FACULTY OF SCIENCE

DEPARTMENT OF MATHEMATICS AND STATISTICS

ACTUARIAL SCIENCE

Master of Science in Actuarial Science
Postgraduate Diploma in Actuarial Science
Postgraduate Certificate in Actuarial Science

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

Admission
1. See General Academic Regulations - Postgraduate Taught Degree Programme Level.

Duration of Study
2. See General Academic Regulations - Postgraduate Taught Degree Programme Level.

Mode of Study
3. The programme is available by full-time study only.

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 project.

Compulsory Modules

Module Code	Module Title	Level	Credits
AG910	Principles of Finance	5	20
MM914	Foundations of Probability and Statistics	5	20
MM951	Inference and Regression Modelling	5	20
EC948	Fundamentals of Macroeconomics	5	10
EC953	Fundamentals of Microeconomics	5	10
MM908	Research Project*	5	40

*For the degree of MSc only

Optional Modules
No fewer than 60 credits

Module Code	Module Title	Level	Credits
AG916	Behavioural Finance	5	10
AG924	Portfolio Theory and Management	5	10

AG919	Risk Management for Banks	5	10
AG937	Fixed Income Analysis	5	10
AG938	Equity Analysis	5	10
MM905	Financial Econometrics	5	10
MM904	Financial Stochastic Processes	5	10
MM913	Quantitative Risk Analysis	5	10
MM915	Spatial Statistics	5	10
MM960	Statistical Machine Learning	5	10
CS983	Evolutionary Computation for Finance 1	5	10
CS984	Evolutionary Computation for Finance 2	5	10
CS986	Fundamentals of Machine Learning for Data Analytics	5	10
CS987	Advanced Machine Learning for Data Analytics	5	10
MS927	Risk Analysis and Management	5	10
EC947	Topics in Public Economics	5	10
EC949	International Macroeconomics	5	10

Not all optional modules on this list will be available in each academic year. Please check your programme handbook for confirmation of which optional modules will run.

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

Examination, Progress and Final Assessment

5. See General Academic Regulations – Postgraduate Taught Degree Programme Level.

6. The final award will be based on performance in the examinations, coursework, and the research project where undertaken.

Award

7. **Degree of MSc**: In order to qualify for the award of the degree of the MSc in Actuarial Science, a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits, of which 40 must have been awarded in respect of the project MM908.

8. **Postgraduate Diploma**: In order to qualify for the award of the Postgraduate Diploma in Actuarial Science, 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 in Actuarial Science, a candidate must have accumulated no fewer than 60 credits from the taught modules of the programme.