Study Abroad and Exchange at UTS: Engineering

As a study abroad or exchange student, you may design a program of subjects from more than one faculty at UTS, provided you enrol in 24 credit points of full-time study.

Engineering subjects are 6 credit points each. In other faculties at UTS, subjects are offered at different credit point levels, so make sure that you satisfy the credit point requirements when choosing your subjects.

What can I study?

- Study abroad and exchange is available:
  > February semester (Autumn, February – June) F
  > July semester (Spring, July – November) J
- Some subjects have prerequisites:
  > Subjects marked with an *(asterisk) have pre-requisites. You must provide evidence that you have passed a subject equivalent to the UTS pre requisite
  > Undergraduate study abroad students are not normally permitted to study postgraduate subjects
- For further details on subjects, including prerequisite knowledge, refer to the UTS Handbook at www.handbook.uts.edu.au.
- For availability of subjects, check the timetable at http://timetable.uts.edu.au. A subject offering is subject to change.

For more information

UTS Engineering programs: www.eng.uts.edu.au

UTS study abroad and exchange:
www.uts.edu.au/international/studyabroad

Tel: (+61 2) 9514 7915
Email: studyabroad.exchange@uts.edu.au

Undergraduate subjects

Key
Information is ordered: Subject Number, Level and Name

- Level 1: Usually undertaken in first year (similar to 100 level, introductory level)
- Level 2: Usually undertaken in second year (similar to 200 level, prior knowledge is required)
- Level 3: Usually undertaken in third year (similar to 300 level, advanced level)
- Level 4: Usually undertaken in fourth year (similar to 400 level, advanced level)

Core Subjects

48230 1 Engineering Communication F/J
48221 1 Engineering Computations* F/J
48240 2 Design and Innovation Fundamentals* F/J
48250 2 Engineering Economics and Finance* F/J
48260 3 Engineering Project Management* F/J
48210 3 Interrogating Technology: Sustainability, Environment and Social Change* F/J
48270 4 Entrepreneurship and Commercialisation* F/J

Civil / Civil and Environmental

48310 1 Introduction to Civil and Environmental Engineering F/J
48321 1 Engineering Mechanics* F/J
48320 1 Surveying F/J
48340 2 Construction* F/J
48352 2 Construction Materials* F/J
48821 2 Ecological Engineering* J
48641 2 Fluid Mechanics* F/J
48331 2 Mechanics of Solids* F/J
48840 2 Water Supply and Wastewater Engineering* J
48350 3 Environmental and Sanitation Engineering* F/J

Civil and Environmental (continued)

48850   3 Environmental Planning and Law F
48362   3 Hydraulics and Hydrology* F/J
48860   3 Pollution Control and Waste Management* F
48330   3 Soil Behaviour* F/J
48349   3 Structural Analysis* F/J
48370   3 Road and Transport Engineering* F/J
48360   4 Geotechnical Engineering* F/J
48353   4 Concrete Design* F/J
48366   4 Steel and Timber Design* F/J
48389   4 Computer Modelling and Design* F/J
48881   4 Water and Environmental Design* J

Electrical Engineering

48510   1 Introduction to Electrical Engineering F/J
48520   1 Electronics and Circuits* F/J
48521   1 Fundamentals of Electrical Engineering* F/J
48530   2 Circuit Analysis* F/J
48531   2 Electromechanical Automation* F/J
48430   2 Embedded C* F/J
48540   3 Signals and Systems* F/J
48451   3 Advanced Digital Systems* F/J
48571   3 Electrical Machines* F/J
48434   3 Embedded Software* F/J
48572   3 Power Circuit Theory* F/J
48580   4 Advanced Control* F
48551   4 Analog Electronics* J
48570   4 Data Acquisition and Distribution* F/J
48581   4 Digital Electronics* F
48560   4 Introductory Control* F/J
48561   4 Power Electronics and Drives* F
48582   4 Power Systems Analysis and Design* F
48583   4 Power Systems Operation and Protection* J
48550   4 Renewable Energy Systems* J

ICT Engineering

48410   1 Introduction to ICT Engineering F/J
48720   1 Network Fundamentals F/J
48024   1 Applications Programming* F/J
48023   1 Programming Fundamentals F/J
48441   1 Introductory Digital Systems* F/J
48541   2 Signal Theory* F/J
48740   2 Communications Networks* F
48730   3 Network Security* F/J

48750   3 Network Planning and Management* J
48450   3 Real-time Operating Systems* F
48770   3 Continuous Communications* F
48440   3 Software Engineering Practice* J
48771   4 Discrete Communications* J
48471   4 ICT Analysis* F/J
48481   4 ICT Design* F/J
48780   4 Mobile Communications* F
48433   4 Software Architecture* J

Innovation Engineering

48080   1 Introduction to Innovation J
22107   1 Accounting for Business Decisions A* F/J
25300   1 Fundamentals of Business Finance* F/J
21511   1 Global Operations and Supply Chain Management F/J
79006   2 Intellectual Property Commercialisation* J
21227   2 Innovation and Entrepreneurship* F/J
24108   2 Marketing Foundations* F/J
48081   3 Innovation Processes* F

Mechanical / Mechanical and Mechatronic Engineering

48610   1 Introduction to Mechanical and Mechatronic Engineering F/J
48620   1 Fundamentals of Mechanical Engineering* F/J
48531   2 Electromechanical Automation* F/J
48641   2 Fluid Mechanics* F/J
48640   2 Machine Dynamics* F/J
48621   2 Manufacturing Engineering* F/J
48600   2 Mechanical Design 1* F/J
48622   2 Mechatronics 1* F/J
48651   2 Thermodynamics* F/J
48660   3 Dynamics and Control* F/J
48661   3 Heat Transfer* F/J
48623   3 Mechatronics 2* F/J
48642   3 Strength of Engineering Materials* F/J
48601   4 Mechanical Vibration and Measurement* J
48650   4 Mechanical Design 2* F/J
48662   4 Mechanical Applications* J
48663   4 Advanced Manufacturing* F/J
48670   4 Mechanical and Mechatronic Design* F/J

Postgraduate subjects

The following postgraduate subjects are available for bachelor level students to enrol in. Students enrolling in these subjects must have completed the equivalent relevant engineering studies (approximately 2.5 years of a 4 year degree).

Key

- **Information is ordered: Subject Number, Name**
- Subjects marked with an *(asterisk) have prerequisites. You must provide evidence that you have passed a subject equivalent to the UTS pre requisite at your home institution.

Engineering Management

49006	Risk Management in Engineering F/J
49016	Technology and Innovation Management F/J

Civil / Civil and Environmental Engineering

49047	Finite Element Analysis J
49049	Air and Noise Pollution J
49102	Traffic and Transportation * F
49106	Road Engineering Practice * J
49107	Urban Stormwater Design F
49108	Local Government Powers and Practice F
49109	Engineered Natural Water Treatment Systems F
49115	Façade Engineering F
49116	Contaminated Site and Waste Remediation J
49117	Floodplain Risk Management in NSW J
49118	Applied Geotechnics J
49119	Problematic Soils and Ground Improvement Technology F
49121	Environmental Assessment and Planning J
49122	Ecology and Sustainability J
49123	Waste and Pollution Management F
49124	Water Quality Management J
49125	Environmental Risk Assessment J
49126	Environmental Management of Land F
49127	On Site Water and Wastewater Treatment J
49131	Bridge Design * J
49134	Structural Dynamics and Earthquake Engineering J
49135	Wind Engineering F
49136	Application of Timber in Engineering Structures J
49150	Prestressed Concrete Design F
49151	Concrete Technology and Practice F
49254	Advanced Soil Mechanics and Foundation Design J
49255	Catchment Modelling J
49256	Flood Estimation F
49257	Geographic Information Systems F
49258	Pavement Analysis and Design F
49285	Emergency Management J

ICT Engineering

49048	Wireless Networking Technologies * F
49110	3G Mobile Communication Systems * J
49201	Integrated Services Networks * J
49202	Communication Protocols * F
49205	Transmission Systems * F
49223	Satellite Communication Systems * J
49225	Software Project Management J
49247	Object Oriented Technology
49262	Web Technologies J

Electrical / Mechanical and Mechatronic Engineering

49261	Biomedical Instrumentation J
49274	Advanced Robotics * J
49275	Neural Networks and Fuzzy Logic F
49286	Vehicle Design
49307	Internal Combustion Engines * J
49312	Advanced Flow Modelling J
49316	Materials Handling F
49321	Energy Conversion F
49322	Air Conditioning * F
49323	Vibration Analysis * F
49325	Computer–aided Mechanical Design J
49328	Turbomachines J
49329	Control of Mechatronic Systems * J
49330	Sensors and Signal Processing F
49928	Design Optimisation for Manufacturing F