COAP: Assembly and C

Module Title:	Assembly and C
Language of Instruction:	English

Credits:	5

NFQ Level:	8

Module Delivered In	5 programme(s)

Teaching & Learning Strategies:	Students will be assessed by means of continuous assessment.

Module Aim:	To enable the student to program in assembly.

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	Program in 80X86 assembly language;
LO2	Understand the use of arrays in assembly.
LO3	Understand the passing of parameters in assembly.

Pre-requisite learning
Module Recommendations *This is prior learning (or a practical skill) that is recommended before enrolment in this module.*
No recommendations listed
Incompatible Modules *These are modules which have learning outcomes that are too similar to the learning outcomes of this module.*
No incompatible modules listed
Co-requisite Modules
No Co-requisite modules listed
Requirements *This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.*
No requirements listed

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Module Content & Assessment

Indicative Content
Introduction Introduction to CPU and Registers. Concepts of sequence, selection and iteration.
Memory Variables Introduction to usage of memory variables
Data movement instructions Moving values to from registers and moving values to from memory.
Control transfer instructions Using control transfer instructions to call and jump to blocks of code.
Arrays Using pointers to access array elements
Stack Push and pop operations. Accessing elements from the stack.
Parameter passing Pass parameters using assembly language
C programming Introduction to programming in c.

Assessment Breakdown	%
Continuous Assessment	100.00%

Continuous Assessment				
Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Other	In Class and/or In Lab Continuous Assessment	1,2,3	100.00	n/a

No Project

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Lecture	12 Weeks per Stage	1.00
Laboratory	12 Weeks per Stage	4.00
Independent Learning	15 Weeks per Stage	4.33
	Total Hours	125.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_KCCYB_B	Bachelor of Science (Honours) in Cyber Crime and IT Security	4	Mandatory
CW_KCSOF_B	Bachelor of Science (Honours) in Software Development	4	Mandatory
CW_KCCYB_D	Bachelor of Science in Cybercrime and IT Security	4	Mandatory
CW_KCSOF_D	Bachelor of Science in Software Development	4	Mandatory
CW_KCCOM_C	Higher Certificate in Science in Computing Programming	4	Mandatory