

Below is the accredited information for this unit:

Unit Code : HIT365

Unit Name : C Programming

Year : 2023

Semester : Semester 1

Sector : Higher Education

School/Discipline : Engineering

Credit Points : 10 Equivalent Units : HIT265

: (Must have passed 1 units in {HIT137} -OR- Must have passed 1 units in {SMA102} -

**Pre-requisites**OR- Must have passed 1 units in {HIT137} with grade of at least {HE.PS} -OR- Must

have passed 1 units in {SMA102} with grade of at least {HE.PS})

Assumed Knowledge : NA

## **Unit Description:**

The unit covers C programming including: C fundamentals; program control statements; data types, variables and expressions; decision making and data type modifiers, arrays and strings, pointers, searching and sorting, structures, and dynamic data structures. Students will combine practical coding skills with associated theoretical concepts. This unit is reliant on on-line materials including electronic submission of assessment items. Students must have access to a reliable high-speed broadband connection and a scanner.

## **Learning Outcomes:**

- Critically apply problem-solving skills using various techniques and hence recommend solutions to specific programming tasks.
- 2. Analyse the mathematical techniques required to solve problems when programming a computer.
- 3. Critically apply programming techniques, including the use of functions, local and global variables, parameters, and the four basic logic structures.
- 4. Critique and validate data structures, including arrays and databases.
- 5. Use effective oral, written, numeric and communication methods to convey ideas and principles.

## Assessment Items (3):

Assessment Task	Value (of total mark)	Related Learning outcome/s
Two quizzes (2 hours each)	30%	1,2,3,4
Two coding assignments (equivalent to 8 pages each)	30%	1,2,3,4,5
Test (2 hours)	40%	1,2,3,4