

Module Code	SS-4301		
Module Title	Software Engineering		
Degree/Diploma	Bachelor of Science (Computer Science)		
Type of Module	Major Option		
Modular Credits	4	Total student Workload	10 hours/week
		Contact hours	4 hours/week
Pre-requisite	SS-2204 Systems Analysis and Design		
Anti-requisite	SS-4316 Advanced Software Engineering		
Aims			
In this module, the student is able to describe the engineering processes in the creation of medium- to large-scale software systems.			
Learning Outcomes			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order:	20%	- describe risk and requirement analyses - explain the different validation techniques	
Middle order:	60%	- apply object-oriented development	
Higher order:	20%	- use software engineering tools and techniques to develop software systems - critically evaluate software process	
Module Content			
<ul style="list-style-type: none"> - Preliminary activities: risk analysis, requirement analysis, system specification and project scheduling. - Software development activities: designing, prototyping, programming, validation and testing. - Development paradigms: object-oriented development, extreme programming techniques and design patterns. - Software engineering tools: integrated development environments, versioning tools, collaborative tools, project management tools, documentation tools and testing tools. 			
Assessment	Formative assessment	Interactive Quizzes and Feedback	
	Summative assessment	Examination 50% Coursework: 50% - 2 class tests (20%) - 2 written assignments (30%)	