

UTS: SCIENCE PRACTICE

The Diploma in Scientific Practice

A practice-based learning experience

WHAT IS THE DIPLOMA IN SCIENTIFIC PRACTICE?

The *Diploma in Scientific Practice* is an innovative and exciting opportunity for UTS undergraduate students, the community and industry to work collaboratively on a broad range of scientific projects. The program is an integral part of the Faculty's commitment to providing students with opportunities for practice-based learning.

Students take part in an industrial internship of approximately 30 weeks. The internship provides students with the opportunity to gain practical experience in the scientific field they are studying and the opportunity to develop the skills, knowledge and attitudes needed to make an effective start in their profession.

Increasingly employers are seeking staff with a mix of technical expertise and generic skills. Generic skills are attributes and abilities such as creativity, innovation, enterprise, teamwork, effective communication, ethical behaviour, critical thinking, problem solving, self-management, self-directed learning, and efficient use of technology. These skills underpin effective performance in the workplace and are sought by employers.

When completed concurrently with any undergraduate Science Degree, the *Diploma in Scientific Practice* makes students work-ready through its focus on the application and acquisition of both technical skills and generic attributes. The program maximises learning experiences by heavily utilising e-learning technologies to create exciting opportunities for the capture and exchange of students' knowledge, experiences, and reflections.

WHO CAN ENROL IN THE DIPLOMA IN SCIENTIFIC PRACTICE?

The Diploma program is optional for science students enrolled in any of the Bachelor degrees. Normally, students will have completed a minimum of three semesters of study. The course consists of two 6 credit point subjects (*Scientific Practice* and *Scientific Practice Review*).

Students will graduate with two qualifications after successful completion of the Bachelor Degree and the Diploma. The Diploma is not offered separately and the combined program will normally take four years of full-time study to complete.

WHAT ARE THE BENEFITS OF COMPLETING THE DIPLOMA IN SCIENTIFIC PRACTICE?

- Gain insight into a career in science
- Focus on career goals
- Test knowledge, skills and abilities on-the-job
- Improve confidence and communication skills
- Develop maturity
- Access professional networks
- Experience enhanced learning and working opportunities
- Gain a head start in the competitive graduate job market by becoming 'work ready'

HOW DO I ORGANISE AN INTERNSHIP?

The Faculty of Science does not arrange industrial placements for students. However, many academics are willing to assist students by providing industry contacts and discussing with students industries that are undertaking projects that interest them.

Career Services at UTS provides a database listing employers and job titles of local graduates from UTS science degrees at <http://138.25.124.210/scm/gdsw>

WHERE CAN I FIND OUT MORE INFORMATION?

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UTS: SCIENCE

Innovative, relevant and practical - a fusion of theory and practical studies

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. Students can opt to take the Diploma in Scientific Practice in the second year of their degree, where they participate in industrial internship.

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

What do our past students say?

SAM MORGAN-KELLOW, graduated in 2007

Bachelor of Science in Urban Ecology

"I chose this area of study because I was keen on learning about the environment. I was interested in biology and other components of the course relating to building and design. The lecturers were very helpful and the practical components of the course were enjoyable. I was able to choose two very different elective areas in second and third year and got to see different ecosystems on my field trips.

My final year project on CBD tree canopies with the City of Sydney was fantastic because I felt it had a real practical application. I'd like to work for local councils in an Environmental Officer role and eventually work in government on policy."

OSTA CHANGALANGSY, graduated in 2006

Bachelor of Medical Science

"My job (as a Clinical Trials assistant) requires me to be highly organised so that I can manage the clinical trials efficiently. My job involves dealing with investigators, pharmaceutical companies. I also ensure patient demographics are correct, order the correct test for each patient as well as to make sure that the results are reported to the investigators. I am also responsible for overseas specimens dispatch for further testing. The subjects I studied at UTS gave me the confidence on my very first day at work.

MARTIN BLABER, graduated in 2007

Bachelor of Science in Nanotechnology

"I was drawn to UTS because it was the pioneer in nanotechnology in Australia. Through the Institute for Nanoscale Technology I have access to two very large computing facilities. I would not have been able to do my work efficiently without access to these machines. I am also a big fan of the people here. They are very supportive and friendly. There is always someone willing to help.

What do employers say about UTS Science, its students and internship program?

MR JAMES MCLEOD,

CEO, Dominion Electronics

"We have taken on four UTS Science interns over the past two years. They did some really great research in imbedded electronics. They compiled the raw data and presented a market analysis report. The interns from UTS Science were very practical and fitted straight into our organisation."

MR ALAN LIDDLE

CEO, Immune System Therapeutics Ltd

"At Immune System Therapeutics, we have interfaced with and worked with UTS Science students for over five years. Students from UTS have strong, readily useable technical skills that allow them to be productive from day one. They have sound knowledge base that enables them to learn and master new technologies in a timely fashion."

What is the Diploma of Scientific Practice? Should you consider this option?

The UTS Diploma of Scientific Practice is yet another example of how studying science at UTS can give your career a kick start. Students have the option in the second or third year of their degree to participate in an industrial internship gaining practical experience and the opportunity to develop the skills, knowledge and attitudes needed to give them that extra edge in the marketplace. The possibility is there for employers to offer students employment as a result of these internships.