



Subject:	Information Technology (IT) - Elective
Subject Outline:	This subject provides an understanding of fundamental computer concepts and an opportunity to learn about and experience applications in the area of image manipulation, web coding, information systems and programming.
Objectives:	On successful completion of this subject, students will be able to: <ol style="list-style-type: none"> 1. Explain and apply knowledge of fundamental concepts of information technology (GA 2, 4, 5); 2. Apply knowledge of web coding principles to create a web page (GA 2, 4, 5, 6); 3. Apply programming concepts to control objects in a web page (GA 2, 4, 5, 6); 4. Apply knowledge to design and implement an information system (GA 2, 4, 5, 6).
Graduate Attributes (GA):	On completion of the Foundation Program, students will be able to: <ol style="list-style-type: none"> 1. Communicate effectively in English in a variety of contexts, circumstances and modes 2. Demonstrate relevant, practical and theoretical knowledge in a subject area 3. Apply relevant academic literacy skills in a subject area 4. Apply relevant numeric literacy skills in a subject area 5. Apply critical, analytical thinking, and problem solving skills for academic contexts 6. Work independently and collaboratively in a cross-cultural context 7. Demonstrate academic integrity
Contact Time:	<ol style="list-style-type: none"> 5. Standard – Four (4) hours per week including one (1) hour tutorial 6. Express – Five (5) hours per week
Attendance:	Students are expected to attend all classes, lectures and practical lab sessions. Attendance is highly valued and contributes directly to the academic success of the student. Attendance is monitored as described in the Attendance Policy.
Tutorials:	Standard students receive assistance from tutors, which involves clarifying concepts discussed in teacher classes, helping students to comprehend and solve questions/problems and providing direction for students about current assessment activities. Express students while not having tutorials, do have less structured student led sessions as part of their program, which encourage students to actively participate in class.
Student Textbook:	There is no prescribed textbook for this subject. All of the required learning resources for this subject are available on the Moodle site for this subject.
Content:	<p>Computer Fundamentals Theory (CF)</p> <ul style="list-style-type: none"> ● Computer hardware ● Software applications including operating systems and utilities ● Networking fundamentals ● Computer number systems - binary, decimal and hexadecimal ● Image file formats and manipulation fundamentals ● Social and ethical issues arising from effects of computer use in society <p>Web Coding (WC)</p> <ul style="list-style-type: none"> ● The html markup language ● Cascading style sheets <p>Computer Programming (PR)</p> <ul style="list-style-type: none"> ● Programming fundamentals ● Algorithms <p>Information Systems (IS)</p> <ul style="list-style-type: none"> ● Database fundamentals and creating an information system ● Modelling information systems



Students in both the standard and express programs are assessed through the following assessment activities:

Assessment Activity	Description	Weighting
Image Manipulation Practical Test	This type of assessment is provided for the all of the practical units to reflect real-world situations where creating and editing a product at a computer is more realistic than working on paper. Students have 50 to 90 minutes (depending on the assessment activity) to complete a practical test with access to their printed resources and reference materials. They are observed correcting mistakes, adjusting their workstations and working with time-constraints.	5%
Image Manipulation Ethics	Students prepare by studying and discussing ethical situations relating the manipulation of images. They then complete an activity on the Moodle site to provide evidence of their understanding of the situations and concepts.	1%
Information Systems Practical Test	Students will complete three practical tests over a period of weeks (50 minutes, 90 minutes, 50 minutes); these tests are given at the completion of each section of the Information Systems unit. Each test requires students to use software to demonstrate skills and knowledge at creating database tables, creating data entry forms, designing queries, designing reports and finally demonstrating their skills to design the model for a small information system.	27%
Computer Fundamentals On-line Exam	Students will complete this on-line exam which covers all topics discussed in the computer fundamentals unit (Number Systems, Hardware, Software, Networks). The exam has questions requiring calculating, matching, identifying, and writing short answers.	10%
Web Coding Practical Test	Students will complete two practical tests over three class lessons (50 minutes, 90 minutes); these tests are given at the completion of the unit. Each test requires students to use software to demonstrate skills and knowledge at creating and assigning the basic elements of a html document, marking up required content and adding styles to a stylesheet for a small business website.	27%
Social Issues Moodle Activity	Students prepare by using the Moodle site to explore and discuss social and ethical situations relating the widespread use of computers in society. During this process, students complete a variety of questions designed to assess their understanding and their ability to identify, analyse and comment on the concepts presented to them.	3%
Programming Practical Test	Students will complete practical tests in a class (90 minutes); this test is given at the completion of the unit. The test requires students to use software to demonstrate skills and knowledge at creating computer programs to solve defined problems.	27%