

MSC (ACTUARIAL SCIENCE)

Programme Learning Outcomes

Programme Learning Outcomes for MSc (Actuarial Science) (NFQ Level 9, Major Award)

On successful completion of this programme, students should be able to:

- Demonstrate a knowledge of the theory of mathematical and statistical finance, actuarial finance methods, probability and statistical methods, survival models and market analysis as described by the syllabi of the first stage subjects of the Institute and Faculty of Actuaries;
- Describe the fundamental theories, models and principles of Actuarial Science and carry out a wide range of calculations involved in financial decision making, valuation and risk modelling;
- Summarize and communicate, in written and oral form, actuarial models and techniques and present such summaries to technical and non-technical audiences;
- Analyse problems of a quantitative nature, encountered in the insurance, pensions and financial industry, and construct solutions to such problems using the tools and skills of modern actuarial practice including the use of statistical and mathematical computer packages and the use of spread sheet and database programmes;
- Enter graduate or research careers in actuarial fields with the ability to significantly contribute to the financial services industry and moreover to society as a whole in using skills and education to identify, assess, manage and quantify uncertainty and risk in various situations;
- Demonstrate the competences, skills and leadership qualities which ultimately lead to the title of Actuarial Fellow.