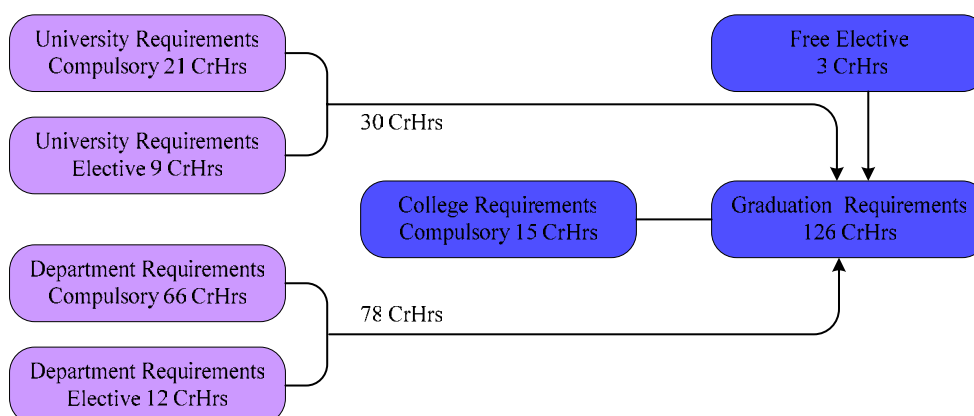


COMPUTER SCIENCE PROGRAM STRUCTURE

1. Graduation Credit Hours (CrHrs) Requirements for the Department:

Requirements	Compulsory CrHrs	Elective CrHrs	Free Elective CrHrs	Total CrHrs
University (UR)	21	9		30
College (CR)	15			15
Department (DR)	66	12		78
Free Elective (FE)			3	3
Total	102		24	126

Program Structure:



2. University Requirements: (30) Credit Hours divided into:

- a. Compulsory 21 Credit Hours.
- b. Electives 9 Credit Hours.

a. Compulsory University Requirements: (21) Credit Hours

Course Number	Course Title	Theory Hours	Lab Hours	Credit Hours	Prerequisite(s)
000001	IU Orientation	1	-	-	-
101101	Computing Fundamentals	2	2	3	-
104100	General Mathematics	3	-	3	-
304100	Introduction to Natural Sciences	3	-	3	-
401100	English Language I	3	-	3	-
401101	English Language II	3	-	3	401100
402100	Arabic Language I	3	-	3	-
403100	Islamic Culture	3	-	3	-

Total	21
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N.B.: Exemption from any one of the above courses shall be decided by the university council.

b. Elective University Requirements: (9) Credit Hours to be chosen from:

Course Number	Course Title	Theory Hours	Lab Hours	Credit Hours	Prerequisite(s)
202120	Introduction to Management	3	-	3	-
202220	Principles of Economics	3	-	3	-
203230	Principles of Accounting	3	-	3	-
301101	Research Methodology	3	-	3	-
301112	Foundations of education	3	-	3	-
401103	Technical Report Writing	3	-	3	401101
401242	Oral Skills	3	-	3	401101
401245	Reading Skills	3	-	3	401100
401246	Writing Skills	3	-	3	401101
402101	Arabic Language II	3	-	3	402100
403101	Islamic Civilization	3	-	3	-
404100	UAE Society	3	-	3	-
404101	Introduction to Sociology	3	-	3	-
404102	Library and Information Sources	3	-	3	-
404110	Media & Multimedia	3	-	3	-
405100	Introduction to Psychology	3	-	3	-

3. College Requirements: Compulsory (15) Credit Hours:

Course Number	Course Title	Theory Hours	Lab Hours	Credit Hours	Prerequisite(s)
101110	Programming I	2	2	3	101101
104101	Mathematics I	4	-	4	104100
104102	Mathematics II	4	-	4	104101
105201	Physics	3	-	3	104101
105291	Physics Lab.	-	2	1	105201 / Co.
Total				15	

4. Department Requirements: (78) Credit Hours :

- a. Compulsory 66 Credit Hours.
- b. Electives 12 Credit Hours.

a. Compulsory Department Requirements for Computer Science: (66) Credit Hours

Course Number	Course Title	Theory Hours	Lab Hours	Credit Hours	Prerequisite(s)
101211	Programming II	2	2	3	101110
101220	File and Storage Structures	3	-	3	101230
101230	Data Structures & Algorithms	3	-	3	104231 101211
101312	Computer Org. & Assembly Programming	2	2	3	103302 101110
101319	Programming Languages, Theory & Practice	3	-	3	101211
101322	Software Specification & Design	3	-	3	101230
101324	Database Management Systems	2	2	3	101211
101331	Intro. to Analysis & Design of Algorithms	3	-	3	101230
101351	Data Communication & Networking	2	2	3	101110
101408	Ethical Aspects of Eng. & CS	3	-	3	Earned 70 CrHrs
101421	Software Engineering	3	-	3	101322
101440	Operating Systems	2	2	3	101230 102320
101451	Artificial Intelligence	2	2	3	101230
101461	IT/ Marketing Research	1	-	1	Earned 70 CrHrs
101490	Computer Software Lab.	-	6	3	Earned 70 CrHrs
101493	CS Seminar	1	-	1	Earned 75 CrHrs
101494	Senior Project I	-	-	3	Earned 80 CrHrs
101495	Training	-	-	3	Earned 60 CrHrs
102320	Computer Architecture	3	-	3	101312
103300	EE Fundamentals I	3	-	3	105201
103302	Digital Logic Design I	3	-	3	101101
103390	EE Fundamentals Lab. I	-	3	1	103300 /Co.
104230	Intro. to Probability & Statistics	3	-	3	104100
104231	Discrete Mathematics	3	-	3	104100
Total				66	

b. Elective Department Requirements for Computer Science: (12) Credit Hours to be chosen from:

Course	Course Title	Theory	Lab	Credit	Prerequisite(s)
101323	Computer Graphics	2	2	3	104102
101382	Web Technology	2	2	3	101110
101401	Selected Topics in Computer Science	X	Y	3	Dept. approval
101414	Object Oriented Programming	2	2	3	101230
101416	Security & Cryptography	3	-	3	101230
101434	Coding & Information Theory	3	-	3	101230
101442	Systems Programming	2	2	3	101312
102428	Digital Communications	3	-	3	101351
102510	Computer Interfacing	3	-	3	101312
103301	EE Fundamentals II	3	-	3	103300
104204	Math III	3	-	3	104102
104320	Numerical Methods	2	2	3	104102

5. Free Elective requirement: (3) Credit Hours:

(3) Credit Hours selected by the student from his specialization or any department in the University.