

Computer Science Four-Year Study Plan

First Year: First Semester					First Year: Second Semester				
Course code	Course Title	Credit Hours	Prerequisite	Co Requisite	Course Code	Course Title	Credit Hours	Prerequisite	Co requisite
MATH 101	Calculus I	4	MATH 002		MATH 102	Calculus II	4	MATH 101	
PHYS 101	General Physics I	4	MATH 002	MATH 101	PHYS 102	General Physics II	4	PHYS 101	
CS 111	Introduction to Computing and Programming	4	PCS 001		CS 112	Object Oriented Programming	4	CS 111	
ENGL 101	First Year Composition	3	ENGL 005		ENGL 102	Introduction to Report Writing	3	ENGL 101	
GHAL xxx	Humanities, Arts, and Languages Elective	3			GSOS xxx	Social Sciences Elective	3		
Total		18			Total		18		
Second Year: First Semester					Second Year: Second Semester				
CHEM 101	General Chemistry	4			STAT 232	Probability and Statistics	3	MATH 102	
CS 223	Digital Logic Design	3	CS 111		MATH 202	Calculus III	3	MATH 102	
CS 201	Introduction to Discrete Systems	3	MATH 102		CS 224	Computer Architecture and Organization	3	CS 223	
CS 211	Data Structures and Algorithms	4	CS 112		SE 262	Software Engineering	3	CS 112	
GIAS 101	Islamic Culture	3			GIAS 102	Arabic Language Skills	3		
Total		17			Total		15		
Third Year: First Semester					Third Year: Second Semester				
MATH 204	Linear Algebra	3	MATH 102		CS 312	Programming Languages	3	CS 303, CS 112	
CS 321	Operating Systems	4	CS 211, CS 224		CS 332	Computer Networks & Data Communications	4	CS 321	
CS 351	Fundamentals of Database Systems	4	CS 112		CS 314	Web Application Development	3	CS 112	
CS 303	Theory of Computation	3	CS 201		ENGL 201	Technical Writing	3	ENGL 102	
CS 341	Artificial Intelligence	3	CS 211		FC 372	Ethics and Professionalism	3		
Total		17			Total		16		
<i>Summer Practical Training (CS 394, Pre-requisite - Year 3 Core Courses): 1 credit</i>									
Fourth Year: First Semester					Fourth Year: Second Semester				
CS 491	Capstone Project I	3	CS 394		CS 492	Capstone Project II	3	CS 491	
CS 421	Parallel and Distributed Computing	3	CS 321		GDMC xxx	Diversity and Multiculturalism Elective	3		
GIAS xxx	Islamic Studies Elective	3			CS 472	Computer Security	3	CS 332	
CS xxx	Professional Elective I	3	College Approval		CS xxx	Professional Elective III	3	College Approval	
CS xxx	Professional Elective II	3	College Approval		CS xxx	Professional Elective IV	3	College Approval	
Total		15			Total		15		
Total Credits Required: 132									

Note1: Subject to minor changes if required.

Note2: ENGL 111 and ENGL 112 can be taken as an elective within any of GDMC xxx, GSOS xxx, and GHAL xxx areas.