

BSC (HONS) FINANCIAL MATHEMATICS AND ACTUARIAL SCIENCE

Programme Learning Outcomes

Programme Learning Outcomes for BSc in Financial Mathematics and Actuarial Science (NFQ Level 8, Major Award)

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

- Apply basic mathematical concepts, theories, principles and techniques for analysis of theoretical and practical problems of a mathematical nature;
- Construct and work with basic financial-mathematical models that are used for financial prediction, contract valuation (including option valuation) and financial decision making;
- Make use of mathematical software to analyze and solve problems in financial mathematics, actuarial science and related areas;
- Communicate effectively with the quantitative financial community and with the actuarial community;
- Provide a grounding in the fundamental concepts of actuarial science as they affect the operation of insurance and other financial bodies;
- Provide grounding in the mathematical and statistical techniques which can be used to model, analyze and manage risks;
- Present fundamental actuarial ideas and arguments to others outside the actuarial profession and use such ideas to analyze business and social issues and to formulate, justify and present plausible and appropriate solutions to business and social problems.