

Module Code	SS-4304		
Module Title	Internet Application Development		
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-2201 Internet Programming and Development		
Anti-requisite	None		
Aims			
This module covers the use of emerging technologies designed to enable the creation of Web-based systems.			
Learning Outcomes			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order:	20%	- create robust, secure and user-friendly Internet applications	
Middle order:	60%	- apply secure communication techniques to ensure data integrity and reliability	
Higher order:	20%	- apply asynchronous processing to ensure responsiveness	
		- apply standard protocols to ensure interoperability	
Module Content			
<ul style="list-style-type: none"> - Web programming languages and application development frameworks - Programming features of web servers and clients - Communication protocols: sockets, typeless streams, stateless protocols, remote invocation, data serialization, sessions - Data persistence: server-side databases, client-side cookies - Data security: authentication, encryption - XML processing: validation, extraction, transformation - Integrated frameworks: DRY principle, MVC design, continuation-style programming - Security: cross-site scripting, code injection, session hijacking, secure protocols 			
Assessment	Formative assessment	Interactive Quizzes and Feedback	
	Summative assessment	Examination: 50% Coursework: 50% - 2 class tests (20%) - 2 written assignments (30%)	