

DIPLOMA OF INFORMATION TECHNOLOGY

Program Information

The Diploma of Information Technology provides students with an understanding of fundamental concepts and necessary skills in programming, networking and databases, enabling students to articulate into the range of IT degrees at the University of South Australia. Listed below are the modules comprising the Diploma of Information Technology. You may have been granted exemption from some modules depending on your academic results. These will be listed in your offer letter.

Students that do not study PRG001 will be required to enrol in Program Design in IT (PDT001) in their first trimester. All IT students are required to complete the tertiary preparation module Language for Study (LGS001) in their first or second trimester. Although LGS001 and PDT001 do not count towards study load or GPA, a non-graded pass is required for the program of study.

All classes (unless otherwise specified) are held at City East Campus.

Stage 1		Study Load	Units
ESS001	Essential Study Skills	25%	4.5
ITN002	Information and New Media Technologies	25%	4.5
PRG001	Programming (Prerequisite for COMP1039)	25%	4.5
CPP002	Communication, People, Place and Culture	25%	4.5
ARC002	Academic Research and Critical Enquiry	25%	4.5
MST001	Mathematics and Statistics	25%	4.5
DES001	Design	25%	4.5
Elective	Choose from: Media & Society, Business Studies 1, Human Biology, Physics 1	25%	4.5
Stage 2			Units
COMP1039	Problem Solving and Programming (Prerequisite for COMP1040 and INFS1021)	25%	4.5
INFS1020	Design Thinking & Digital Innovation	25%	4.5
INFT1016	Information Technology Fundamentals (Prerequisite for INFT1020 and INFT1021)	25%	4.5
INFT1012	Network Fundamentals	25%	4.5
COMP1040	Programming Fundamentals	25%	4.5
INFT1020	Database Fundamentals	25%	4.5
INFS1021	Systems Analysis	25%	4.5
INFT1021	IT Project Management	25%	4.5

Program Outline

Tertiary Preparation

Program Design for IT

This module develops logical thinking skills needed for programmers to successfully think through the steps and solve programming problems. You will be introduced to pseudocode and flow charts to help organise steps in a logical manner for programming algorithms.

Language for Study

This module develops language skills for students to communicate confidently, express ideas effectively and gain a sound understanding of the level of language proficiency required to attend an Australian university.

Stage 1

Academic Research and Critical Enquiry

This module will introduce you to the basic principles of critical thinking. It also assists you in developing skills needed for the tertiary study environment, including academic reading, listening and note-taking, as well as written formats and referencing.

Information and New Media Technologies

You will be introduced to the use of the Internet, social media and associated technologies in society and business. Through the module, you will utilise Microsoft Office along with online tools for effective communication and discuss the ethical and security issues related to the use of Information Communication Technologies.

Communication, People, Place and Culture

In this unit you are introduced to the basic principles of communication and its role in society and culture. You will investigate the effects of different forms of verbal and non-verbal communication and describe cultural influences on the communication process.

Design

This module provides you with an introduction to the basic principles of design and their application to various publications. You will use the design process and different software applications to publish material for both print and electronic media and analyse the messages communicated through different design elements.

Programming

This module introduces you to the basic principles of programming and their use in writing simple programs. You will use the systems development life cycle to write programs combining different data types and programming structures, and learn techniques to test successful outcomes.

Mathematics & Statistics

This module introduces you to the mathematical concepts required for further studies, particularly in statistics. You will learn to use fundamental arithmetic and algebra to solve problems, and apply statistical processes and concepts including sampling techniques and different forms of presentation.

Essential Study Skills

In this module students will be provided with an understanding and application of essential study skills, covering independent learning skills and styles, active listening, presentation and group work skills.

Stage 1 Elective Modules

Select one elective module from the options below.

Media & Society

This module analyses the use of media in society and its role in cultural life. You will investigate the different factors, which shape cultures today and discuss how the media affects popular culture, interpretations of the world and contributes to cultural identity.

Business Studies 1

This unit provides you with an understanding and application of foundation concepts in the business disciplines of management and leadership, finance, marketing and human resources. You will discuss current trends, opportunities, and issues that impact on contemporary business and learn to use appropriate communication for the business environment.

Human Biology

This module will introduce you to the basic concepts of human biology as a foundation for further study in this area. You will develop an understanding of the main body systems and the associated biology, and an awareness and appreciation of the human body in a personal, social and medical context.

Physics 1

In this module you are introduced to the basic concepts of Physics, with a particular focus on motion and heat. You will learn appropriate equations and units for demonstrating different concepts and conduct experiments to analyse and test theories.

Stage 2

Design Thinking & Digital Innovation

This module focuses on defining a problem with cultural and ethical considerations and evaluating alternative solutions. You will learn to communicate effectively with stakeholders from the initial definition of the problem through to eliciting feedback on proposed solutions.

IT Project Management

This module develops skills in software project management including defining project scope, analysing risks and developing appropriate plans. You will analyse the systems lifecycle and how it relates to project management.

Pre-requisite: Information Technology Fundamentals

Information Technology Fundamentals

This module will assist you to develop a solid understanding of Information Technology concepts that will enable you to make decisions in relation to IT infrastructure issues.

Network Fundamentals

You will learn to identify and describe alternative network and telecommunications solutions to satisfy user needs and technical requirements; analyse short and long term trade-offs associated with alternative solutions; and make recommendations of appropriate networking solutions.

Pre-requisite: Information Technology Fundamentals

Problem Solving and Programming

This module introduces you to problem solving and modelling, and the utilisation of tools in the problem solving process. You will also be introduced to programming and will gain the necessary skills to design, implement, test and debug a program.

Pre-requisite: Programming

Programming Fundamentals

This module will build upon the concepts taught in 'Problem Solving and Programming' and insight into more abstract concepts and programming techniques. You will utilise integrated development environments for programming, documentation tools and application programming interfaces.

Pre-requisite: Problem Solving and Programming

Database Fundamentals

In this module you will learn to design and construct a relational database for a small organisation. This module will introduce you to database management systems, the Relational Model and SQL.

Pre-requisite: Information Technology Fundamentals

Systems Analysis

This module develops communication skills within a collaborative work environment. You will learn techniques for understanding business and analysing and specifying requirements for business systems.

Pre-requisite: Problem Solving and Programming