

BS (Computer Science)**Total Credit Hours 130,****4 Years 8, Semesters (For the batches, Fall 2023 and onward)**

The BS Computer Science Program, University of Baltistan, proposed the following study plan and course coding as per HEC-NCEAC revised policy of curricula 2023 for Bachelor of Science in Computer Science. The below mentioned course batch plan reflect the courses along with course codes based on semester wise.

Semester I					
S. No	Course Code	Course Title	Course Category	Credit Hours	Pre Requisite
1	GEC - 111	Application of information and Communication Technologies	General Education - I	2+1	-
2	CCC- 111	Programming Fundamentals	Computing Core-CS- I	3+1	-
3	GEC – 112	Applied Physics	General(Natural Science Education - II	3+0	-
4	GEC – 113	Calculus and Analytical Geometry	General Education (Quantitative Reasoning)- III	3+0	-
5	GEC - 114	Ideology and constitution of Pakistan	General Education – IV	2+0	-
6	GEC - 115	Functional English	General Education - V	3+0	-
Total 18 (16+2)					

Semester II					
S. No	Course Code	Course Title	Course Category	Credit Hours	Pre Requisite
1	CCC - 122	Object Oriented Programming	Computing Core-CS- II	3+1	Programming Fundamentals
2	CCC - 123	Digital Logic Design	Computing Core-CS- III	2+1	Applied Physics
3	CSS - 121	Graph Theory	CS Supporting -I	3+0	
4	GEC - 126	Islamic Studies	General Education - VI	2+0	-
5	GEC - 127	Expository writing	General Education -VII	3+0	Functional English
6	MSC -1 2 1	Linear Algebra	Mathematics & Supporting Courses - I	3+0	
Total 18 (16+2)					

Semester III					
S. No	Course Code	Course Title	Course Category	Credit Hours	Pre Requisite
1	CCC - 214	Data Structures	Computing-CS- Core – IV	3+1	Object Oriented Programming
2	CCC - 215	Computer Organization and Assembly Language	Computing-CS- Core – V	2+1	Digital Logic Design
3	CSC - 211	Theory of Automata	CS Core Core – I	3+0	-
4	MSC - 212	Multivariable Calculus	Mathematics & Supporting Courses - II	3+0	-
5	GEC - 218	Introduction to managements	General Education (Social Science)-VIII	2+0	-
Total 15 (13+2)					

Semester IV					
S. No	Course Code	Course Title	Course Category	Credit Hours	Pre Requisite
1	CCC - 226	Database Systems	Computing-CS- Core – VI	3+1	
2	CCC – 227	Analysis of Algorithms	Computing-CS- Core – VII	3+0	Data Structures
3	CSC - 222	Computer Architecture	CS Core- II	2+1	Computer Organization and Assembly Language
4	MSC - 223	Probability and Statistics	Mathematics & Supporting Courses - III	3+0	-
5	UEC - 222	Human Resource Management	University Elective - I	3+0	-
Total 16(14+2)					

Semester V					
S. No	Course Code	Course Title	Course Category	Credit Hours	Pre Requisite
1	CSC - 313	Advance database Managements system	CS Core - III	3+0	Database Systems
2	CCC – 318	Software Engineering	Computing Core-CS- – VIII	3+0	-
3	CCC – 319	Operating Systems	Computing Core -CS-- IX	2+1	
4	MSC- 314	Technical and Business writing	Mathematics & Supporting Courses - IV	3+0	Expository writing
5	CSC - 314	HCI and Computer Graphics	CS Core -IV	2+1	-
Total 15(13+2)					

Semester VI					
S. No	Course Code	Course Title	Course Category	Credit Hours	Pre Requisite
1	CCC - 3210	Computer networks	Computing Core -CS-- X	2+1	-
2	CSC - 325	Compiler Construction	CS Core – V	2+1	Theory of Automata
3	CCC - 3211	Artificial Intelligence	Computing Core-CS- – XI	2+1	
4	CSE - 322	Cloud Computing	CS Elective - I	3+0	-
5	GEC - 329	Entrepreneurship	General Education -XI	2+0	-
Total 14 (11+3)					

Semester VII					
S. No	Course Code	Course Title	Course Category	Credit Hours	Pre Requisite
1	CCC - 4112	Information Security	Computing Core-CS- – XII	2+1	
2	CCC - 4113	Final Year Project - I	Computing Core -CS-- XIII	0+3	-
3	GEC - 4110	Professional Practices	General Education(Arts and Humanities)- X	2+0	-
4	CSC - 416	Parallel and Distributed Computing	CS Core – VI	2+1	Operating System
5	CSE-413	Machine Learning	CS Elective - II	3+0	-
6	GEC - 4211	Discrete Structure	General Education(Quantitative Reasoning -XII	3+0	
Total 17 (12+5)					

Semester VIII					
S. No	Course Code	Course Title	Course Category	Credit Hours	Pre Requisite
1	CCC - 4214	Final Year Project - II	Computing Core - XIV	0+3	Final Year Project - I
2	GEC - 4212	E-Commerce	General(Civic and community engagements) Education -XI	2+0	-
3	CSE-424	Mobile Application and Development	CS Elective- III	3+0	-
4	CSE-425	Big data analytics -	CS Elective - IV	3+0	-
5	CSE-426	Internet of things	CS Elective- V	3+0	-
6	CSE-427	Object oriented analysis and design	CS Elective- VI	2+1	
Total 17 (13+4)					