Mathematics Methods

Course length: Full year
Credit value: 20 credits

Advice to students
Mathematics Methods develops an increasingly complex and sophisticated understanding of calculus and statistics. By using functions and their derivatives and integrals, and by mathematically modelling physical processes, students develop a deep understanding of the physical world through a sound knowledge of relationships involving rates of change. Students use statistics to describe and analyse phenomena that involve uncertainty and variation.

Mathematics Methods provides the foundation for further study in mathematics, economics, computer sciences, and the sciences. It prepares students for courses and careers that may involve the use of statistics, such as health or social sciences. When studied together with Specialist Mathematics, this subject can be a pathway to engineering, physical science, and laser physics.

Course overview
Topic 1: Further differentiation and applications
Topic 2: Discrete random variables
Topic 3: Integral calculus
Topic 4: Logarithmic functions
Topic 5: Continuous random variables and the normal distribution
Topic 5: Sampling and confidence intervals.

Assessment
• 6 skills and applications tasks 50%
• 1 folio task 20%
• Examination (3 hours) 30%

Pathways
The successful completion of Mathematics Methods can provide pathways into university courses in accounting, management, computer studies, health sciences, business, commerce, psychology and some engineering courses.