

1st Year	First Semester							Second Semester						
	Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours		Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours	
						L	Lab						L	Lab
	MATH111	Calculus I	MATH099	5	3	3		MATH112	Calculus II	MATH 111	6	3	3	
	PHYS111	General Physics I		5	3	2	2	PHYS113	General Physics II	PHYS 111	6	3	2	2
	CSC101	Introduction to Computing		5	2	2		CSC102	Computer Programming I		6	3	2	2
	ENGL103	English for Academic Purposes I	ENGL012	5	3	3		LAW106	Human Rights		5	2	2	
	GS111	Arabic Language Skills		5	3	3		ENGL104	English for Academic Purposes II	ENGL103	5	3	3	
	Total				14	13	2	Total				14	12	4

2nd Year	Third Semester							Fourth Semester						
	Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours		Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours	
						L	Lab						L	Lab
	ENGL202	English Writing for Communications	ENGL104	6	3	3		CSC204	Web Programming I	CSC102	7	3	2	2
	CSC207	Database Management Systems I	CSC102	6	3	3		CSC305	Python Programming	CSC201	7	3	2	2
	MATH205	Discrete Mathematics	MATH111	6	3	3		CSC303	Database Management Systems II	CSC 207	7	3	2	2
	CSC201	Computer Programming II	CSC 102	7	3	2	2	CSC202	Data Structures and Algorithms I	CSC201	7	3	2	2
	MATH212	Probability and Statistics	MATH111	6	3	3		CSC302	Introduction to Computer Networks	CSC 101	6	3	3	
	CSC203	Computer Organization and Architecture	CSC 101	6	3	3		CSC211	Research Methodology	MATH212	7	3	3	
	Total				18	17	2	Total				18	11	8

3rd Year	Fifth Semester							Sixth Semester						
	Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours		Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours	
						L	Lab						L	Lab
	CSC309	Data Science I	CSC 303	7	3	3		CSC301	Software Engineering	CSC 201	7	3	3	
	MATH206	Linear Algebra	MATH111	6	3	3		CSC312	Artificial Intelligence	CSC305	7	3	3	
	CSC304	Data Structures and Algorithms II	CSC 202	8	3	3		MGT102	Principles of Management		6	3	3	
	CSC311	Systems Analysis and Design	CSC303	8	3	3		CSCXXX	Elective course		8	3	3	
	CSC307	Cybersecurity	CSC302	7	3	3		CSC391	Cloud Computing	CSC302	8	3	3	
	CSC306	Web Programming II	CSC204	8	3	2	2	Total				15	15	0
	Total				18	17	2							

Training Requirement

CSC390	Industrial Training	75 Credit Hrs.	8	3	3	
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4th Year	Seventh Semester							Eighth Semester						
	Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours		Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours	
						L	Lab						L	Lab
	GS133	History of Bahrain		5	3	3		CSC412	Information Retrieval	CSC309	8	3	3	
	MGT100	Introduction to Entrepreneurship		6	2	2		CSCXXX	Elective course		8	3	3	
	CSC318	Introduction to Virtual Reality	CSC 201	7	3	3		CSC405	Operating Systems	CSC 304	8	3	3	
	CSC490	Graduation project	90 Credit Hrs. & CSC211	8	3	3		CSC404	Mobile Application Development	CSC 201	8	3	2	2
	CSCXXX	Elective course		8	3	3		Total				12	11	2
	Total				14	14	0							

LIST OF ELECTIVE COURSES (Choose one track from the following, select 3 courses)

Data Science and Artificial Intelligence track							Cybersecurity track						
Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours		Course Code	Course Title	Pre requisite	NQF Level	CR.	Contact Hours	
					L	Lab						L	Lab
CSC 410	Data Science II	CSC309	8	3	3		CSC 441	Cloud Computing Security	CSC307	8	3	3	
CSC 413	Machine Learning	CSC312	8	3	2	2	CSC 426	Cryptocurrencies and Security on the Blockchain	CSC307	8	3	3	
CSC 497	Deep Learning	CSC 413	8	3	2	2	CSC 427	Digital Forensics	CSC307	8	3	2	2
CSC 415	Special Topics in Data Science and AI	CSC 413	8	3	3		CSC 428	Special Topics in Cybersecurity	CSC307	8	3	3	
Total				12	10	4	Total				12	11	2

Total for program 126 Credit Hours