Study Plan
Bachelor of Science in Software Design

2021 – 2022

Semester	Course Code		Course Title	Pre/Co Requisite	Credit Hours
Semester 1	LNG	181	English I for Engineering Computing	None	3
			Humanity Elective 1		3
	MTH	112	Calculus I	Pass Math Placement Test or MTH-012	3
	BCS	101	Elements of Computing	None	3
	ENT	141	Fundamentals in Innovation and Entrepreneurship 1	None	2
					14
Semester 2	MTH	120	Discrete Mathematics	None	3
	LNG	182	English II for Engineering Computing	LNG-181	3
	BCS	102	Introduction to Computing Science I	BCS-101	3
	MTH	113	Calculus II	MTH-112	3
	ENT	142	Fundamentals in Innovation and Entrepreneurship 2	ENT-141	1
					13
Semester 3	MTH	114	Linear Algebra	MTH-112	3
	MTH	130	Probability and Statistics	MTH-112	3
	MTH	203	Discrete Mathematics for Computing Science	MTH-120, BCS-102	3
	BCS	201	Logic for Computing Science	MTH-120	3
	BCS	202	Introduction to Computing Science II	BCS-102	3
	ENT	241	Entrepreneurship I	ENT-142	2
					17
Semester 4	ENG	210	Computer Architecture	BCS-202 or ENG-101	4

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	BCS	203	Software Specifications	BCS-202, BCS-201	3
	BCS	204	System-Level Programming	BCS-102	3
	BCS	205	Programming Paradigms	BCS-202, BCS-201	3
	BCS	206	Information Structures	BCS-202, MTH-203	3
	ENT	242	Entrepreneurship II	ENT-241	1
					17
Semester 5	BCS	301	Operating Systems	ENG-210, BCS-206	4
	GED	198	Islamic Culture	None	3
	BCS	302	Scientific Computing	BCS-102, MTH-114	3
	BSD	310	Game Design	BCS-202, BCS-206	3
	BSD	311	Human Computer Interaction	BCS-206	3
					16
Semester 6	BCS	305	Software Architecture	BCS-206, BCS-203	3
	BCS	306	Database Management Systems	BCS-202, BCS-201	3
	BSD	312	Software Quality	BCS-204	3
	BSD	313	Advanced User Interface Design	BSD-311	3
	BCS	309	Algorithms I	BCS-201, BCS-206	3
					15
Semester 7	BSD	410	Software Design Project	Completed 90 Cr.H	6
	BSD	402	Formal Methods	BCS-305	3
	BSD	403	Software Requirements	BCS-305	3
	BCS	401	Ethics for Computing Professionals	None	3
	GED	196	Communication Skills in Arabic 1	None	3
					18
Semester 8	BSD	410	Software Design Project (Cont.)	Completed 90 Cr.H	--

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	BSD	404	Algorithms II	BCS-203, BCS-309	3
			Major Elective 1		3
			Major Elective 2		3
	GED	199	UAE Society	None	3
			Humanity Elective 2		3
					15
Total					**125**