

# Computer Science Programme

## 4 Years Study Plan 2015/2016 (135 Cr)

First Year: Semester 1					
Course Code	Course Title	Prerequisite	Lecture Hrs	Lab. Hrs	Credit
CS104	Computer Skills	-	1	4	3
CS121	Discrete Mathematics	-	3	-	3
ENG111	Upper-Intermediate English	-	3	-	3
HBH105	Bahrain Civilization & History	-	3	-	3
ARB101	Arabic Language	-	3	-	3
HR106	Human Rights	-	3	-	3
Total Credit Hours					18

First Year: Semester 2					
Course Code	Course Title	Prerequisite	Lecture Hrs	Lab. Hrs	Credit
PHY101	Introduction to Physics	-	3	-	3
MAT101	Mathematics	-	3	-	3
CS111	Structured Programming	-	2	2	3
CS152	Digital logic	-	3	-	3
ENG112	Advanced English	ENG111	3	-	3
LFS102	Thinking and Communications Skills Development	-	3	-	3
Total Credit Hours					18

Second Year: Semester 1					
Course Code	Course Title	Prerequisite	Lecture Hrs	Lab. Hrs	Credit
CS215	Data Structures	CS111	2	2	3
MAT201	Mathematics II	MAT101	3	-	3
CS251	Microcomputers & Assembly Language	CS152	2	2	3
-	<b>University Elective</b>	-	-	-	3
STA201	Probability & Statistics	-	3	-	3
CS206	Computer Ethics & Social Responsibility	CS104	3	-	3
Total Credit Hours					18

Second Year: Semester 2					
Course Code	Course Title	Prerequisite	Lecture Hrs	Lab. Hrs	Credit
CS212	Object Oriented Prog. I	CS111	2	2	3
CS252	Computer Architecture	CS251	3	-	3
CS201	Communication Skills	ENG111	3	-	3
-	<b>Major Elective</b>	-	-	-	3
SRM201	scientific resarch methods	STA201	3	-	3
Total Credit Hours					15

Third Year: Semester 1					
Course Code	Course Title	Prerequisite	Lecture Hrs	Lab. Hrs	Credit
CS335	Information Systems Analysis	CS212	2	2	3
CS351	Operating Systems	CS252	3	-	3
CS314	Object Oriented Prog. II	CS212	2	2	3
CS385	Web Based Software Development I	CS212	2	2	3
CS311	Algorithms Design & Analysis	CS215	3	-	3
CS371	Computational Theory	CS215	3	-	3
Total Credit Hours					18

Third Year: Semester2					
Course Code	Course Title	Prerequisite	Lecture Hrs	Lab. Hrs	Credit
CS333	Software Engineering I	CS335	2	2	3
CS313	Visual Programming	CS212	2	2	3
CS336	Databases Systems	CS335	2	2	3
CS361	Data Communications & Comp. Networks	CS351	3	-	3
-	Major Elective	-	-	-	3
CS341	Artificial Intelligence	CS311	2	2	3
Total Credit Hours					18

Forth Year: Semester 1					
Course Code	Course Title	Prerequisite	Lecture Hrs	Lab. Hrs	Credit
CS463	Mobile Computing	CS361	2	2	3
CS434	Databases development	CS336	1	4	3
-	Major Elective	-	-	-	3
CS431	Software Engineering II	CS333	2	2	3
CS462	Ciphering & Computer Security	CS361	3	-	3
CS471	Compilers Design	CS371	3	0	3
Total Credit Hours					18

Forth Year: Semester 2					
Course Code	Course Title	Prerequisite	Lecture Hrs	Lab. Hrs	Credit
CS432	Graduation Project	90 Cr.	-	6	3
CS433	Internship	90 Cr.	-	-	3
-	Major Elective	-	-	-	3
-	University Elective	-	-	-	3
Total Credit Hours					12