

Study Plan: Bachelor of Software Engineering

First Level:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	ENGL 1102	English Language (1)	4	2	0	4	0	----	----	University
2	MTH 1102	Differential Calculus	3	3	0	0	0	----	----	College
3	CIS 1102	Fundamentals of Programming	3	2	0	2	0	----	----	College
4	CIS 1101	Emerging Digital Technologies	3	3	0	0	0	----	----	College
5	CHM 1100	General Chemistry (1)	3	2	0	2	0	----	----	College
Total			16							

Second Level:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	PHS 1100	General Physics (1)	3	2	0	2	0	---	----	Program
2	CIS 1103	Computer Programming (1)	4	3	0	2	0	----	----	College
3	ENGL 1103	English Language (2)	4	2	0	4	0	ENGL 1102	----	University
4	MTH 1201	Integral Calculus	3	3	0	0	0	MTH 1102	----	College
5	CNE 1101	Digital & Logic Design	3	3	0	0	0	----	----	Program
Total			17							

Third Level:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	SWE 1201	Introduction to Software Engineering	3	3	0	0	0	-----	---	Program
2		University Elective Course	2	2	0	0	0	---	---	University
3	MTH 1281	Statistics and Probability	3	3	0	0	0	MTH 1201	---	College
4	PHS 1202	General Physics 2	3	2	0	2	0	PHS 1101	---	Program
5	CIS 1204	Computer Programming (2)	4	3	0	2	0	CIS 1103	---	College
6	CIS 1211	Discrete Mathematics	3	3	0	0	0	MTH 1102	---	College
Total			18							

Fourth Level:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	CIS 1212	Theory of Computation	3	3	0	0	0	CIS 1211	----	Program
2	CIS 1205	Data Structures	3	3	0	0	0	CIS 1204	----	College
3	MTH 1285	Principles of Linear Algebra	3	3	0	0	0	MTH 1201	----	College
4	SWE 1221	Software Requirements Engineering	3	3	0	0	0	SWE 1201	----	Program
5	CIS 1243	Computer Organization	3	3	0	0	0	CNE 1101	----	Program
6	MTH 1202	Advanced calculus	3	3	0	0	0	MTH 1201	----	Program
Total			18							

Fifth Level:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	CIS 1342	Operating Systems	3	3	0	0	0	CIS 1205	----	College
2	CIS 1322	Concepts of Database Systems	3	2	0	2	0	CIS 1205	----	Program
3	SWE 1331	Software Design and Architecture	3	2	0	2	0	SWE 1221	----	Program
4	MTH 1382	Numerical methods	3	3	0	0	0	MTH 1285	----	Program
5	SWE 1341	Software Quality Assurance	3	3	0	0	0	SWE 1221	----	Program
6	CIS 1313	Artificial Intelligence	3	3	0	0	0	CIS 1205	----	Program
Total			18							

Sixth Level:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	CIS 1363	Computer Networks	3	3	0	0	0	CIS 1342	----	Program
2	SWE 1371	Professional Ethics and Practices in Software Engineering	2	2	0	0	0	SWE 1221		Program
3	SWE 1342	Software Testing and Verification	3	2	0	2	0	SWE 1341	----	Program
4	SWE 1381	User Interface Design	3	3	0	0	0	SWE 1331	---	Program
5	SWE 1391	Graduation Project (1)	2	2	0	0	0	Pass 85 Credit Hours SWE 1341	----	Program
6	CIS1497	Technical Reports Writing	2	2	0	0	0	Pass 85 Credit Hours		College
7		Elective Course (1) (Group 2)	3	--	--	--	--	---	----	Program
Total			18							

Seventh Level:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	SWE 1441	Software Maintenance and Evolution	3	3	0	0	0	SWE 1342	---	Program
2	SWE 1422	Software Security	3	3	0	0	0	SWE 1342	---	Program
3	SWE 1492	Graduation Project (2)	3	2	0	2	0	SWE 1391	---	Program
4	SWE 1461	Software Project Management	3	3	0	0	0	SWE 1341	----	Program
5		Elective Course (2) (Group 2)	3	--	--	--	--	---	---	Program
6		Elective Course (3) (Group 1)	3	--	--	--	--	---	---	Program
Total			18							

Eighth Level:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	SWE 1493	Cooperative Training	12	0	0	0	24	Pass 118 Credit Hours	CIS 1492	Program
2	CIS 1492	Professional Courses	2	2	0	0	0	---	SWE 1493	University
Total			12							

Program Requirements (Elective Courses Group 1):

The student must select (1) courses (3 Credit Hours) from the list below:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites
				Lec.	Tut.	Lab	Tr		
1	CIS 1434	Cloud Computing	3	2	0	2	0	Pass 80 Credit Hours	-----
2	CIS 1462	Natural Language Processing	3	3	0	0	0	Pass 80 Credit Hours	-----
3	CIS 1435	Internet of Things	3	3	0	0	0	Pass 80 Credit Hours	-----
4	IS 1427	Big Data Analytics	3	3	0	0	0	Pass 80 Credit Hours	-----
5	CIS 1314	Design and Analysis of Algorithms	3	3	0	0	0	CIS 1205 CIS 1211	
6	CNE 1424	Intelligent Systems	3	3	0	0	0	Pass 80 Credit Hours	-----
Total			3						

Program Requirements (Elective Courses Group 2):

The student must select (2) courses (6 Credit Hours) from the list below:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites
				Lec.	Tut.	Lab	Tr		
1	SWE 1483	Virtual and Augmented Reality	3	2	0	2	0	SWE 1331	-----
2	SWE 1443	Software Reuse	3	2	0	2	0	SWE 1331	-----
3	SWE 1484	Selected Topics	3	3	0	0	0	Pass 85 Credit Hours	-----
4	SWE 1432	Design Patterns	3	3	0	0	0	SWE 1331	-----
5	SWE 1485	Advanced Web Application	3	2	0	2	0	Pass 85 Credit Hours	-----
6	SWE 1486	Mobile Application Development	3	2	0	2	0	CIS 1204	-----
7	SWE 1442	Software Configuration Management	3	2	0	2	0	SWE 1342	-----
Total			6						

University Requirements (Elective Courses List):

The student must select (1) course (2 Credit Hours) from the list below:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites
				Lec.	Tut.	Lab	Tr		
1	ISL 1100	The Noble Qur'an	2	2	0	0	--	-----	-----
2	ISL 1101	Interpretation of the Qur'an	2	2	0	0	--	-----	-----
3	ISL 1102	Creed and Family in Islam	2	2	0	0	--	-----	-----
4	EDU 1101	History and Civilization of Kingdom of Saudi Arabia	2	2	0	0	--	-----	-----
5	EDU 1105	Learning and Communication Skills	2	2	0	0	--	-----	-----
6	BUS 1101	Entrepreneurship	2	2	0	0	--	-----	-----
7	BUS 1103	Principles of Financial Knowledge	2	2	0	0	--	-----	-----
Total			2						