

Module code	SS-1204		
Module Title	Computer Architecture and Organisation		
Degree/Diploma	Bachelor of Science (Computer Science)		
Type of Module	Major Core		
Modular Credits	4	Total student Workload	10 hours/week
		Contact hours	4 hours/week
Prerequisite	None		
Anti-requisite	None		
Aims			
In this module, the student can describe how different hardware components are interconnected to realise the architectural specifications of a computer system. The student can also apply low-level programming using assembly language.			
Learning Outcomes			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	20%	- explain the stages involved in decoding and executing instructions - illustrate basic concepts of interfacing to external devices	
Middle order:	60%	- determine the functions of a given simple functional unit - compare different instruction set architectures	
Higher order:	20%	- write assembly language programs - construct small scale logic circuits, given their functional specifications	
Module Contents			
- Digital logic and digital systems; Machine level representation; Assembly level programming - Memory system; Interfacing; Functional organisation; Alternative architectures			
Assessment	Formative assessment	Interactive Quizzes and Feedback	
	Summative assessment	Examination: 50% Coursework: 50% - 2 class tests (20%) - 1 written assignment (15%) - 1 laboratory exercise (15%)	