2024 Science Subject Guide

Study Abroad and Exchange

Study Abroad and Exchange students may choose subjects from more than one faculty at UTS.

This guide highlights our most popular Science subjects. You can also search for other subjects and majors using the UTS Handbook and UTS Science website: http://www.science.uts.edu.au/

Subjects offered in other faculties may carry different credit point values. Be mindful of this when choosing your subjects.

Final enrolment into subjects is conditional upon class availabilities and completion of the online enrolment process.

When can I study?

Study Abroad and Exchange is available:

Period	Category
February – June	**A**: Autumn Session

Period	Category
July – November	**S**: Spring Session

- For availability of subjects, check the timetable at https://www.uts.edu.au/current-students/timetable/uts-timetable-planner

What can I study?

Pre-approved subject list

This is a great place to start! All subjects in this list are:

- Pre-approved and automatically added in your study plan
- No need to add them in your application
- You can self-enrol once you activate your student account
- No additional subject assessments will be required

Faculty assessed subjects

All subjects from this list require prior knowledge. You will need to:

- List the subjects in your application
- Demonstrate that you have the prior skills and knowledge necessary to undertake the subject (academic transcript and subject outline)
- Check prerequisites in the UTS Handbook www.handbook.uts.edu.au

Note: Each subject will be individually assessed by the faculty for approval and it can take up to 6 weeks.

Pre-approved subjects

Undergraduate

36200 Arguments, Evidence and Intuition
36201 Arguments, Evidence and Intuition
68037 Physical Modelling
68101 Physics 1
65323 Advanced Imaging and Specialist Recovery
91567 Advanced Microscopy and Imaging
91123 Nature and Evolution
91429 Physiological Bases of Human Movement
65111 Chemistry 1
65242 Principles of Forensic Science
60101 Chemistry and Materials Science
33116 Design, Data, and Decisions
65325 Digital Trace and Identity
37181 Discrete Mathematics
35255 Forensic Statistics
35010 Foundation Mathematics
91562 Health and Homeostasis 1
60006 Scientific Perspectives for Global Issues
91400 Human Anatomy and Physiology
91142 Biotechnology
91161 Cell Biology and Genetics
91107 The Biosphere
91100 Urban Sustainability and Resilience

Postgraduate

91189 Urban Sustainability and Resilience
99026 Coastal Protection and Restoration
99031 Risk-based Site Assessment

Faculty assessed subjects

Key: (Information included: Subject Number, Subject Name, Level and Session offered)

- **L1** (Level 1) Usually undertaken in first year (similar to 100 level, introductory level)
- **L2** (Level 2) Usually undertaken in second year (similar to 200 level, prior knowledge is required)
- **L3** (Level 3) Usually undertaken in third year (similar to 300 level, advanced level)

Undergraduate Subjects

- Students with no prior Science background should start with the pre-approved subject list
- Undergraduate students are not permitted to study postgraduate subjects.
- * Indicates that this subject has prerequisite(s)

Chemistry

65212	Chemistry 2*	L1	S
65621	Environmental Chemistry*	L1	S
65312	Forensic Imaging	L1	S
65202	Organic Chemistry 1*	L2	A
65307	Physical Chemistry 1*	L2	A

Mathematical Sciences

33130	Mathematics 1	L1	A or S
33230	Mathematics 2*	L1	A or S
37252	Regression and Linear Models*	L2	A
37161	Probability and Random Variables*	L1	S
31250	Introduction to Data Analytics	L2	S
37495	Statistical Design and Models for Evaluation Studies	L3	A

91401	Immunology*	L1	S
91563	Haematology 1*	L1	A
91314	General Microbiology*	L2	A
91703	Physiological Systems*	L2	A
91320	Metabolic Biochemistry*	L2	A
91500	Histology*	L2	A
91239	Human Pathophysiology*	L2	S
91132	Molecular Biology 1*	L2	S
91326	Analytical Biochemistry*	L2	S

Physics and Advanced Materials

68201	Physics 2*	L1	S
68075	Advanced Materials*	L2	A
68206	Optics*	L2	S

Environmental Science Subjects

- Some UTS Environmental Science subjects are taught by major intensive field trips. Examples of such subjects are: 91163 Alpine and Lowland Ecology, 91370 Semi-arid Ecology, and 91371 Forest and Mountain Ecology, which are rotated each year. Please check the timetable to check with option is available and dates of the subject. Generally, these are available only to inbound students studying for two sessions, as significant time is taken to prepare for the trip. Priority will be given to full-degree students.
- # Offered as a February intensive session (interested students must email studyabroad.exchange@uts.edu.au prior to lodging their application)
- ## Offered in July intensive session attached to the UTS Spring Session (interested students must email studyabroad.exchange@uts.edu.au prior to lodging their application)
- **$** Additional Excursion Costs for off-campus work in the field. Students should email studyabroad.exchange@uts.edu.au for current pricing.
- Students will be required to supply their own field-appropriate clothing (for any terrestrial field work) and camping equipment where required

Students interested in subjects marked # or ## must email studyabroad.exchange@uts.edu.au prior to lodging their application

91110	Experimental Design and Sampling*	L2	A
91120	GIS and Remote Sensing	L2	A
91154	Ecology*	L2	A
91168	Ecological Genetics	L2	A
91157	Marine Communities* ($ – field work runs during STUVAC)	L2	S
91363	Animal Behaviour and Physiology*	L2	S
91270	Plant Physiology and Climate Change*	L2	S
91121	Aquatic Ecosystems* ($)	L3	A
91116	Australian Wildlife and Management* ($ – N.B. field work running late Feb/early March)	L3	A
91118	Fish Biology and Fisheries* ($)	L3	A
91309	Biodiversity Conservation*	L3	A
91145	Environmental Protection and Management*	L3	A
91159	Environmental Remediation*	L3	S
91155	Stream and Lake Assessment* ($)	L3	S
91126	Coral Reef Ecosystems* # # ($)	L3	A

Postgraduate Subjects

Students enrolling in these postgraduate subjects must have completed the equivalent relevant studies.

35003	Modern Algebra	A
37010	Statistics and Financial Econometrics	A
35004	Mathematical Analysis and Applications	A
37400	Postgraduate Optimisation	A
66063	Analytical Separation Science	A
66067	Environments and Analytical Chemistry	A
65010	Forensic Toxicology and Drug Analysis	A
37401	Machine Learning: Mathematical Theory and Applications	S
37457	Advanced Bayesian Methods	S
37007	Probability Theory and Stochastic Analysis	S
91572	Proteomics	S
69501	Infection and Immune Diagnostics	S
66066	Chemical Pathology	S
66064	Analytical Spectroscopy	S
66066	Chemical Pathology	S
68109	Advanced Communication Skills in Science	A or S
69504	Diagnostic Pathology	A or S
69505	Medical Microbiology	A or S
69506	Biomolecular Science	A or S
60117	Understanding Data and Statistical Design	A or S