

Proposed Study Plan for BS (Information Technology) 2022			
4-Year Program (8 Regular Semesters)			
Distribution of Credit Hours According to HEC Curriculum 2017			
S. No.	Course Categories	Credit Hours	Remarks
1	General Education (GE)	19 Credits (18-1)	
2	Computing Core (CC)	39 Credits (27-12)	
3	Math and Science Foundation (MT)	12 Credits	
4	University Elective (UE)	12 Credits	
5	IT Elective (ITE)	15 Credits	
6	IT Core (ITC)	24 Credits (21-3)	
7	IT Supporting (ITS)	9 Credits	
Total		130	

BS(IT) -1 st Semester			
S. No.	Code	Course Title	Cr. Hr.
1	GE-301	Introduction to ICT	3+0
2	CC-301	Programming Fundamentals	3+1
3	GE-302	English Composition & Comprehension	3+0
4	MT-301	Calculus & Analytical Geometry	3+0
5	MT-302	Applied Physics	3+0
6	GE-303	Islamic Studies/ Ethics	2+0
Total			17+1
2 nd Semester			
S. No.	Code	Course Title	Cr. Hr.
1	CC-311	Object Oriented Programming-1	3+1
2	GE-311	Communication & Presentation Skills	3+0
3	MT-311	Probability & Statistics	3+0
4	UE-311	Financial Accounting	3+0
5	ITS-311	Software Requirement Engineering	3+0
6	GE-312	Pakistan Studies	2+0
Total			17+1
3 rd Semester			
S. No.	Code	Course Title	Cr. Hr.
1	CC-401	Data Structures & Algorithms	3+1
2	CC-402	Discrete Structures	3+0

3	UE-401	Psychology	3+0
4	ITS-401	Formal Methods	3+0
5	MT-401	Linear Algebra	3+0
6	CC-403	Computer Networks	3+1
	Total		18+2
		4 th Semester	
S. No.	Code	Course Title	Cr. Hr.
1	CC-411	Database Systems	3+1
2	CC-412	Object Oriented Programming-II	3+0
3	CC-413	Operating Systems	3+1
4	UE-411	Technology Management	3+0
5	ITC-411	IT Project Management	3+0
6	UE-412	Principles of Marketing	3+0
	Total		18+2
		5 th Semester	
S. No.	Code	Course Title	Cr. Hr.
1	ITS-501	Enterprise Systems	3+0
2	CC-501	Information Security	3+0
3	CC-502	Software Engineering	3+0
4	ITC-501	System and Network Administration	3+1
5	ITE-502	Artificial Intelligence	3+0
6	ITE-503	Web Engineering	3+0
	Total		18+1
		6 th Semester	
S. No.	Code	Course Title	Cr. Hr.
1	ITC-511	Web Technologies	3+0
2	ITE-511	wireless Communication	3+0
3	ITE-512	Modern programming languages	3+0
4	ITC-512	IT Infrastructure	3+0
5	GE-511	Technical & Business Writing	3+0
6	ITC-513	Database Administration and Management	3+1
	Total		18+1
		7 th Semester	
S. No.	Code	Course Title	Cr. Hr.
1	ITC-601	Virtual System and Services	3+1
2	CC-601	Final Year Project – I	0+3
3	ITE-601	Mobile Application Development	3+0
4	ITE-602	NoSQL Database Systems	3+0
5	GE-601	Professional Practices	3+0
	Total		12+4
		8 th Semester	
S. No.	Code	Course Title	Cr. Hr.

1	CC-611	Final Year Project – II	0+3
2	ITC-611	Cyber Security	3+0
3	ITE-613	Digital Image Processing	3+0
	Total		6+3
	Grand Total		139