

Study Plan

Bachelor of Science in Computer Science

Semester	Course Code		Course Title	Pre/Co Requisite	Credit Hours
Semester 1	LNG	181	English I for Engineering and Computing	None	3
	XXX	XXX	GE Elective (1)	None	3
	MTH	112	Calculus I	Pass Math Placement Test or MTH 012	3
	BCS	101	Elements of Computing	None	3
	ENT	141	Fundamentals of Innovation and Entrepreneurship 1	None	2
					14
Semester 2	MTH	120	Discrete Mathematics	None	3
	LNG	182	English II for Engineering and Computing	LNG 181	3

	BCS	102	Introduction to Computing Science I	BCS 101	3
	MTH	113	Calculus II	MTH 112	3
	XXX	XXX	GE Elective (2)	None	3
	ENT	142	Fundamentals of Innovation and Entrepreneurship 2	ENT 141	1
					16
Semester 3	MTH	114	Linear Algebra	MTH 112	3
	MTH	130	Probability and Statistics	MTH 112	3
	MTH	203	Discrete Mathematics for Computing Science	BCS 102, MTH 120	3
	BCS	201	Logic for Computing Science	MTH 120	3
	BCS	202	Introduction to Computing Science II	BCS 102	3

	ENT	241	Entrepreneurship 1	ENT 142	2
					17
Semester 4	ENG	210	Computer Architecture	BCS 202 or ENG 101	4
	BCS	203	Software Specifications	BCS 201, BCS 202	3
	BCS	206	Information Structures	BCS 202, MTH 203	3
	BCS	221	Communication Networks	BCS 102	3
	BCS	222	Programming Paradigms	BCS 201, BCS 202	3
	ENT	242	Entrepreneurship 2	ENT 241	1
					17
Semester 5	GED	198	Islamic Culture	None	3
	BCS	301	Operating Systems	BCS 206, ENG 210	4

	BCS	303	Security Principles and Practices	BCS 221	4
	BCS	304	Data Mining	BCS 202, MTH 114, MTH 130, MTH 203	3
	BCS	311	Scientific Computing	BCS 102, MTH 114	3
					17
Semester 6	BCS	305	Software Architecture	BCS 203, BCS 206	3
	BCS	306	Database Management Systems	BCS 201, BCS 202	3
	BCS	307	Digital Systems	ENG 210	4
	BCS	309	Algorithms I	BCS 201, BCS 206	3
	BCS	323	System-Level Programming	BCS 102	3
					16
Semester 7	GED	196	Communication Skills in Arabic 1	None	3

	BCS	401	Ethics for Computing Professionals	None	3
	BCS	402	Computability and Complexity	BCS 203, BCS 309	3
	BCS	410	Computer Science Project	Completed 90 Cr. Hrs.	6
					15
Semester 8	BCS	410	Computer Science Project (Cont.)	Completed 90 Cr. Hrs.	--
	GED	199	UAE Society	None	3
	BCS	403	Advanced Database Systems	BCS 206, BCS 306	3
	BCS	405	Artificial Intelligence	BCS 206, BCS 222	3
	XXX	XXX	Program Major Elective		3
					12
Internship to be taken in summer after completion of 90 Cr. Hrs. and CGPA 2.0 or more.					3

Total		127
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