

# BS Computer Science

## SEMESTER - I

S.N.	Course Title	Credit Hours	Category
1	Programming Fundamentals	4(3-1)	Major
2	Digital Logic Design	3(2-1)	Major
3	Functional English	3(3-0)	General Education
4	Islamic Studies/Ethics (for Non-Muslim Students in lieu of Islamic Studies)	2(2-0)	General Education
5	Application of Information and Communication Technology	3(2-1)	General Education
6	Teaching of The Holy Quran-I	1(1-0)	
<b>Total Credit Hrs 16</b>			

## SEMESTER - II

S.N.	Course Title	Credit Hours	Category
1	Object Oriented Programming	4(3-1)	Major
2	Computer Organization & Assembly Language	3(2-1)	Major
3	Computer Networks	3(2-1)	Major
4	Expository Writing	3(3-0)	General Education
5	Ideology and Constitution of Pakistan	2(2-0)	General Education
6	Discrete Structures	3(3-0)	General Education
<b>Total Credit Hrs 18</b>			



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## SEMESTER - III

S.N.	Course Title	Credit Hours	Category
1	Data Structures	4(3-1)	Major
2	Artificial Intelligence	3(2-1)	Major
3	Software Engineering	3(3-0)	Major
4	Applied Physics	3(2-1)	General Education
5	Introduction to Management	2(2-0)	General Education
6	Calculus and Analytic Geometry	3(3-0)	General Education
7	Teaching of The Holy Quran-II	1(1-0)	
<b>Total Credit Hrs 19</b>			

## SEMESTER - IV

S.N.	Course Title	Credit Hours	Category
1	Analysis of Algorithms	3(3-0)	Major
2	Database Systems	4(3-1)	Major
3	Operating Systems	3(2-1)	Major
4	Professional Practices	2(2-0)	General Education
5	Entrepreneurship	2(2-0)	General Education
6	Civics and Community Engagement	2(2-0)	General Education
<b>Total Credit Hrs 16</b>			



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## SEMESTER - V

S.N.	Course Title	Credit Hours	Category
1	Computer Architecture	3(2-1)	Major
2	Advance Database Mar	3(2-1)	Major
3	Object Oriented Analysi	3(2-1)	Major
4	Web Engineering	3(2-1)	Major
5	Multivariable Calculus	3(3-0)	Interdisciplinary
6	Teaching of The Holy Q	1(1-0)	
<b>Total Credit Hrs 16</b>			

## SEMESTER – VI

S.N.	Course Title	Credit Hours	Category
1	Theory of Automata	3(3-0)	Major
2	Visual Programming	3(2-1)	Major
3	Information Security	3(2-1)	Major
4	Mobile Application Development	3(2-1)	Major
5	Probability & Statistics	3(3-0)	Interdisciplinary
6	Internship (6-8 weeks)	3(0-3)	Internship
<b>Total Credit Hrs 18</b>			



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## SEMESTER - VII

S.N.	Course Title	Credit Hours	Category
1	Compiler Construction	3(2-1)	Major
2	Software Testing & Quality Assurance	3(2-1)	Major
3	Cyber Security	3(2-1)	Major
4	Human Computer Interaction	3(2-1)	Major
5	Linear Algebra	3(3-0)	Interdisciplinary
6	Teaching of The Holy Quran-IV	1(1-0)	

**Total Credit Hrs:16**

## SEMESTER – VIII

S.N.	Course Title	Credit Hours	Category
1	Parallel and Distributed Computing	3(2-1)	Major
2	Digital Image Processing	3(2-1)	Major
3	Introduction to Marketing (Management Sciences)	3(3-0)	Interdisciplinary
4	Technical & Business Writing	3(3-0)	Interdisciplinary
5	Capstone Project	3(0-3)	Capstone Project

**Total Credit Hrs:15**

