

**CURRICULUM OF BACHELOR OF SCIENCE IN NETWORK
ENGINEERING & SECURITY (BNES)**

=====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	
PHY 201	Introduction to Physical Science	3		PHY 103	Physics - I (Mechanics)	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 201	Fundamentals of Web Design	3	CIS 103	SWE 202	Introduction to Software Engineering	3	CIS 104
CIS 202	Data Structures	3	CIS 104	NES 212	Data Communications and Computer Networks	3	
ENG 201	Technical Report Writing	3	ENG 101	ISL 201	Foundation of Islamic Economy	2	ISL 101
PHY 202	Physics - II (EM+Electronics)	4	PHY 103	NES 221	Digital Logic and Design	4	
MTH 211	Calculus-II	4	MTH 104	ISY 221	Introduction to Database Systems	3	CIS 104
				ARB 202	Writing Skills in Arabic	2	ARB 102
Sub-Total		17		Sub-Total		17	

THIRD YEAR (Junior)

First Semester				Second Semester			
Code	Course Title	CR	Pre-Requisite	Code	Course Title	CR	Pre-Requisite
ISL 301	Work Ethics in Islam	2	ISL 201	CIS 321	Operating System	3	CIS 103
CIS 304	Computer Architecture	3	NES 221	CIS 386	Project Management	3	ISY 102
MTH 301	Linear Algebra	3	MTH 001	NES 322	Signals and Systems	3	MTH 302
MTH 302	Differential Equations	4	MTH 211	NES 342	Wireless and Mobile Computing	3	NES 341
NES 341	Computer Networks	4	NES 212	CIS 351	Client Server Programing	3	CIS 104
				CIS 381	Computer Ethics	2	ISY 102
Sub-Total		16		Sub-Total		17	

FOURTH YEAR (Senior)

First Semester				Second Semester			
Code	Course Title	CR	Pre-Requisite	Code	Course Title	CR	Pre-Requisite
CIS 491	Graduation Project I	3	90 CH	CIS 492	Graduation Project II	3	
NES 423	Digital Communication Systems	3	NES 322	NES 482	Network Security	4	
NES 481	Security Policies and Procedures	3	NES 341	NES 483	Forensics and Incident Response	3	
NES 443	Enterprise Networking	3	NES 341	Free Elective II		3	
CIS Elective I		3		CIS Elective II		3	

Free Elective I	3				
Sub-Total	18			Sub-Total	16