



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, however, subjects are offered at different credit point levels, so it's important to 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, March – June)
 - > July semester (Spring, August – November)
- > Prerequisites apply to certain subjects:
 - > If you apply for a subject with a prerequisite, you will first need to demonstrate that you have the prior skills and knowledge needed to undertake the subject.
 - > 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>. Many subjects are offered in one semester only.

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
- 48221 1 Informatics: Visual Basic

- 48240 2 Design Fundamentals
- 48250 2 Engineering Economics and Finance

- 48260 3 Engineering Project Management
- 48210 3 Interrogating Technology: Sustainability, Environment and Social Change

- 48270 4 Engineering Enterprise

Civil / Civil and Environmental

- 48310 1 Introduction to Civil Engineering
- 48321 1 Statics
- 48320 1 Surveying

- 48340 2 Construction
- 48352 2 Construction Materials
- 48821 2 Ecological Engineering
- 48641 2 Fluid Mechanics
- 48331 2 Mechanics of Solids
- 48840 2 Water Supply and Wastewater Engineering



Civil / Civil and Environmental (continued)

- 48350 3 Environmental and Sanitation Engineering
- 48850 3 Environmental Planning and Law
- 48362 3 Hydraulics and Hydrology
- 48860 3 Pollution Control and Waste Management
- 48330 3 Soil Behaviour
- 48349 3 Structural Analysis
- 48370 3 Transport in the Environment

- 48360 4 Geotechnical Engineering
- 48353 4 Concrete Design
- 48366 4 Steel and Timber Design
- 48389 4 Computer Modelling and Design
- 48881 4 Water and Environmental Design

Electrical Engineering

- 48510 1 Introduction to Electrical Engineering
- 48520 1 Electronics and Circuits
- 48521 1 Fundamentals of Electrical Engineering

- 48530 2 Circuit Analysis
- 48531 2 Electromechanical Automation
- 48430 2 Embedded C

- 48540 3 Signals and Systems
- 48451 3 Advanced Digital Systems
- 48571 3 Electrical Machines
- 48434 3 Embedded Software
- 48572 3 Power Circuit Theory

- 48580 4 Advanced Control
- 48551 4 Analog Electronics
- 48570 4 Data Acquisition and Distribution
- 48581 4 Digital Electronics
- 48560 4 Introductory Control
- 48561 4 Power Electronics and Drives
- 48582 4 Power Systems Analysis and Design
- 48583 4 Power Systems Operation and Protection
- 48550 4 Renewable Energy Systems

ICT Engineering

- 48410 1 Introduction to ICT Engineering
- 48720 1 Network Fundamentals
- 48024 1 Object-oriented Design

- 48023 1 Object-oriented Programming
- 48441 1 Introductory Digital Systems

- 48541 2 Signal Theory
- 48740 2 Communications Networks

- 48730 3 Authentication and System Security
- 48750 3 Network Planning and Management
- 48450 3 Real-time Operating Systems
- 48770 3 Signal Processing
- 48440 3 Software Engineering

- 48771 4 Communication Theory
- 48471 4 ICT Analysis
- 48481 4 ICT Design
- 48780 4 Mobile Communications
- 48433 4 Software Architecture: Engineering

Innovation

- 48080 1 Introduction to Innovation
- 22107 1 Accounting for Business
- 25300 1 Fundamentals of Business Finance

- 21193 2 Business Strategy
- 79006 2 Intellectual Property Commercialisation
- 21227 2 Managing Innovations and Entrepreneurship
- 24108 2 Marketing Foundations

- 48081 3 Innovation Processes

Mechanical / Mechanical and Mechatronic Engineering

- 48610 1 Introduction to Mechanical and Mechatronic Engineering
- 48620 1 Fundamentals of Mechanical Engineering

- 48531 2 Electromechanical Automation
- 48641 2 Fluid Mechanics
- 48640 2 Machine Dynamics
- 48621 2 Manufacturing Engineering
- 48600 2 Mechanical Design 1
- 48622 2 Mechatronics 1
- 48651 2 Thermodynamics



- 48660 3 Dynamics and Control
- 48661 3 Heat Transfer
- 48623 3 Mechatronics 2
- 48642 3 Strength of Engineering Materials

- 48601 4 Mechanical Vibration and Measurement
- 48650 4 Mechanical Design 2
- 48662 4 Mechanical Applications
- 48663 4 Advanced Manufacturing
- 48670 4 Mechanical and Mechatronic Design



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 *(asterix) 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
- 49016 Technology and Innovation Management

Civil / Civil and Environmental Engineering

- 49047 Finite Element Analysis
- 49049 Air and Noise Pollution
- 49102 Traffic and Transportation *
- 49104 Asset Maintenance Management
- 49106 Road Engineering Practice *
- 49107 Urban Stormwater Design
- 49108 Local Government Powers and Practice
- 49109 Engineered Natural Water Treatment Systems
- 49115 Façade Engineering
- 49116 Contaminated Site and Waste Remediation
- 49117 Floodplain Risk Management in NSW
- 49118 Applied Geotechnics
- 49119 Problematic Soils and Ground Improvement Technology
- 49121 Environmental Assessment and Planning
- 49122 Ecology and Sustainability
- 49123 Waste and Pollution Management
- 49124 Water Quality Management
- 49125 Environmental Risk Assessment
- 49126 Environmental Management of Land
- 49127 On Site Water and Wastewater Treatment
- 49131 Bridge Design *
- 49132 Stability of Structures
- 49133 Steel and Composite Design

- 49134 Structural Dynamics and Earthquake Engineering
- 49135 Wind Engineering
- 49136 Application of Timber in Engineering Structures
- 49150 Prestressed Concrete Design
- 49151 Concrete Technology and Practice
- 49152 Rehabilitation of Concrete Structures
- 49254 Advanced Soil Mechanics and Foundation Design
- 49255 Catchment Modelling
- 49256 Flood Estimation
- 49257 Geographic Information Systems
- 49258 Pavement Analysis and Design
- 49285 Emergency Management

ICT Engineering

- 49048 Wireless Networking Technologies *
- 49099 GSM, GPRS and EDGE Technologies *
- 49110 3G Mobile Communication Systems *
- 49201 Integrated Services Networks *
- 49202 Communication Protocols *
- 49205 Transmission Systems *
- 49223 Satellite Communication Systems *
- 49225 Software Project Management
- 49247 Object Oriented Technology
- 49262 Web Technologies

Electrical / Mechanical and Mechatronic Engineering

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