2024 Information Technology (IT) 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 IT subjects. You can also search for other subjects and majors using the UTS Handbook and UTS IT website: https://www.uts.edu.au/study/information-technology

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, which can take up to 6 weeks.

Pre-approved subjects

Undergraduate

31269 Business Requirements Modelling
31016 Career Management for IT Professionals
31282 Systems Testing and Quality Management
31265 Communication for IT Professionals
31266 Introduction to Information Systems
31061 Database Principles
31268 Web Systems
31250 Introduction to Data Analytics
31260 Fundamentals of Interaction Design
41039 Programming 1

Postgraduate

32003 Computer Game Design
32004 Game Development
32027 Interactive Media
32144 Technology Research Preparation
32405 Human-Centred Design Research Methods
32501 Computer Graphics
32516 Internet Programming
32524 LANS and Routing
32531 Global Information Systems
32541 Project Management
32543 3D Animation
32547 UNIX Systems Programming
32557 Enabling Enterprise Information Systems
32558 Business Intelligence
32563 IT Professional and Society
32570 Enterprise Architecture Practice
32571 Enterprise Software Testing
32998 .NET Application Development
32130 Fundamentals of Data Analytics
41020 Human-centred Design Methods
42017 Fundamentals of Interaction Design
42070 Prototyping Physical Interaction

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 Engineering 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)

Core subjects

48023	Programming Fundamentals	L1	A or S
41092	Network Fundamentals	L1	A or S
31271	Database Fundamentals*	L2	A or S
31272	Project Management and the Professional*	L3	A or S

Business Information Systems Management

These subjects are suitable for students with a background in information systems.

31247	Collaborative Business Processes*	L1	A or S
31255	Finance and IT Professionals*	L2	A
31257	Information System Development Methodologies	L2	A
31258	Innovations for Global Relationship Management*	L2	S
31245	Business Process and IT Strategy*	L3	S
31097	IT Operations Management*	L3	A

Computer Graphics and Animation

For IT students with no prior background in computer graphics, 31080 is recommended as a starting point.

31264	Introduction to Computer Graphics*	L2	A
31262	Introduction to Computer Game Design*	L2	A
31080	Interactive Media*	L2	S
31263	Introduction to Computer Game Development*	L3	S

Interaction Design

These subjects are suitable for students with a background in software, interactive media and interaction / user design.

41019	Prototyping Physical Interaction*	L2	A
31777	Advanced Interaction Design*	L2	S
31080	Interactive Media	L2	S
41021	Interaction Design Studio (12CP)*	L3	A or S

Data Analytics

These subjects are suitable for students with a background in statistics, business intelligence and/or analytics.

41040	Introduction to Artificial Intelligence*	L1	S
42028	Deep Learning and Convolutional Neural Network*	L2	A
31256	Image Processing and Pattern Recognition	L2	S
31005	Machine Learning*	L2	S

Enterprise Systems Development

These subjects are suitable for students with a background in software development. All subjects assume introductory Java programming ability.

48024	Programming 2*	L2	A or S
31251	Data Structures and Algorithms*	L2	A
41001	Cloud Computing and Software as a Service*	L3	A
41889	Application Development in the iOS Environment*	L3	A
31777	Advanced Interaction Design*	L3	S
31927	Application Development with .NET*	L3	S
48433	Software Architecture*	L3	S

Networking and Cybersecurity

These subjects are suitable for students with a background in networking and data communications.

48024	Programming 2*	L2	A or S
31277	Routing and Switching Essentials*	L2	A or S
41900	Cryptography	L2	A
31748	Programming on the Internet*	L2	A
31338	Network Servers*	L2	S
31275	Mobile Networking*	L2	S
48730	Cybersecurity*	L3	A or S
41889	Application Development in the iOS Environment*	L3	A
48436	Digital Forensics*	L3	S
41891	Cloud Computing Infrastructure*	L3	S

Postgraduate subjects

The following are postgraduate subjects in IT at UTS. Apart from the foundation IT subjects mentioned below, generally students are required to have completed a bachelor's degree in computing, IT, or a related field (or have equivalent prior knowledge) to be eligible to study the following subjects.

Foundation IT subjects

These postgraduate subjects are suitable for students who have completed their bachelor's degree in a field other than computing or IT.

32555	Fundamentals of Software Development	A or S
32606	Database	A or S

Data Analytics

42913	Social and Information Network Analysis	A
32113	Advanced Database	S
32513	Advanced Data Analytics Algorithms	S
32146	Data Visualisation and Visual Analytics	S
42177	Image Processing and Pattern Recognition*	S
42913	Social and Information Network Analysis	A

Interactive Media

95566	Digital Experience Design	A
95563	Storytelling and Sense-making Studio	S

Internetworking

32548	Cybersecurity	A or S

Software Development

42889	iOS Application Development	A
42904	Cloud Computing and Software as a Service	A
32509	Advanced Interaction Design	S