

0244 BS Computer Science

Shift : Morning

Duration : 4 years, 8 semesters, 131 credit hours

Eligibility : Intermediate or equivalent qualification with at least 50% marks from any recognized Board

1st Semester

Course	Course Title	Credit Hours
CSC-101	Introduction to Computing	3
CSC-101(L)	Introduction to Computing	1
CSC-110	Fundamentals of Programming	3
CSC-110 (L)	Fundamentals of Programming	1
ENG-121	English Composition & Comprehension	3
HUM-101	Islamic Studies	2
MTS-122	Calculus & Analytical Geometry	3

2nd Semester

Course	Course Title	Credit Hours
CSC-205	Object Oriented Programming	3
CSC-205(L)	Object Oriented Programming	1
CSC-111	Basic Electronics	2
CSC-111(L)	Basic Electronics	1
ENG-102	Technical Report Writing	3
HUM-102	Pakistan Studies	2
MTS-102	Discrete Structures	3
MTS-301	Linear Algebra	3

3rd Semester

Course	Course Title	Credit Hours
CSC-201	Digital Logic Design	3
CSC-201(L)	Digital Logic Design	1
CSC-216	Data Structures & Algorithms	2
CSC-216(L)	Data Structures & Algorithms	1
CSC-403	Software Engineering	3
ENG-101	Communication Skills	3
-----	University Elective-I	3

4th Semester

Course	Course Title	Credit Hours
CSC-202	Database Systems	3
CSC-202(L)	Database Systems	1
CSC-301	Computer Architecture	3
CSC-307	Theory of Automata & Formal Language	3
MTS-217	Multi Variate Calculus	3
MTS-307	Probability and Statistics	3
-----	CS Elective-I	3

5th Semester

Course	Course Title	Credit Hours
CSC-217	Operating Systems	3
CSC-219	Design and Analysis of Algorithms	3
CSC-317(2)	Data Communication & Computer Network	2
CSC-317(L)	Data Communication & Computer Network	1
CSC-410	Micro Processor & Assembly Language	2
CSC-410	Micro Processor & Assembly Language	1
-----	CS Elective-II	3

6th Semester

Course	Course Title	Credit Hours
CSC-411	Compiler Construction	3
CSC-320	Artificial Intelligence	3
MTS-410	Differential Equations	3
-----	CS Elective-III	3
-----	CS Elective-IV	3
-----	University Elective-II	3

7th Semester

Course	Course Title	Credit Hours
CSC-313	Human Computer Interaction	3
CSC-436	Information Security	3
-----	CS Elective-V	3
-----	CS Elective-VI	3
-----	University Elective-III	3
CSC-499	Project	3

8th Semester

Course	Course Title	Credit Hours
CSC-437	Numerical Computing	3
-----	University Elective-IV	3
-----	CSC-499 Project	3

Course	Course Title	Credit Hours
University Elective Courses:		12
ACC-201	Fundamentals of Accounting	3
HRM-201	Organizational Behaviour	3
MGT-101	Principles of Management	3
MGT-302	Entrepreneurship	3
MGT-408	Leadership	3
MKT-203	Marketing Management	3
PSY-101	Fundamentals of Psychology	3

Course	Course Title	Credit Hours	Course	Course Title	Credit Hours
Computer Science Elective Courses:		21	Computer Science Elective Courses:		21
CSC-214	Computer Graphics	2	CSC-430	Data Warehousing & Data Mining	2
CSC-214(L)	Computer Graphics	1	CSC-430(L)	Data Warehousing & Data Mining	1
CSC-215	Web Engineering - 1	2	CSC-433	Data Mining	3
CSC-215(L)	Web Engineering - 1	1	CSC-434	Mobile Application & Development	2
CSC-305	Network Management	2	CSC-434(L)	Mobile Application & Development	1
CSC-305(L)	Network Management	1	CSC-435	Computer Vision	3
CSC-319	Wireless Network	3	CSC-XXX	Expert Systems	3
CSC-420	Web Engineering - II	2	CSC-XXX	Digital Signal Processing	3
CSC-420(L)	Web Engineering - II	1	CSC-XXX	Distributed Computing	3
CSC-424	Digital Image Processing	2	CSC-XXX	Grid & Cloud Computing	3
CSC-424(L)	Digital Image Processing	1	CSC-XXX	Data Warehousing	3
CSC-xxx	Fuzzy Logics	3			