

Science



close-up

Science at Sydney has enabled me to explore all of my interests in the medical sciences; from practical work in anatomy, to keeping up with the latest in research findings.

Amber D'Souza,
Bachelor of Medical Science
(Graduate)

Why Sydney?

- Students have the variety and flexibility to determine their major studies from the beginning of their degree or wait until later years when a career path is clearer
- You gain access to 29 specialist majors in the one degree, using one UAC preference
- Courses cater for all levels of students with Advanced Science options, Talented Student Program and Special Studies Programs on offer
- You can study in other countries through the University Exchange Program
www.usyd.edu.au/fstudent/studyabroad.
- Flexibility to blend arts and sciences via an interdisciplinary program such as the Bachelor of Liberal Studies. Up to one-third of science degrees tend to be undertaken in subjects from other faculties
- Sydney science graduates are prized by employers as they recognise that a science education develops high-level teamwork, adaptability and creative thinking skills
- You can graduate with a double science major, an asset in a highly competitive job market
- If further study interests you, a science degree can lead to other graduate programs in medicine, dentistry, commerce or law and a variety of research careers. The faculty offers a range of specialist science postgraduate coursework degrees in: Nutrition and Dietetics, Bioethics, Bioinformatics, Environmental Science, History and Philosophy of Science, Microscopy and Microanalysis, Molecular Biotechnology, Nuclear Science, Psychology degrees, Spatial Information Science and Wildlife Health and Population Management.

- The combined science and medicine degree provides students with the opportunity to pursue and develop an interest in science as preparation for entry into medicine
- Curious about a future in science but haven't studied science and maths for the HSC? The science and technology degree can open a pathway to the science arena

The Talented Student Program

The Talented Student Program (TSP) allows talented students to undertake challenging and stimulating courses and projects to fully develop talents and satisfy any special interests. The TSP is different for each student and can be tailor-made. The TSP pushes the boundaries of the typical university experience.

Entry is by invitation from the Dean of Science and generally requires a minimum UAI of 99.00.

For more TSP information contact:

Associate Dean (TSP)
Associate Professor Tony Masters
 E: a.masters@chem.usyd.edu.au

Or contact the Faculty of Science Office:
 T: (02) 9351 3021
 E: info@science.usyd.edu.au

Prepare yourself for a future in:

- Agriculture
- Astrophysics
- Banking
- Bioinformatics – combining biological sciences and information technology
- Biochemistry
- Bioethics
- Clinical nutrition and dietetics
- Computer science
- Education
- Environmental planning and management
- Financial Mathematics
- Forensic work
- Geology and Geophysics
- Government
- Human geography
- Industrial chemistry
- Journalism
- Management
- Marketing
- Marine science
- Medical research
- Medicine
- Molecular chemistry
- Museum work
- Nutritional science
- Patent work
- Pathology services
- Plant science
- Psychology*
- Research
- Relativity
- Science communication
- Science organisations
- Scientific research
- Statistics and analysis
- Teaching
- Theoretical physics
- Writing

*The NSW Psychologists' Registration Board requires four years of study plus two years of postgraduate study or two years of experience under supervision. Full membership of the Australian Psychological Society requires six years' study in psychology. Becoming a registered psychologist opens even more doors to practicing in large firms or your own business in one of many areas, including educational, clinical, organisational or counselling psychology.

Graduates currently work with the London School of Tropical Medicine, CSIRO, Australian Government Analytical Laboratories, the Sydney Aquarium, Taronga Zoo, Sydney Water, universities and a host of other organisations, in specialisations ranging from anthropology to zoology, from psychology to forensic science, and from journalism to environmental science.

Science bridging courses

Biology

Offered through CCE:
E: info@cce.usyd.edu.au
T: (02) 9036 4789
www-secure.cce.usyd.edu.au

Chemistry

E: j.hurst@chem.usyd.edu.au
T: (02) 9351 3105
www.chem.usyd.edu.au/study/bridgingcourse.html

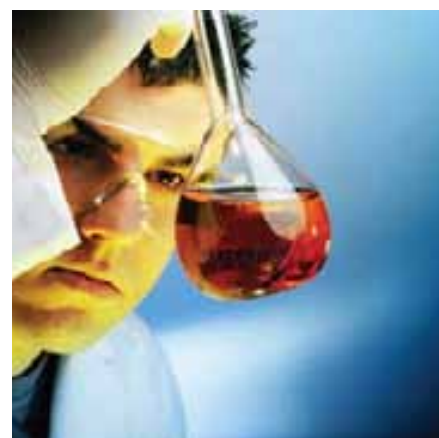
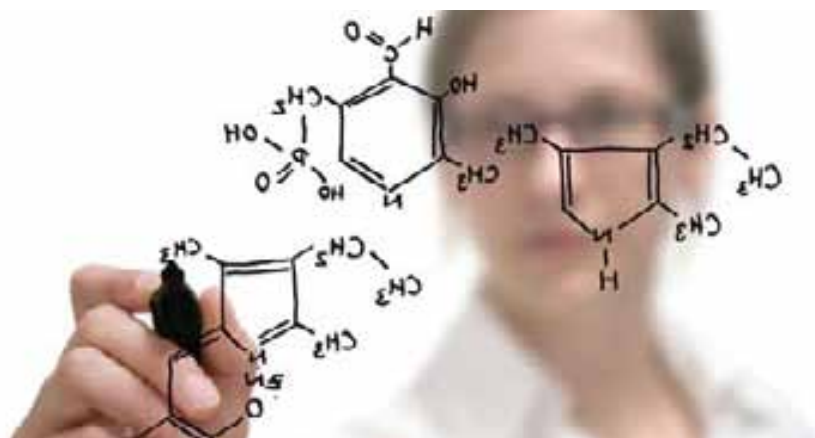
Mathematics

www.maths.usyd.edu.au/u/BC

Physics

Offered through CCE:
E: info@cce.usyd.edu.au
T: (02) 9036 4789
www-secure.cce.usyd.edu.au

Students in combined-degree courses also take subjects in arts and humanities, commerce, engineering, education, law, medical science or nursing. See relevant pages in this prospectus for more information, and contact the relevant faculties.



1: Degrees Administered by the Faculty of Science

DEGREE	STUDY LENGTH	ASSUMED KNOWLEDGE	MAJOR STUDIES
Bachelor of Science	3 years	Mathematics or HSC Mathematics Extension 1. Other assumed knowledge depends on subjects chosen.	Agricultural Chemistry; Anatomy and Histology; Biochemistry; Bioinformatics; Biology (Animal, Plant, Genetics); Cell Pathology; Chemistry; Computational Science; Computer Science; Environmental Studies; Financial Mathematics and Statistics; Geography; Geology and Geophysics; History and Philosophy of Science; Immunobiology; Information Systems; Marine Science; Mathematics; Medicinal Chemistry; Microbiology; Nanoscience and Technology; Neuroscience; Pharmacology; Physics; Physiology; Plant Science; Psychology; Soil Science; Statistics.
– Advanced	3 years	Mathematics or HSC Mathematics Extension 1. Other assumed knowledge depends on subjects chosen.	See entry for Bachelor of Science (above), but with the opportunity to study at an advanced level and (depending on subjects chosen) to undertake research projects.
– Advanced Mathematics	3 years	HSC Mathematics Extension 2. Other assumed knowledge depends on subjects chosen.	Mathematics; Statistics.
– Molecular Biology and Genetics	3 years	Mathematics or HSC Mathematics Extension 1 and Chemistry.	Biochemistry; Biology; Chemistry; Microbiology; Molecular Biology and Genetics.
– Nutrition	4 years	Mathematics or HSC Mathematics Extension 1, Chemistry and Biology or Physics.	Biochemistry; Nutrition.
Bachelor of Science and Technology	3 years	Mathematics to Year 10 standard or higher.	See entry for Bachelor of Science (above), Bachelor of Engineering page 39 and Bachelor of Design Computing page 27.
Bachelor of Medical Science	3 years	Mathematics, Chemistry, and Biology or Physics.	Anatomy; Biochemistry; Biology; Cell Pathology; Histology; History and Philosophy of Science; Immunology; Infectious Diseases; Microbiology; Molecular Biology and Genetics; Pharmacology; Physiology.
Bachelor of Psychology	4 years	Mathematics.	Psychology.
Bachelor of Science/ Bachelor of Arts[†]	5 years	See individual entries for Bachelor of Science (above) and Bachelor of Arts page 29.	See individual entries for Bachelor of Science (above) and Bachelor of Arts page 29.
Bachelor of Science/ Bachelor of Laws[†]	5 years	See individual entries for Bachelor of Science (above) and Bachelor of Laws page 45.	See individual entries for Bachelor of Science (above) and Bachelor of Laws page 45.
Bachelor of Science (Advanced)/ Bachelor of Medicine/Bachelor of Surgery*	7 years	See individual entries for Bachelor of Science (Advanced) (above) and Bachelor of Medicine on page 47.	See individual entries for Bachelor of Science (Advanced) (above) and Bachelor of Medicine on page 47.
Bachelor of Medical Science/ Bachelor of Medicine/Bachelor of Surgery*	7 years	See individual entries for Bachelor of Medical Science (above) and Bachelor of Medicine on page 47.	See individual entries for Bachelor of Medical Science (above) and Bachelor of Medicine on page 47.

2: Degrees in which Science can be studied

DEGREE	STUDY LENGTH	ASSUMED KNOWLEDGE	MAJOR STUDIES
Bachelor of Applied Science (Exercise and Sport Science)/ Bachelor of Science (Nutrition)	5 years	Mathematics, Chemistry and Biology.	See above entry for Bachelor of Science (Nutrition) and page 43 for Bachelor of Applied Science (Exercise and Sport Science).
Bachelor of Arts and Sciences	3 years	Depends on subjects chosen.	Combines study in arts, science, socio-legal, and economics and business subjects.
Bachelor of Health Sciences	3 years	Depends on subjects chosen.	Health systems and services.
Bachelor of Liberal Studies	4 years	Mathematics. Other assumed knowledge depends on subjects chosen.	Combines study in the humanities (including a language) and science, from the faculties of Arts, Science, and Economics and Business. See individual entries for Bachelor of Arts page 29 and Bachelor of Science (above).
Bachelor of Commerce/ Bachelor of Science[†]	5 years	See individual entries for Bachelor of Science (above) and Bachelor of Commerce page 35.	See individual entries for Bachelor of Science (above) and Bachelor of Commerce page 35.
Bachelor of Engineering/ Bachelor of Science[†]	5 years	See individual entries for Bachelor of Science (above) and Bachelor of Engineering page 40.	See individual entries for Bachelor of Science (above) and Bachelor of Engineering pages 40.
Bachelor of Engineering/ Bachelor of Medical Science	5 years	See individual entries for Bachelor of Engineering page 40 and Bachelor of Medical Science (above).	See individual entries for Bachelor of Engineering pages 40 and Bachelor of Medical Science page 54.
Bachelor of Education (Secondary: Science)/Bachelor of Science[†]	5 years	See individual entries for Bachelor of Science (above) and Bachelor of Education (Secondary: Science) on page 37.	See individual entries for Bachelor of Science (above) and Bachelor of Education (Secondary: Science) on page 37.
Bachelor of Education (Secondary: Mathematics)/Bachelor of Science[†]	5 years	See individual entries for Bachelor of Science (above) and Bachelor of Education (Secondary: Mathematics) on page 37.	See individual entries for Bachelor of Science (above) and Bachelor of Education (Secondary: Mathematics) on page 37.
Bachelor of Science/ Master of Nursing[†]	4 years	See Bachelor of Science (above).	Nursing and a major from Bachelor of Science (above). All students must study Human Biology during their first year.

For more information contact the information officer:

Faculty of Science Camperdown Campus

T: (02) 9351 3021

F: (02) 9351 4846

E: info@science.usyd.edu.au

www.science.usyd.edu.au

No. of academic staff: 500

No. of students: 5300

For entry requirements, see page 19. For detailed course and faculty information, refer to www.usyd.edu.au/courses.

* Plus additional selection criteria. For more information go to www.medfac.usyd.edu.au/futurestudent/combineddegree/admission/sci-med.php.

[†] It is also possible to enrol in a Bachelor of Science (Advanced) or a Bachelor of Science (Advanced Mathematics) in a combined course. To do this, students must achieve a UAI sufficient for entry to a Bachelor of Science (Advanced) or a Bachelor of Science (Advanced Mathematics).