ENTRY REQUIREMENTS
Minimum university entry requirements apply. To enrol in first-year Calculus & Applications, the prerequisite is Mathematics – Methods or Specialised (MTM315109 or MTS315109). Students may also enrol after having successfully completed the mathematics foundation unit offered during the summer semester.

FOR MORE INFORMATION
Full details of courses are published on the UTAS website www.utas.edu.au/courses

School of Mathematics & Physics
University of Tasmania
Private Bag 37
Hobart, Tasmania 7001
Phone: (03) 6226 2439
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Email: Karen.Bradford@utas.edu.au
www.utas.edu.au/maths

Other information related to university study such as application and admission, accommodation options, fees, services and facilities can be accessed at www.utas.edu.au/futurestudents, email course.info@utas.edu.au or phone 1300 363 864.

For international students, this information can be found at www.international.utas.edu.au, email Your.Study@utas.edu.au or phone +61 3 6324 3775.
Employers include government agencies (such as the Defence Force and the Australian Bureau of Statistics), CSIRO, universities and colleges. In the private sector, employment opportunities include banks, computer firms, insurance and mining companies.

**WHAT MAKES US DISTINCTIVE?**
- We have a fully integrated mathematics-physics program.
- We offer a mathematics bridging course that qualifies students for entry into first-year mathematics units.
- We offer smaller classes where possible, to enable individual attention to you, the student.

**COURSE STRUCTURE**
The following is a general guide to completing a Bachelor of Science with a major in mathematics.

**Year 1**
**Calculus & Applications 1A** – provides the fundamental tools of single variable calculus that are needed in the application of mathematics to science and engineering. It extends the ideas of differentiation and integration and shows how they can be used to optimise various processes. There is also an introduction to the powerful modern tools of symbolic computer algebra.

**Calculus & Applications 1B** – continues the study of calculus in the second semester with the focus on integration and some linear algebra; also includes an introduction to differential equations, which are important in modelling growth and decay problems that arise in fields such as chemistry and biology.

**Data Handling & Statistics 1** – a ‘hands-on’ statistics course designed to introduce students to collecting and analysing data, drawn from various disciplines of practical relevance.

Three first-year mathematics units are taught in Launceston: Mathematics 1 and Mathematics II covers the material of Calculus & Applications 1. Data Handling & Statistics is also offered.

**SCHOLARSHIPS**
The University of Tasmania offers national undergraduate scholarships in mathematics. To find out more, visit the University website www.utas.edu.au, email the Scholarships Office at Tas.Scholarships@utas.edu.au or talk to your careers adviser.

**FURTHER STUDY**
The School of Mathematics and Physics offers the following postgraduate courses:
- Graduate Diploma of Science in Computational Mathematics, Operations Research or Statistical Applications
- Graduate Diploma of Science with Honours in Mathematics
- Master of Applied Science, in Mathematics
- Research higher degrees at masters and doctoral levels*

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For students who have completed Mathematics – Specialised MTS315109 and are interested in some additional, challenging material, there is Advanced Calculus 1A and 1B.

**Years 2 and 3**
In second and third year, further development takes place in calculus, analysis, computational and numerical methods, algebra, discrete mathematics, operations research and data handling and statistics.

**WHY STUDY MATHEMATICS?**
The range of professions to which mathematics is applicable is continually expanding. In addition to its more traditional role in modelling in the physical sciences, mathematics is now a key component in the analysis of financial markets, coding and cryptography, the design of computer networks and weather and climate modelling.

Mathematics should be considered as the science component of a combined degree with arts, commerce or law. Surveys have shown that employers perceive that mathematics graduates have good problem-solving skills, the capacity for logical thought and the ability to think laterally. Studying mathematics enhances these attributes.

Mathematics can be used to solve problems in fields that range from psychology to biology, physics and chemistry to engineering and commerce, and games design to information technology.

**CAREERS IN MATHEMATICS**
Some of the employment opportunities for mathematics graduates are:
- Weather forecasting
- Statistics and analysis of data
- Resource management (operations research)
- Market forecasting and finance
- Analysis of economic data
- Computer programming
- Medical technology
- Logical design
- Industrial consultancy
- Secondary and tertiary teaching
- Telecommunications industry

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* International students should consult the international student website for course availability. www.international.utas.edu.au