

Bachelor's Science in Computer Science Honours

First Year: Semester 1

No	Course	Course Code	Credit Hours	Lecture	Lab	Tutorial
1	Arabic I	UR111	3	2	-	2
2	English I	UR112	3	2	-	2
3	Religious Studies I	UR113	3	2	-	2
4	Sudanese Studies	UR114	2	2	-	-
5	Introduction to Computer Science	CS111	3	2	2	-
6	Physics	CS112	4	2	2	2
7	Calculus I	MT111	3	2	-	2
8	Algebra and Analytic Geometry	MT112	3	2	-	2
Total			24	16	4	12

First Year: Semester 2

No	Course	Course Code	Credit Hours	Lecture	Lab	Tutorial
1	Arabic II	UR121	3	2	-	2
2	English II	UR122	3	2	-	2
3	Religious Studies II	UR123	3	2	-	2
4	Computer Applications	IT121	3	2	2	-
5	Calculus II	MT123	3	2	-	2
6	Principles of Economics	HU121	2	2	-	-
7	Programming Methods I	CS123	3	2	2	-
8	Basic Electronics	CS124	3	2	2	-
Total			23	16	6	8
Year Total			47	32	10	20
Grand Total			47	32	10	20

Second Year: Semester 3

No	Course	Course Code	Credit Hours	Lecture	Lab	Tutorial
1	Data Structure	CS235	3	2	2	-
2	Programming Methods II	CS236	3	2	2	-
3	Logic Circuits Design	CS237	3	2	2	
4	Discrete Mathematics I	MT234	3	2	-	2
5	Statistics & Probability	MT235	3	2	-	2
6	Differential Equations	MT236	3	2	-	2
7	Communication Skills	HU232	2	2	-	-
8	Principles of Management	HU233	2	2	-	-
Total			22	16	6	6

Second Year: Semester 4

No	Course	Course Code	Credit Hours	Lecture	Lab	Tutorial
1	Visual Programming	CS248	3	2	2	-
2	Database Concept	CS249	3	2	2	-
3	File Management & Organization	CS240	3	2	2	-
4	Computer Architecture & Organization	CS241	3	2	-	-
5	Computer Graphics	CS242	3	2	2	-
6	Discrete Mathematics II	MT247	3	2	-	2
7	Statistical Method	MT248	3	2	-	2
8	Linear Algebra	MT249	3	2	-	2
Total			24	16	8	6
Year Total			46	32	14	12
Grand Total			93	64	24	32

Third Year: Semester 5

No	Course	Course Code	Credit Hours	Lecture	Lab	Tutorial
1	Internet Technology I	IT352	3	2	2	-
2	Algorithm Design & Analysis	CS353	2	2	-	-
3	Operating System	CS354	3	2	2	-
4	Artificial Intelligence	CS355	2	2	-	-
5	Computer Networks	CS356	3	2	2	-
6	System Analysis & Design I	IS351	3	2	2	-
7	Project Management	HU354	2	2	-	-
8	Practical Training	HU355	2	-	-	-
Total			20	14	8	-

Third Year: Semester 6

No	Course	Course Code	Credit Hours	Lecture	Lab	Tutorial
1	Neural Networks	CS367	2	2	-	-
2	Digital Image Processing	CS368	3	2	2	-
3	Computer Security	CS369	2	2	-	-
4	Internet Technology II	IT363	3	2	2	-
5	Wireless Sensors Networks	IT364	3	2	2	-
6	System Analysis & Design II	IS362	3	2	2	-
7	Software Engineering	SW361	3	2	2	-
8	Research Methodology	HU365	2	2	-	-
Total			21	16	10	-
Year Total			41	30	18	-
Grand Total			134	94	42	32

Fourth Year: Semester 7

No	Course	Course Code	Credit Hours	Lecture	Lab	Tutorial
1	Advanced Database	CS471	3	2	2	-
2	Compiler Design	CS472	2	2	-	-
3	Concept of Programming Language	CS473	2	2	-	-
4	Final Project I	CS474	3	2	2	-
5	Cloud Computing	IT475	2	2	-	-
6	Advanced Software Engineering	SW472	3	2	2	-
7	Elective Course I	CS475	3	2	2	-
8	Elective Course II	CS476	3	2	2	-
Total			21	16	10	-

Fourth Year: Semester 8

No	Course	Course Code	Credit Hours	Lecture	Lab	Tutorial
1	Human Computer Interaction	CS483	3	2	2	-
2	Simulation and Modeling	CS484	3	2	2	-
3	Software Quality Assurance	SW483	3	-	-	-
4	Elective Course III	CS485	3	2	2	-
5	Elective Course IV	CS486	3	2	2	-
6	Final Project II	CS480	3	2	2	-
Total			18	10	10	-
Year Total			39	26	20	-
Grand Total			173	120	62	32

Total credit hours = 173

January 2021