

CURRICULUM OF BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING (BSSE)

===== YU-CCIS - Version 1 =====



STUDY PLAN BY SEMESTER SOFTWARE ENGINEERING (SWE)

FIRST YEAR (Freshmen) (35 Credit Hours)												
Course Code	Course Title	Pre-Req	L T	L B	C R	Course Code	Course Title	Pre-Req	L T	L B	C R	
CIS 103	Programming Fundamentals I	CMP 002	3	2	4	CIS 104	Programming Fundamentals II	CIS 103	3	2	4	
ENG 101	English Essay Writing	No	3	0	3	IS 102	Introduction to Information Systems	No	3	0	3	
PHY 201	Introduction to Physical Science	No	3	0	3	PHY 103	Physics I	PHY 201	3	2	4	
MTH 104	Calculus I	MTH 001	3	0	3	STT 103	Probability and Statistics	MTH 001	3	0	3	
ISL 101	Foundation of Islamic Culture	No	2	0	2	MTH 105	Discrete Mathematics	MTH 001	4	0	4	
						ARB 102	Communication Skills in Arabic	No	2	0	2	
TOTAL CREDIT HOURS			15			TOTAL CREDIT HOURS			20			

SECOND YEAR (Sophomore) (36 Credit Hours)												
Course Code	Course Title	Pre-Req	LT	LB	C R	Course Code	Course Title	Pre-Req	LT	LB	CR	
CIS 202	Data Structures	CIS 104	3	0	3	SWE 202	Introduction to Software Engineering	CIS 104	3	0	3	
CIS 201	Fundamental of Web Design	CIS 103	3	0	3	NES 212	Data Communications and Computer Networks	No	3	0	3	
ENG 201	Technical Report Writing	ENG 101	3	0	3	PHY 203	Physics II	PHY 103	3	2	4	
MTH 211	Calculus II	MTH 104	4	0	4	IS 221	Introduction to Database Systems	CIS 104	3	0	3	
MTH 301	Linear Algebra	MTH 001	3	0	3	CIS 222	Interactive Media	CIS 201	3	0	3	
ISL 201	Foundation of Islamic Economy	ISL 101	2	0	2	ARB 202	Writing Skills in Arabic	ARB 102	2	0	2	
TOTAL CREDIT HOURS			18			TOTAL CREDIT HOURS			18			

THIRD YEAR (Junior) (35 Credit Hours)												
Course Code	Course Title	Pre-Req	LT	LB	C R	Course Code	Course Title	Pre-Req	LT	LB	C R	
CIS 381	Computer Ethics	IS 102	2	0	2	CIS 321	Operating System	CIS 103	3	0	3	
SWE 300	Software Process & Modelling	SWE 202	3	0	3	CIS 386	Project Management	IS 102	3	0	3	
CIS 304	Computer Architecture	MTH 105	3	0	3	SWE 302	Software Architecture & Design	SWE 202	3	0	3	
SWE 301	Software Requirement Engineering	SWE 202	3	0	3	SWE 312	Software Construction & User Interface	SWE 202	3	0	3	
MTH 302	Differential Equations	MTH 211	4	0	4	SWE 321	Advanced User Interface Design	CIS 222	3	0	3	
ISL 301	Work Ethics in Islam	ISL 201	2	0	2	SWE 322	Advanced Web Programming	CIS 201	3	0	3	
TOTAL CREDIT HOURS			17			TOTAL CREDIT HOURS			18			

Summer Session (3 Credit Hours)					
Course Code	Course Title	Pre-Req	LT	LB	CR
CIS 493	Cooperative Assignment	90 Credit Hours			3
TOTAL CREDIT HOURS			3		

FOURTH YEAR (Senior) 30 Credit Hours												
Course Code	Course Title	Pre-Req	L T	L B	C R	Course Code	Course Title	Pre-Req	L T	L B	C R	
CIS 491	Graduation Project I	90 CH	3	0	3	CIS 492	Graduation Project II	CIS 491	3	0	3	
SWE 411	Software Verification and Validation	SWE 312	3	0	3	SWE 401	Software Quality Assurance	SWE 301	3	0	3	
SWE 421	Game Development	CIS 222	3	0	3	IS 384	Information Security	IS 102	3	0	3	
	Elective I		3	0	3		Elective III		3	0	3	
	Elective II		3	0	3		Elective IV		3	0	3	
TOTAL CREDIT HOURS			15			TOTAL CREDIT HOURS			15			

GRAND TOTAL 139 CREDIT HOURS

STUDY PLAN BY SEMESTER SOFTWARE ENGINEERING (SWE)

Electives

Graphics and Multimedia Electives					
Course Code	Course Title	Pre-Requisite	LT	LB	CR
SWE 323	Visual Communication	CIS 222	3	0	3
SWE 324	Computer Graphics	CIS 222	3	0	3
SWE 422	3D Modelling and Design	SWE 324	3	0	3
SWE 423	Principles of Video and Animation	SWE 323	3	0	3

Software Engineering Electives					
Course Code	Course Title	Pre-Requisite	LT	LB	CR
SWE 402	Software Maintenance and Evolution	SWE 312	3	0	3
SWE 413	Design Patterns	SWE 202	3	0	3
SWE 414	Formal Methods in Software Engineering	SWE 202	3	0	3
SWE 415	Software Usability Engineering	SWE 202	3	0	3