



## Bachelor of Science (Honours) Financial Mathematics

### Vision

To be a global university of educational excellence with transformative societal impact

### Mission

**U**niversal values in our beliefs

**T**enacity in overcoming challenges

**A**gility in facing new frontiers

**R**esponsibility in pursuit of excellence

### Programme Educational Objectives

**PEO 1:** Graduates are competent in problem solving in financial and banking industries using mathematical and computational methods.

**PEO 2:** Graduates who are capable of taking management roles and communicating effectively with other players in their industries.

**PEO 3:** Graduates practicing professional ethics, life-long learning, and sustainable development for the betterment of the profession and society.

### Programme Outcomes

**PO1:** Knowledge

Demonstrate competency in understanding the concepts and applications of Financial Mathematics

**PO2:** Practical skills

Exhibit ability to collect financial data, to use computer and mathematical software to access information and process data, and to exercise good judgement in analysing data.

**PO3:** Social skills and responsibilities

Relate the importance of ethics, culture, economics, and human relationships; as well as apply these factors in mathematics related disciplines.

**PO4:** Values, attitudes and professionalism

Demonstrate the ability to keep ethical standards and to show and commit oneself to professional responsibilities.

**PO5:** Communication, leadership and team skills

Demonstrate the ability to communicate effectively with individuals from different backgrounds, as well as demonstrate the ability to work in a diverse team as a valued member or as an effective leader.

**PO6:** Problem solving and scientific skills

Develop theoretical knowledge of the fundamental theorem of asset pricing and of relevant scientific methods, in order to apply these models and methods or synthesize models to solve problems in financial and banking industries.

**PO7:** Information management and life-long learning skills

Demonstrate the ability to engage in life-long self-development and self-learning.

**PO8:** Managerial and entrepreneurial skills

Acquire skills, including soft skills, to plan, conduct, and manage projects and assignments independently.