Course Outline

Title: PROGRAMMING 2

Code: ITECH2100

Formerly: CP627

Faculty / Portfolio: Faculty of Science

Program Level:

	AQF Level of Program					
	5	6	7	8	9	10
Level						
Introductory						
Intermediate			✔			
Advanced						

Pre-requisites: (CP514 or CP689 or ITECH1000)

Co-requisites: Nil

Exclusions: (CP627 and CP871 and ITECH6100)

Progress Units: 15

ASCED Code: 020103

Learning Outcomes:

Knowledge:

K1. Explain the principles of inheritance, composition and their consequences
K2. Discuss basic object oriented concepts
K3. Explain the principles of event-driven programming

Skills:

S1. develop object-oriented programs involving several interacting classes
S2. incorporate pre-written classes, including those from the SDK, into software solutions
S3. develop object oriented programs which involve both object oriented and event driven aspects

Application of knowledge and skills:

A1. design, develop, test and debug programs from supplied program specifications

Values and Graduate Attributes:

Values:

V1. develop a professional approach to programming
V2. develop problem solving skills leading to self-reliance

Course Outline

ITECH2100 PROGRAMMING 2

Graduate Attributes:

Attribute	Brief Description	Focus
Continuous Learning	In a blended learning approach facilitated by the use of a contemporary industry based programming language and development environment requiring planning, development and implementation of software solutions, students will continue to develop their knowledge and skills.	Medium
Self Reliance	Students will participate in a self-directed and collaborative learning environment to develop their theoretical and technical expertise in the field of software development.	Medium
Engaged Citizenship	Students will produce programming solutions which meet industry standards.	Medium
Social Responsibility	Students will use industry standard development environments, programming languages and development techniques to deploy software solutions.	Medium

Content:

Topics may include:

- Object-oriented programming concepts: encapsulation, polymorphism, inheritance, dynamic binding.
- Design principles: classes and their relationships, model/view approach, distinction between specification and implementation, programming style.

Assessment:

Students should attend laboratory classes and complete laboratory worksheets. Students should maintain a folio and record for tutors to see at any time throughout the semester. Students should participate in lectures and computer laboratory classes and maintain a notebook with notes and exercises.

The assessment for the subject will include at least one practical assignment involving the development of an application. A set of practice worksheets may be included as an assignment. The examination will test the understanding of the concepts studied in this course.

Learning Outcomes Assessed	Assessment Task	Assessment Type	Weighting
K1, K2, K3, S1, S2, S3, A1	Individual and/or group exploration in solving problems	Projects / Assignments	40 - 50%
K1, K2, K3, S1, S2, S3, A1	Review and skills practice	Tests / Examination(s)	50 - 60%

Adopted Reference Style:

APA

Presentation of Academic Work:

Course Outline

ITECH2100 PROGRAMMING 2

https://federation.edu.au/students/assistance-support-and-services/academic-support/general-guide-for-the-presentation-of-academic-work