

COURSE REQUIREMENTS

What is Computer Applications about?

Computer-based technology is an integral part of contemporary society. This is reflected in daily activities carried out in contexts such as the workplace, education, entertainment, recreation and the home. In this course, students will participate in hands-on activities to develop skills, knowledge and understanding related to information and communication technologies so that they can participate confidently in these environments.

Project work is integrated into the course and there are opportunities for individual and group projects in each of the modules.

The aim of Computing Applications is to develop students' capacity to be critical, ethical, competent and confident users of information and communication technologies in order to participate in a range of work, study and other life situations.

Modules

1	Hardware and Software Skills	7	Desktop Publishing II
2	Graphics I	8	Databases
3	Graphics II	9	Communications I
4	Spread sheets I	10	Communications II
5	Spread sheets II	11	Multimedia I
6	Desktop Publishing I	12	Multimedia II

Project Requirements

It is a basic course requirement that individual and/or group project work must form part of the teaching and learning program. It is highly recommended that project work be integrated throughout modules; however, it is a minimum requirement that a project forms a significant part of at least one module.

It is expected that students will develop knowledge, understanding and skills in project work sufficiently early in the course to complete the mandatory requirement of at least one project.

The capacity to undertake the mandatory project will be enhanced when students have access to deeper understanding and skills in an area by completing both related modules, eg Graphics I and II.

Key aspects of project work to be covered include the following:

- Project management
- development of project plans including tasks, schedule and budget
- documentation of project plans
- communication skills including written and oral communication with key stakeholders

- Social and ethical considerations
 - identification of major social and ethical issues that relate to the chosen project and its phases

- Problem-solving
 - identification and definition of the problem
 - identification of available resources to assist in solving the problem
 - analysis of options
 - development of a prototype to test and demonstrate the solution
 - ongoing evaluation

- Decision-making
 - based on a range of criteria including:
 - project specifications
 - economic feasibility
 - technical feasibility

- Designing solutions
 - consideration of a number of possible solutions
 - consultation with key stakeholders in the development of the solution

- Implementation
 - an implementation plan that details:
 - participant training if required
 - timeline for implementation
 - resource requirements

- Testing, evaluating and maintaining
 - in relation to compliance with the original specifications
 - effectiveness of the solution
 - recommendations for improvement.

Table of Objectives and Outcomes

Objectives	Outcomes
<p>Students will develop:</p> <p>1. skills in the use and understanding of a range of computer software and related terminology</p>	<p>A student:</p> <p>1.1 describes the function and application of a variety of computer software</p> <p>1.2 applies computing terminology appropriately in practical situations</p> <p>1.3 uses appropriate computer software in a given context</p>
<p>2. knowledge and understanding of the development of computer-based systems, their operations and functions</p>	<p>2.1 describes aspects of human activity which have developed into computer applications</p> <p>2.2 explains the principles and functions of specific hardware components</p> <p>2.3 evaluates the suitability of hardware in a particular context</p>

Objectives	Outcomes
3. skills in demonstrating the methods, processes and application of project management techniques to solve problems in a range of contexts	3.1 applies a range of project management techniques in the development of a solution 3.2 analyses and documents the steps involved in problem-solving and applies them to producing computer-based solutions 3.3 implements, tests, debugs and evaluates solutions using current common application packages
4. knowledge and understanding of the ethics and impact of computer-based technology and emerging trends on society	4.1 identifies and reflects on the social and technological implications when making decisions about the use of computer software 4.2 evaluates the use of a computer-based solution compared to non-computer solutions 4.3 identifies social and ethical issues related to the use of computer software
5. skills in critical evaluation of the appropriateness of computer software in a variety of contexts	5.1 evaluates the suitability of software applications in a particular context