

**CURRICULUM OF BACHELOR OF SCIENCE IN SOFTWARE
ENGINEERING (BSE)**

=====YU-COEA A.Y.2020 JULY=====

FIRST YEAR (Freshmen)

First Semester				Second Semester			
Code	Course Title	CR	Pre-Requisite	Code	Course Title	CR	Pre-Requisite
CIS 103	Programming Fundamentals I	4	CMP 001	CIS 104	Programming Fundamentals II	4	CIS 103
ENG 101	English Essay Writing	3 3	ORN 05R ORN 05C	ISY 102	Introduction to Information Systems	3	CMP 001
PHY 201	Introduction to Physical Science	3		PHY 103	Physics I	4	PHY 201
MTH 104	Calculus I	3	MTH 001	STT 103	Probability and Statistics	3	MTH 001
ISL 101	Foundation of Islamic Culture	2		MTH 105	Discrete Mathematics	4	MTH 001
				ARB 102	Communication Skills in Arabic	2	
Sub-Total		18		Sub-Total		20	

SECOND YEAR (Sophomore)

First Semester				Second Semester			
Code	Course Title	CR	Pre-Requisite	Code	Course Title	CR	Pre-Requisite
CIS 202	Data Structures	3	CIS 104	SWE 202	Introduction to Software Engineering	3	CIS 104
CIS 201	Fundamental of Web Design	3	CIS 103	NES 212	Data Communications & Computer Networks	3	
ENG 201	Technical Report Writing	3	ENG 101	PHY 203	Physics II	4	PHY 103
MTH 211	Calculus II	4	MTH 104	ISY 221	Introduction to Database Systems	3	CIS 104
MTH 301	Linear Algebra	3	MTH 001	CIS 222	Interactive Media	3	CIS 201
ISL 201	Foundation of Islamic Economy	2	ISL 101	ARB 202	Writing Skills in Arabic	2	ARB 102
Sub-Total		18		Sub-Total		18	

THIRD YEAR (Junior)

First Semester				Second Semester			
Code	Course Title	CR	Pre-Requisite	Code	Course Title	CR	Pre-Requisite
CIS 381	Computer Ethics	2	ISY 102	CIS 321	Operating Systems	3	CIS 103
SWE 300	Software Process & Modelling	3	SWE 202	CIS 386	Project Management	3	ISY 102
CIS 304	Computer Architecture	3	MTH 105	SWE 302	Software Architecture & Design	3	SWE 202
SWE 301	Software Requirement Engineering	3	SWE 202	SWE 312	Software Construction & User Interface	3	SWE 202
MTH 302	Differential Equations	4	MTH 211	SWE 321	Advanced User Interface Design	3	CIS 222
ISL 301	Work Ethics in Islam	2	ISL 201	SWE 322	Advanced Web Programming	3	CIS 201
Sub-Total		17		Sub-Total		18	

FOURTH YEAR (Senior)

First Semester				Second Semester			
Code	Course Title	CR	Pre-Requisite	Code	Course Title	CR	Pre-Requisite
CIS 493	Cooperative Assignment	3	90 CH	CIS 492	Graduation Project II	3	CIS 491
CIS 491	Graduation Project I	3	90 CH	SWE 401	Software Quality Assurance	3	SWE 301
SWE 411	Software Verification & Validation	3	SWE 312	ISY 384	Information Security	3	ISY 102
SWE 421	Game Development	3	CIS 222	SWE Elective III		3	
SWE Elective I		3		SWE Elective IV		3	

SWE Elective II	3						
Sub-Total	18				Sub-Total	15	