

UTS:



# SCIENCE

NEW

## BACHELOR OF MEDICINAL CHEMISTRY

### Specialist degree :

Bachelor of Medicinal Chemistry

UAC Code: 607065

UTS Code: C10275

ATAR 2014: Not applicable

### WHAT WILL I LEARN?

The Bachelor of Medicinal Chemistry equips you with skills to undertake the design, discovery and development of new drugs.

The course is a research inspired, trans-disciplinary degree located at the intersection of chemistry, biology and pharmacology.

In your first year, you will develop a solid foundation in chemistry, maths and biology which will underpin your future studies. These topics will be expanded and developed as you progress through your degree with subjects such as pharmacology and drug synthesis strategies delivered in your second and third years of study.

The practice oriented nature of the degree will involve access to cutting edge instrumentation, equipping you with the necessary skills to prepare you for a career as a medicinal chemist.

### CAREER OPTIONS

This program offers graduates a pathway into careers at the forefront of drug discovery, from concept to delivery.

Your highly developed practical skills will differentiate you from other graduates, allowing you to work in areas of drug discovery and development including the creation of new synthetic drug compounds.

You can choose to work in range of industries including pharmaceutical science to biotechnology where you will have the opportunity to interact with multi-disciplinary teams involving pharmacologists, toxicologists, analytical chemists, microbiologists, and bio-pharmacists.

Majority of jobs are with pharmaceutical companies, biotechnology start-ups, clinical trials management or government regulatory authorities.

This program also provides you with the requisite knowledge for entry into the UTS Masters of Pharmacy. This is a professional qualification that leads to eligibility for qualification as a pharmacist.

Research opportunities can also be accessed through the Honours or Masters programs leading to higher research degree studies

### HONOURS

The Bachelor of Medicinal Chemistry (Honours) is available to eligible students via an additional year of full time study.

### PROFESSIONAL SOCIETIES

Graduates will be eligible for membership of the Royal Australian Chemical Institute.

### COURSE CODES

UTS course code: C10275

UAC code: 607065

Duration: 3 years full-time

Location: City campus

Assumed Knowledge: Year 12 Mathematics, any two units of English, and any two units of Science.

### NEED TO KNOW MORE?

Associate Professor Andrew McDonagh  
Program Director Medicinal Chemistry  
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**FULL TIME PROGRAM**
**YEAR 1****AUTUMN SEMESTER**

Principles of Scientific Practice	6cp
Chemistry 1	6cp
Cell Biology & Genetics	6cp
Mathematical Modelling for Science	6cp

**SPRING SEMESTER**

Chemistry 2	6cp
Statistics and Mathematics for Science	6cp
Human Anatomy & Physiology	6cp
Elective	6cp

**YEAR 2****AUTUMN SEMESTER**

Organic Chemistry 1	6cp
Physiological Systems	6cp
Physical Chemistry 1	6cp
Elective	6cp

**SPRING SEMESTER**

Organic Chemistry 2	6cp
Inorganic Chemistry 1	6cp
Spectroscopy and Structure	6cp
Medicinal Chemistry	6cp

**YEAR 3****AUTUMN SEMESTER**

Analytical Chemistry 2	6cp
Metabolic Biochemistry	6cp
Pharmacology 1	6cp
Elective	6cp

**SPRING SEMESTER**

Strategies in Drug Synthesis	6cp
Analytical Chemistry 3	6cp
Pharmacology 2	6cp
Elective	6cp

**OTHER NEW COURSES COMMENCING IN 2015**

UTS Science is introducing a few new courses commencing in 2015, which are:

- Bachelor of Biomedical Physics
- Bachelor of Advanced Science (Advanced Materials)
- Bachelor of Advanced Science (Environmental Biotechnology)
- Bachelor of Advanced Science (Infection and Immunity)
- Bachelor of Advanced Science (Pre-Medicine)

Find out more at the UTS Science booths and discuss study options with our academics.

[www.science.uts.edu.au/future](http://www.science.uts.edu.au/future)

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**WHY UTS SCIENCE?**

At UTS Science innovation is more than just an idea, it is applied in the development of courses, making science an experience.

Our courses show how basic sciences like biology, physics, chemistry and mathematics connect with the quest for new vaccines, new gene therapy treatments, development of efficient photonics, more sensitive detection systems for environmental toxins and pathogens, and a host of exciting applications.

Students study science at UTS because they want courses with real world skills. Employers value our graduates because they are work-ready, even before they graduate.

Studying science at UTS also means having access to new state-of-the-art laboratory facility in the city, the chance to network with a group of diverse researchers and the opportunity to contribute to current research.