

Plan of study continuation to obtain the Bachelor in Computer Science

Remedial and Bridging Courses					
No.	Course Code	Course Title	ASU Credit	NQF Credit	NQF Level
1	CSC111	Structured Programming	3	12	6
2	CSC212	Object-Oriented Programming I	3	12	6
3	CSC222	Software Engineering I	3	12	6
4	CSC221	Database Systems	3	12	6
5	CSC215	Data Structures	3	12	7
6	CSC322	Web Based Software Development I	3	12	7

HEC Compulsory Courses					
No.	Course Code	Course Title	ASU Credit	NQF Credit	NQF Level
1	HR106	Human Rights	3	12	5
2	ARB101	Arabic Language	3	12	6
3	HBH105	Bahrain Civilization & History	3	12	6

Programme Study Plan						
No.	Course Code	Course Title	Prerequisite	ASU Credit	NQF Credit	NQF Level
Year 1 – First Semester						
1	CSC304	Artificial Intelligence	CSC212	3	12	7
2	CSC314	Object Oriented Programming II	CSC212	3	12	7
3	CSC321	Systems Analysis and Design	CSC221	3	12	7
4	CSC325	Database Development	CSC221	3	12	7
5	CSC331	Operating Systems	CSC231	3	12	7
6	-	Programme Elective (1)	-	3	12	7

Year 1 – Second Semester						
1	BA161	Introduction to Entrepreneurship	-	3	12	6
2	CSC301	Numerical Analysis	CSC203	3	12	7
3	CSC302	Computational Theory	CSC102+CSC215	3	12	7
4	CSC323	Visual Programming	CSC314+CSC221	3	12	8
5	CSC332	Data Communication and Computer Networks	CSC331	3	12	8
6	-	Programme Elective (2)	-	3	12	7
Year 1 – Summer Semester						
4	CSC441	Internship	CSC321+90 credit hours	3	24	8
Year 2 – First Semester						
1	CSC401	Algorithm Design and Analysis	CSC102+CSC215	3	12	8
2	CSC402	Compilers Design	CSC302	3	12	8
3	CSC425	Graduation Project 1	CSC241+90 credit hours	3	12	8
5	-	Programme Elective (3)	-	3	12	8
Year 2 – Second Semester						
1	CSC426	Graduation Project 2	CSC425	3	12	8
2	CSC435	Ciphering and Computer Security	CSC332	3	12	8
3	CSC436	Mobile Computing	CSC332	3	12	8
4	-	Programme Elective (4)	-	3	12	8
5	-	Programme Elective (5)	-	3	12	8

Programme Elective Courses						
No.	Course Code	Course Title	Prerequisite	ASU Credit	NQF Credit	NQF Level
Group 1						
1	CSC204	Linear Algebra	CSC203	3	12	7
2	CSC305	Operations Research	CSC103	3	12	7
3	CSC326	Mobile Application Development	CSC322+CSC221	3	12	7
4	CSC327	Web Based Software Development II	CSC322+CSC221	3	12	7
5	CSC328	Human computer interaction	CSC222	3	12	7

6	CSC329	Multimedia Systems	CSC322	3	12	7
7	CSC421	Software Engineering II	CSC222	3	12	7
Group 2						
1	CSC312	Programming Language Concepts	CSC314	3	12	8
2	CSC315	Data Mining	CSC304	3	12	8
3	CSC343	Special Topics in Computer Science	DEPT. APPROVAL	3	12	8
4	CSC403	Image Processing	CSC401	3	12	8
5	CSC411	Computer Graphics	CSC401	3	12	8
6	CSC437	Cloud computing	CSC332	3	12	8
7	CSC438	Parallel and Distributed Computing	CSC332	3	12	8