

# **Bachelor of Mathematics**

UAC code 756511

Mathematics and statistics are the basis for successful decision making and problem solving in business, science, engineering and industry. The higher-than-average starting salaries of mathematical/statistical graduates is an indication that they are in demand by employers, and that they have the skills to be productive from their first day on the job.

This degree provides students with the essential skills and knowledge of a professional mathematician or statistician: logic, mathematical modelling, experimental design, the ability to manipulate, analyse and interpret large amounts of data. Students are also encouraged to develop computing skills, as specialised software provides an invaluable tool when analysing large amounts of data or performing time-consuming calculations quickly.

Graduates often work in management teams where they are the only member of the team with in-depth knowledge of mathematics/statistics. For this reason, considerable emphasis is placed on students developing good communication skills. The ability to explain complex information in simple language is an important asset for a mathematician in the job market.

Bachelor of Mathematics graduates' employment opportunities can be further enhanced by the flexibility of this degree. One third of the subjects taken in the BMath degree may be from other disciplines. This allows students to pick up a wider variety of skills and opens greater options in the employment market. Such a program may involve a "double major", that is, officially recognized specialisation in another discipline.

The most common choices of discipline for a double major are:

Accountancy	Information Systems
Computer Science	Econometrics
Economics	Science
Management	Maths/Applied Statistics

Other majors are also possible.

Honours

After completing the 3-year Bachelor degree, a fourth year of study (Honours) is available to students with a credit average or better. This additional full-time year of study is a more challenging and research oriented program, that adds prestige to the degree. It would be an advantage for students who were aiming for a research-based job, or those planning to go on to a Masters degree or PhD.

## **Graduate Opportunities**

Likely employers include the government (Public Service), Department of Employment, Education & Training, Defence Science and Technology Organisation, armed services, CSIRO/Bureau of Meteorology, Department of Agriculture, Mining and Transport, marine research laboratories, and large private companies such as BHP, Telecom, AMP, Optus, Comalco, National Bank.

Most jobs that are suitable for mathematics graduates don't have the word "mathematician" in the title. Below is a list of some position titles held by maths graduates.

- investment adviser
- quality controller
- risk manager
- survey statistician
- market researcher
- transport system analyst
- biometrician
- meteorologist
- operations researcher
- environment modeller
- research officer
- data analyst
- logistics manager
- purchasing agent

## **Course Duration**

The Bachelor of Mathematics is a three year full-time degree or equivalent part-time.

## **Assumed knowledge**

HSC Mathematics Band 4. (HSC Mathematics Extension 1 is recommended.) There is no HSC English pre-requisite.

[Degree Rules](#)

Further enquiries to:  
Dr Maureen Edwards  
School of Mathematics and Applied Statistics  
email: [maureen@uow.edu.au](mailto:maureen@uow.edu.au)  
Ph (02) 4221 4768  
Fax: (02) 4221 4845