

BSc Computer Science

COURSE DISTRIBUTION PER SEMESTER (Suggested Semester Breakdown)

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
Semester 1								
1.	R	Programming Principles I	COMP-111	4	50'	13	52	6
2.	R	Software Development Essentials	COMP-117	3	50'	13	39	6
3.	R	Mathematics and Logic for Computation	MATH-111	4	50'	13	52	6
4.	R	Calculus I	MATH-195	4	50'	13	52	6
5.	R	English Composition	ENGL-101	3	50'	13	39	6
Semester 2								
1.	R	Programming Principles II	COMP-113	4	50'	13	52	6
2.	R	Collaborative Software Development	COMP-119	3	50'	13	39	6
3.	R	Calculus II	MATH-196	4	50'	13	52	6
4.	E	Business Elective	-	3	50'	13	39	6
5.	E	Liberal Arts Elective	-	3	50'	13	39	6

Semester 3

1.	R	Digital Systems	COMP-200	3	50'	13	39	6
2.	R	Systems Analysis and Design	COMP-201	3	50'	13	39	6
3.	R	Object-Oriented Programming	COMP-212	4	50'	13	52	6
4.	R	Advanced Programming and Paradigms	COMP-221	4	50'	13	52	6
5.	E	Major Elective	-	3	50'	13	39	6

Semester 4

1.	R	Machine Learning and Data Mining I	COMP-244	3	50'	13	39	6
2.	R	Data Structures and Algorithms	COMP-270	3	50'	13	39	6
3.	R	Probability and Statistics I	MATH-225	3	50'	13	39	6
4.	R	Linear Algebra I	MATH-280	3	50'	13	39	6
5.	R	Technical Writing and Research	BADM-332	3	50'	13	39	6

Semester 5

1.	R	Theory of Computation	COMP-321	3	50'	13	39	6
2.	R	Computer Organization and Architecture	COMP-335	4	50'	13	52	6
3.	E	Major Elective	-	3	50'	13	39	6
4.	E	Major Elective	-	3	50'	13	39	6
5.	E	Major Elective	-	3	50'	13	39	6

Semester 6

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1.	R	Database Management Systems	COMP-302	3	50'	13	39	6
2.	R	Operating Systems	COMP-354	3	50'	13	39	6
3.	R	Networks and Data Communications	COMP-358	3	50'	13	39	6
4.	E	Major Elective	-	3	50'	13	39	6
5.	E	Major Elective	-	3	50'	13	39	6
Semester 7								
1.	R	Artificial Intelligence	COMP-405	3	50'	13	39	6
2.	R	Parallel and Distributed Systems	COMP-417	3	50'	13	39	6
3.	R	Final Year Project I	COMP-498	3	50'	13	39	6
4.	E	Major Elective	-	3	50'	13	39	6
5.	E	Major Elective	-	3	50'	13	39	6
Semester 8								
1.	R	Software Engineering	COMP-401	3	50'	13	39	6
2.	R	Computer Security	COMP-431	3	50'	13	39	6
3.	R	Final Year Project II	COMP-499	3	50'	13	39	6
4.	E	Major Elective	-	3	50'	13	39	6
5.	E	Major Elective	-	3	50'	13	39	6



Note: The semester breakdown is indicative and includes ten Major Electives (COMP) courses out of the maximum of ten (minimum of 6) that a student can take from Section B. In general, the student has a choice on the number of electives to take from each section (B, C, D, E, and F) as long as the number of credits completed in each section, satisfies each section's minimum credits and does not exceed its maximum number of credits.