



Study Plan of Bachelor of Science in Computer Science: Software Engineering track

Program	Awarded Degree	Concentration
Computer Science (CS)	Bachelor of Science in Computer Science	Software Engineering

First Semester			
Code	Course Name	Cr.	Pre.
CP 101	Introduction to Computing	3	
CP 110	Programming I	3	
ISL 101	Islamic Studies	3	
MATH 101	Calculus I	4	
STAT 101	General Statistics	3	
Total		16	

Second Semester			
Code	Course Name	Cr.	Pre.
ARAB 101	Arabic Language	3	
CP 115	Programming II	3	CP 110
CP 120	Digital Logic Design	3	
MATH 102	Calculus II	4	MATH 101
STAT 102	Probability Theory	3	STAT 101
Total		16	

Third Semester			
Code	Course Name	Cr.	Pre.
CHEM 101	General Chemistry I	4	
CP 210	Data Structures I	3	CP 115
CP 220	Computer Organization & Architecture	3	CP 120
MATH 212	Discrete Math	3	MATH 101
STAT 250	Applied Probability & Random Processes	3	STAT 102
Total		16	

Fourth Semester			
Code	Course Name	Cr.	Pre.
CP 225	Operating Systems	3	CP 220
CP 230	Systems Analysis and Design	3	CP 210
CP 240	Databases	3	CP 210
ENGL 201	Technical Writing	3	
PHYS 101	General Physics	4	
Total		16	

Fifth Semester			
Code	Course Name	Cr.	Pre.
CS 301	Applied Math for Computing	3	STAT 250
CS 310	Analysis & Design of Algorithms I	3	CP 210
CS 330	Software Engineering I	3	CP 230
CS 350	Computer Networks	3	CP 225
CS 360	Artificial Intelligence I	3	CP 210
	Free I	3	
Total		18	

Sixth Semester			
Code	Course Name	Cr.	Pre.
CS 315	Programming Languages	3	CS 310
CS 370	Data Security	3	CS 301
CS 380	Human-Computer Interaction	3	CP 230
	Concentration Course I	3	
	Concentration Course II	3	
	Free II	3	
Total		18	

Summer Semester

CS 390 - Summer (Workplace) Training – Credit: 1 Training: 200 Hours – Prerequisite: Department Approval.

Seventh Semester			
Course Code	Course Name	Cr.	Pre.
CS 401	Professional Computing Issues	3	CS 390
CS 498	Senior Project (I)	1	CS 390
	Concentration Course III	3	
	Concentration Course IV	3	
	Elective I	3	
	Free III	3	
Total		16	

Eighth Semester			
Course code	Course Name	Cr.	Pre.
CS 499	Senior Project (II)	3	CS 498
CS 480	Computer Graphics I	3	CS 380
	Concentration Course V	3	
	Elective II	3	
	Elective III	3	
Total		15	

CS Concentration Courses

Course Code	Course Name	Credit Hours	Prerequisite
Software Engineering Concentration			
CS 336	Software Requirements Engineering	3	CS 330
CS 338	Systems Architecture	3	CS 330
CS 430	Usability Engineering	3	CS 330
CS 435	Software Testing	3	CS 330
CS 438	SE Processes and Tools	3	CS 330
Total		15	

CS Elective Courses

Course Code	Course Name	Credit Hours	Prerequisite
CS 495	Special/Selected Topics	3	Dept. Approval
CS 485	Multimedia & User Interface Design	3	Dept. Approval
CS 419	Systems Programming	3	Dept. Approval
Total		9	

Free Courses

Course Code	Course Name	Cr.	Pre.
EI - 101	Emotional Intelligence	3	
ENG 204	Critical Thinking	3	
ETH 101	Social Ethics	3	
GD 286	Photography 1	3	
MKT 333	Public Relations	3	
NPS - 101	Negotiation and Problem Solving	3	
PSY 101	Introduction to Psychology	3	
SPD 101	Soft Skills and Personality Development	3	