

# FACULTY OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

## List of Courses Offered

Student Exchange Programme (UMSEP) for the 2012/2013 Academic Session

Programmes: 1) Bachelor of Computer Science  
2) Bachelor of Information Technology

No.	Course Code	Topic	Credit Hours	Courses Offered	
				Semester I	Semester II
PROGRAMME CORE COURSES					
1	WXES1109	Computer Systems & Organization	3	√	
2	WXES1112	Computing Mathematics I	3	√	√
3	WXES1116	Programming I	5	√	√
4	WXES2113	Operating Systems	4	√	
5	WXES2114	Database	5	√	
6	WAES1102	Principles of Artificial Intelligence	3		√
7	WAES2104	Mathematics for Intelligent Systems	3		√
8	WKES1104	Software Engineering I	3		√
9	WKES3109	Software Architecture and Design Paradigms	4		√
10	WMES1105	Principles of Information Systems	3		√
11	WMES2112	System Analysis, Modeling and Design	4		√
12	WMES3108	IT Project Management	3		√
13	WRES2111	Fundamentals of Network Technology	5	√	
14	WRET1106	Multimedia System	4		√
15	WRET2110	Interaction Design	3		√
16	WRET3105	Data Communication and Networking	3		√
17	WXET3104	Multimedia Programming	4		√
BACHELOR OF COMPUTER SCIENCE (ARTIFICIAL INTELLIGENCE)					
PROGRAMME ELECTIVE I COURSES					
1	WAES2103	Expert Systems	3		√
2	WAES2106	Prolog Programming	3		√
3	WAES2107	Fundamentals of Cognitive Science	3		√
4	WAES2108	Natural Language Processing and Generation	3		√
5	WAES3102	Fundamentals of Robot Intelligence	3		√
6	WAES3104	Fundamentals of Artificial Neural Network	3		√
7	WAES3105	Machine Learning Methods	3		√
8	WAES3106	Image Processing	3		√
PROGRAMME ELECTIVE II COURSES					
1	WAES3306	Intelligence of Information Systems	3	√	OR √
2	WAES3308	Numerical Methods	3	√	OR √
3	WAES3370	Artificial Intelligence Software Tools	3	√	OR √

BACHELOR OF COMPUTER SCIENCE (SOFTWARE ENGINEERING)					
PROGRAMME ELECTIVE I COURSES					
1	WKES2107	Human Computer Interaction	4		√
2	WKES2108	Software Project Management	4		√
3	WKES2109	Programming for Web Engineering	4		√
4	WKES3106	Software Quality	3		√
5	WKES3110	Software Verification and Validation	4	√	
6	WKES3202	Software Requirements Engineering	3		√
PROGRAMME ELECTIVE II COURSES					
1	WKES3108	Software Evolution and Validation	3	√	OR √
2	WKES3204	Software Process And Metrics	3	√	OR √
3	WKES3203	Advance Programming	3	√	OR √
4	WKES3311	Analysis Algorithm	3	√	OR √
5	WKES3403	Automated Theory	3	√	OR √
BACHELOR OF COMPUTER SCIENCE (MANAGEMENT INFORMATION SYSTEM)					
PROGRAMME ELECTIVE I COURSES					
1	WMES2107	Statistics Application for Information Technology	3		√
2	WMES2109	Organisational Theory	3		√
3	WMES2111	Open Source Programming	3		√
4	WMES3106	Information Control and Security	3		√
5	WMES3107	Information System Auditing	3		√
6	WMES3109	Technopreneurship	3	√	
7	WMES3110	Intelligent Agent in Information System	3		√
PROGRAMME ELECTIVE II COURSES					
1	WMES3104	Accounting Management System	3	√	OR √
2	WMES3302	Decision Support System	3	√	OR √
3	WMES3314	Electronic Commerce	3	√	OR √
4	WMES3318	Knowledge Management	3	√	OR √
5	WMES3320	Fundamentals Of Data Mining And Warehousing	3	√	OR √
BACHELOR OF COMPUTER SCIENCE (COMPUTER SYSTEM AND NETWORKING)					
PROGRAMME ELECTIVE I COURSES					
1	WRES1103	Digital Design	3		√
2	WRES2112	Network Security	4		√
3	WRES2109	Mathematics in Networking	3		√
4	WRES3107	Microprocessor	4		√
5	WRES3109	Principle in Distributed Systems	4		√
6	WRES3108	Enterprise Network Design and Management	4	√	
7	WRES3405	Mobile Computing	3	√	
PROGRAMME ELECTIVE II COURSES					
1	WRES3104	Network Modeling And Simulation	3	√	OR √
2	WRES3301	Cryptography	3	√	OR √
3	WRES3303	VLSI	3	√	OR √
4	WRES3305	Emergence Network Technology	3	√	OR √
5	WRES3310	Intelligent Network Technology	3	√	OR √
6	WRES3315	Embedded Programming System	3	√	OR √

BACHELOR OF INFORMATION TECHNOLOGY (MULTIMEDIA)					
PROGRAMME ELECTIVE I COURSES					
1	WRET1104	Mathematics for Multimedia	3		√
2	WRET1105	Multimedia Application Development	3		√
3	WRET2105	Audio Synthesis	3	√	
4	WRET2108	Digital Image Processing	3	√	
5	WRET2109	Digital Video Processing	3		√
6	WRET2111	Rendering and Animation	4		√
7	WRET2112	Visual Computing and Graphics	4	√	
8	WRET3106	Virtual Reality	4		√
9	WRET3314	Computer Games Programming	3	√	
PROGRAMME ELECTIVE II COURSES					
1	WRET3312	Multimedia in Learning	3	√	OR √
2	WRET3313	Multimedia Information Retrieval	3	√	OR √
BACHELOR OF INFORMATION TECHNOLOGY (MANAGEMENT)					
PROGRAMME ELECTIVE I COURSES					
1	WMET1104	Service Engineering & Management	3		√
2	WMET1105	Information Technology (IT) Services Integration	3		√
3	WMET1108	Information Technology (IT) And Service Economy	3		√
4	WMET2104	Stochastic Methods Of System Analysis	3	√	
5	WMET2111	Information Service Oriented Architecture	3	√	
6	WMET2112	Information Technology (IT) System Architecture	3		√
7	WMET3109	Autonomic Computing	3		√
8	WMET3110	Information Law And Policy	3	√	

Note: Course offered is subject to change.