Code	Module Title	Level	Credits
MM956	Financial Stochastic Processes (online)	5	10

MM955	Financial Econometrics (online)	5	10
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With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University for one or more of the modules listed above.

Compulsory Modules for on-campus MSc Applied Statistics in Health Sciences

Module Code	Module Title	Level	Credits
MM914	Foundations of Probability and Statistics	5	20
MM916	Data Analytics in R	5	20
MM909	Medical Statistics	5	20
MM911	Effective Statistical Consultancy	5	10
MM912	Survey Design and Analysis	5	10
MM915	Spatial Statistics	5	10
MM913	Quantitative Risk Analysis	5	10
MM953	Experimental Design	5	10
MM954	Multivariate Analysis	5	10
MM550	MSc Project	5	60

With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University (with the exception of MM550 which cannot be substituted) up to a maximum of 40 credits.

Compulsory Modules for online MSc Applied Statistics in Health Sciences (September start)

Module Code	Module Title	Level	Credits
MM922	Foundations of Probability and Statistics	5	20
MM923	Data Analytics in R	5	20
MM924	Statistical Modelling and Analysis	5	20
MM927	Medical Statistics	5	20
MM929	Effective Statistical Consultancy	5	10
MM926	Survey Design and Analysis	5	10
MM928	Spatial Statistics	5	10
MM925	Quantitative Risk Analysis	5	10

MM930	MSc Project*	5	60
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With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University (with the exception of MM930 which cannot be substituted) up to a maximum of 40 credits.

Compulsory Modules for online MSc Applied Statistics in Health Sciences (January start)

Module Code	Module Title	Level	Credits
MM959	Foundations of Probability and Statistics	5	20
MM957	Data Analytics in R	5	20
MM958	Statistical Modelling and Analysis	5	20
MM927	Medical Statistics	5	20
MM929	Effective Statistical Consultancy	5	10
MM926	Survey Design and Analysis	5	10
MM928	Spatial Statistics	5	10
MM925	Quantitative Risk Analysis	5	10
MM930	MSc Project	5	60

With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University (with the exception of MM930 which cannot be substituted) up to a maximum of 40 credits.

**MSc Medical Statistics (September start)
Compulsory Modules**

Module Code	Module Title	Level	Credits
MM922	Foundations of Probability and Statistics	5	20
MM923	Data Analytics in R	5	20
MM924	Statistical Modelling and Analysis	5	20
MM927	Medical Statistics	5	20
MM929	Effective Statistical Consultancy	5	10
MM926	Survey Design and Analysis	5	10
MM928	Spatial Statistics	5	10
MM925	Quantitative Risk Analysis	5	10

MM930	MSc Project	5	60
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With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University (with the exception of MM930 which cannot be substituted) up to a maximum of 40 credits.

MSc Medical Statistics (January start) **Compulsory Modules**

Module Code	Module Title	Level	Credits
MM959	Foundations of Probability and Statistics	5	20
MM957	Data Analytics in R	5	20
MM958	Statistical Modelling and Analysis	5	20
MM927	Medical Statistics	5	20
MM929	Effective Statistical Consultancy	5	10
MM926	Survey Design and Analysis	5	10
MM928	Spatial Statistics	5	10
MM925	Quantitative Risk Analysis	5	10
MM930	MSc Project	5	60

With the approval of the Programme Director, students may substitute other Level 5 modules offered by the University (with the exception of MM930 which cannot be substituted) up to a maximum of 40 credits.

Examination, Progress and Final Assessment

5. The [General Academic Regulations - Postgraduate Taught Degree Programme Level](#) shall apply.
6. The final award will be based on performance in the examinations, coursework and the project where undertaken.

Award

7. **Degree of MSc:** In order to qualify for the award of the degree of the MSc, a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits, of which 60 must have been awarded in respect of the project (either MM550 or MM930).
8. **Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma, a candidate must have accumulated no fewer than 120 credits from the taught modules of the programme.
9. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate, a candidate must have accumulated no fewer than 60 credits from the taught modules of the programme.