

## STUDY PLAN BY COURSE CATEGORY (**Information System**)

Requirements		Number of Courses	Credit Hours	
			#	%
University Requirements	Compulsory	8	19	14%
College Requirements	Compulsory	16	50	37%
Program Requirements	Compulsory	16	48	35.5%
	Elective		0	
IS Electives	Compulsory	4	12	08.8%
Free Electives	Compulsory	2	6	04.4%
<b>Total</b>			<b>135</b>	<b>100</b>

### A. UNIVERSITY REQUIREMENTS

#	Course Code	Course Titles	Pre-Requisite	Credit Hours
1.	ENG 101	English Essay Writing		3
2.	ENG 201	Technical Report Writing		3
3.	PHY 201	Introduction to Physical Science		3
4.	ARB 102	Communication Skills in Arabic		2
5.	ARB 202	Writing Skills in Arabic	ARB 102	2
6.	ISL 101	Foundation of Islamic Culture		2
7.	ISL 201	Foundation of Islamic Economy	ISL 101	2
8.	ISL 301	Work Ethics in Islam	ISL 201	2
<b>Sub-total</b>				<b>19</b>

### B. COLLEGE REQUIREMENT

#	Course Code	Course Titles	Pre-Requisite	Credit Hours
1.	CIS 103	Programming Fundamentals I		4
2.	MTH104	Calculus I		3
3.	IS 102	Introduction to Information Systems		3
4.	CIS 104	Programming Fundamentals II	CIS 103	4
5.	STT103	Probability and Statistics		3
6.	IS 221	Introduction to Database Systems	CIS 104	3
7.	MTH 105	Discrete Mathematics		4
8.	CIS 201	Fundamentals of Web Design	CIS103	3
9.	CIS 202	Data Structures	CIS 104	3
10.	NES 212	Data Communication & Computer Networks		3
11.	CIS 381	Computer Ethics		2
12.	CIS 321	Operating Systems	CIS 103	3

13.	CIS 386	Project Management		3
14.	CIS 491	Graduation Project I	Sen. Standing	3
15.	CIS 492	Graduation Project II	CIS 491	3
16.	CIS 493	Cooperative Assignment - 440 working	90 Credit hr.	3
<b>Sub-total</b>				<b>50</b>

### C.PROGRAM REQUIREMENTS

#	Course Code	Course Titles	Pre-Requisite	Credit Hours
1.	MGT 101	Introduction to Management		3
2.	IS 211	Systems Analysis and Design	IS 102	3
3.	MGT 102	Organization Behaviour	MGT 101	3
4.	ECO 201	Principles of Microeconomics	STT 103	3
5.	IS 321	Advanced Database Systems	IS 221	3
6.	MKT 102	Introduction to Marketing		3
7.	ACC 201	Financial Accounting	MGT 101	3
8.	IS 382	Information Assurance	IS 102	3
9.	CIS 305	Internet Business	IS 102	3
10.	IS 333	Enterprise Information Systems	IS 102	3
11.	IS 334	Decision Support Systems	IS 102	3
12.	IS 322	Mathematical Modelling for IS	MTH 104	3
13.	IS 384	Information Security	CIS 381	3
14.		MINOR I		3
15.		MINOR II		3
16.		MINOR III		3
<b>Sub-total</b>				<b>48</b>

### D.E-Business Minor

#	Course Code	Course Titles	Pre-Requisite	Credit Hours
1.	IS 303	E-Commerce Programming	CIS 201	3
2.	IS 352	Web Server Operation	NES 212	3
3.	IS 431	Business Application Development	IS 211	3
<b>Sub-total</b>				<b>9</b>

### E.Big Data Minor

#	Course Code	Course Titles	Pre-Requisite	Credit Hours
1	IS 432	Big-Data Analytics	IS 221	3
2.	IS 433	Data Visualization	IS 221	3
3.	IS 434	Data Science	IS 221	3
<b>Sub-total</b>				<b>9</b>

**F.Information Security Minor**

#	Course Code	Course Titles	Pre-Requisite	Credit Hours
1	IS 481	Ethical Hacking & Intrusion Detection	IS 384	3
2.	NES 483	Computer Forensics & Incident	IS 384	3
3.	IS 482	Cyber Security	IS 384	3
<b>Sub-total</b>				<b>9</b>

**G. CCIS ELECTIVE COURSES (ANY FOUR)**

#	Course Code	Course Titles	Pre-Requisite	Credit Hours
1	IS 332	Data Mining and Data Warehousing	IS 322	3
2.	MTH201	Operation Research	STT103	3
3.	IS 351	Client-Server Programming	CIS 104	3
4.	IS 353	Secure E-commerce	CIS 305	3
5.	IS 451	Intranet and Portals	CIS 201	3
6.	IS 435	Systems Modeling and Simulation	IS 211	3
7.	IS 436	Knowledge-Based Systems	IS 333	3
8.	IS 437	Selected Topics in Information Systems	IS 333	3
9.	IS 438	Artificial Intelligence and Expert	IS 333	3
10.	SWE401	Software Quality Assurance	None	3
11.	IS 484	IT Audit and Control	IS 384	3
12.	IS 439	Big Data Applications	IS 221	3
13.	SWE 422	Principles of Video and Animation	None	3
14.	MGT 305	Quality Management	MGT 101	3
15.	MKT 312	Marketing Research	MKT 102	3
16.	IS 335	Data Warehousing	IS 321	3
<b>Sub-total</b>				

**H.TWO FREE ELECTIVE COURSES**

#	Course Code	Course Titles	Pre-Requisite	Credit Hours
1.		Free Elective 1		3
2.		Free Elective 2		3
<b>Sub-total</b>				<b>6</b>

**I.COOPERATIVE ASSIGNMENT**

#	Course Code	Course Titles	Pre-Requisite	Credit Hours
1.	CIS 493	Cooperative Assignment	90 Credit Hours	3
<b>Sub-total</b>				<b>3</b>
<b>GRAND TOTAL 135 CREDIT HOURS</b>				

## STUDY PLAN BY SEMESTER (Information Systems)

### FIRST SEMESTER

Course Code	Course Title	Pre-Requisite	CR
CIS 103	Programming Fundamentals I (3+1)		4
ENG 101	English Essay Writing		3
PHY 201	Introduction to Physical Science		3
MGT 101	Introduction to Management		3
MTH104	Calculus I		3
ISL 101	Foundation of Islamic Culture		2
<b>TOTAL CREDIT HOURS</b>			<b>18</b>

### SECOND SEMESTER

Course Code	Course Title	Pre-Requisite	CR
CIS 104	Programming Fundamentals II (3+1)	CIS 103	4
IS 102	Introduction to Information Systems		3
STT103	Probability and Statistics		3
MGT 102	Organization Behaviour	MGT 101	3
MTH 105	Discrete Mathematics		4
ARB 102	Communication Skills in Arabic		2
<b>TOTAL CREDIT HOURS</b>			<b>19</b>

### THIRD SEMESTER

Course Code	Course Title	Pre-Requisite	CR
CIS 201	Fundamentals of Web Design	CIS 103	3
CIS 202	Data Structures	CIS 104	3
ENG 201	Technical Report Writing	ENG 101	3
IS 221	Introduction to Database Systems	CIS 104	3
ECO 201	Principles of Microeconomics		3
ISL 201	Foundation of Islamic Economy	ISL 101	2
<b>TOTAL CREDIT HOURS</b>			<b>17</b>

### FOURTH SEMESTER

Course Code	Course Title	Pre-Requisite	CR
IS 211	Systems Analysis and Design	IS 102	3
NES 212	Data Communication & Computer Networks		3
IS 321	Advance Database Systems	IS 221	3
MKT 102	Introduction to Marketing		3
ACC 201	Financial Accounting	MGT 101	3
ARB 202	Writing Skills in Arabic	ARB 102	2
<b>TOTAL CREDIT HOURS</b>			<b>17</b>

### FIFTH SEMESTER

Course Code	Course Title	Pre-Requisite	CR
IS 382	Information Assurance	IS 102	3
CIS 381	Computer Ethics	IS 102	2
CIS 305	Internet Business	IS 102	3
IS 333	Enterprise Information Systems	IS 102	3
IS 334	Decision Support Systems	IS 102	3
ISL 301	Work Ethics in Islam	ISL 201	2
<b>TOTAL CREDIT HOURS</b>			<b>16</b>

### SIXTH SEMESTER

Course Code	Course Title	Pre-Requisite	CR
CIS 321	Operating System	CIS 103	3
CIS 386	Project Management	IS 102	3
IS 322	Mathematical Modelling for IS	MTH 104	3
IS 384	Information Security	CIS 381	3
	IS Elective I		3
<b>TOTAL CREDIT HOURS</b>			<b>15</b>

### COOPERATIVE ASSIGNMENT

Course Code	Course Title	Pre-Requisite	CR
CIS 493	Cooperative Assignment	90 Credit Hours	3
<b>TOTAL CREDIT HOURS</b>			<b>3</b>

### SEVENTH SEMESTER

Course Code	Course Title	Pre-Requisite	CR
CIS 491	Graduation Project I	Sen. Standing	3
	MINOR I		3
	MINOR II		3
	IS Elective II		3
	IS Elective III		3
<b>TOTAL CREDIT HOURS</b>			<b>15</b>

### EIGHTH SEMESTER

Course Code	Course Title	Pre-Requisite	CR
CIS 492	Graduation Project II	CIS 491	3
	MINOR III		3
	IS Elective IV		3
	Free Elective I		3
	Free Elective II		3
<b>TOTAL CREDIT HOURS</b>			<b>15</b>

**GRAND TOTAL 135 CREDIT HOURS**

E-Business Minor			
Course Code	Course Title	Pre-Requisite	CR
IS 303	E-Commerce Programming	CIS 201	3
IS 352	Web Server Operation	NES 212	3
IS 431	Business Application Development	IS 211	3
TOTAL CREDIT HOURS			9

Big Data Minor			
Course Code	Course Title	Pre-Requisite	CR
IS 432	Big-Data Analytics	IS 221	3
IS 433	Data Visualization	IS 221	3
IS 434	Data Science	IS 221	3
TOTAL CREDIT HOURS			9

Information Security Minor			
Course Code	Course Title	Pre-Requisite	CR
IS 481	Ethical Hacking & Intrusion Detection	IS 384	3
NES 482	Computer Forensics & Incident Response	IS 384	3
IS 483	Cyber Security	IS 384	3
TOTAL CREDIT HOURS			9

CCIS Elective (Pool of Courses)			
Course Code	Course Title	Pre-Requisite	CR
IS 332	Data Mining	IS 321	3
MTH201	Operation Research	STT103	3
IS 351	Client-Server Programming	CIS 104	3
IS 353	Secure E-commerce	CIS 305	3
IS 451	Intranet and Portals	CIS 201	3
IS 435	Systems Modeling and Simulation	IS 211	3
IS 436	Knowledge-Based Systems	IS 333	3
IS 437	Selected Topics in Information Systems	IS 333	3
IS 438	Artificial Intelligence and Expert Systems	IS 333	3
SWE401	Software Quality Assurance	None	3
IS 484	IT Audit and Control	IS 384	3
IS 439	Big Data Applications	IS 321	3
SWE 422	Principles of Video and Animation	None	3
MGT 305	Quality Management	MGT 101	3
IS 335	Data Warehousing	IS 321	3