

Department of Computer Science and Engineering
Course Offerings For B.Sc. in CSE /B.Sc. in Data Science Fall 2025 TRIMESTER

Program: BSCSE						
SL	Course Code	Title	Cr	Prerequisite	Exam Day	Exam Slot
Trimester 1						
1	ENG 1011	English I	3	X	Day 1	T1
2	BDS 1201	History of the Emergence of Bangladesh	2	X	Day 6	T1
3	CSE 1110	Introduction to Computer Systems	1	X	N/A	N/A
4	MATH 1151	Fundamental Calculus	3	X	Day 2	T2
Trimester 2						
1	ENG 1013	English II	3	ENG 1011	Day 1	T2
2	CSE 1111	Structured Programming Language	3	CSE 1110	Day 4	T2
3	CSE 1112	Structured Programming Language Laboratory	1	CSE 1110	N/A	N/A
4	CSE 2213	Discrete Mathematics	3	X	Day 3	T2
Trimester 3						
1	MATH 2183	Calculus and Linear Algebra	3	MATH 1151	Day 1	T3
2	PHY 2105	Physics	3	X	Day 7	T3
3	PHY 2106	Physics Lab	1	X	N/A	N/A
4	CSE 2215	Data Structure and Algorithms I	3	CSE 1111	Day 4	T2
5	CSE 2216	Data Structure and Algorithms I Laboratory	1	CSE 1112	N/A	N/A
Trimester 4						
1	MATH 2201	Coordinate Geometry and Vector Analysis	3	MATH 1151	Day 5	T1
2	CSE 1325	Digital Logic Design	3	X	Day 3	T3
3	CSE 1326	Digital Logic Design Lab	1	X	N/A	N/A
4	CSE 1115	Object Oriented Programming	3	CSE 2215	Day 6	T2
5	CSE 1116	Object Oriented Programming Lab	1	CSE 2216	N/A	N/A
Trimester 5						
1	MATH 2205	Probability and Statistics	3	MATH 1151	Day 2	T3
2	SOC 2101	Society, Technology and Engineering Ethics	3	X	Day 1	T3
3	CSE 2217	Data Structure and Algorithms II	3	CSE 2215	Day 5	T2
4	CSE 2218	Data Structure and Algorithms II Laboratory	1	CSE 2216	N/A	N/A
5	EEE 2113	Electrical Circuits	3	X	Day 6	T3
Trimester 6						
1	CSE 3521	Database Management Systems	3	X	Day 2	T1
2	CSE 3522	Database Management Systems Lab	1	X	N/A	N/A
3	EEE 2123	Electronics	3	EEE 2113	Day 6	T3
4	EEE 2124	Electronics Lab	1	X	N/A	N/A
5	CSE 4165	Web Programming	3	CSE 1115, CSE 1116	Day 7	T1
Trimester 7						
1	CSE 3313	Computer Architecture	3	CSE 1325	Day 1	T3
2	CSE 2118	Advanced Object Oriented Programming Lab	1	CSE 1116	N/A	N/A
3	BIO 3105	Biology for Engineers	3	X	Day 3	T3
4	CSE 3411	System Analysis and Design	3	X	Day 5	T1
5	CSE 3412	System Analysis and Design Lab	1	X	N/A	N/A
Trimester 8						
1	CSE 4325	Microprocessors and Microcontrollers	3	CSE 3313	Day 2	T2
2	CSE 4326	Microprocessors and Microcontrollers Lab.	1	X	N/A	N/A
3	CSE 3421	Software Engineering	3	CSE 3411	Day 5	T3
4	CSE 3422	Software Engineering Lab	1	CSE 3412	N/A	N/A
5	CSE 3811	Artificial Intelligence	3	MATH 2205	Day 3	T1
6	CSE 3812	Artificial Intelligence Lab	1	X	N/A	N/A
Trimester 9						
1	CSE 2233	Theory of Computation	3	X	Day 7	T2
2	GED OPT1	General Education Optional-I	3	X	N/A	N/A
3	PMG 4101	Project Management	3	CSE 3411	Day 3	T2
4	CSE 3711	Computer Networks	3	X	Day 4	T3
5	CSE 3712	Computer Networks Lab	1	X	N/A	N/A

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Trimester 10						
1	GED OPT2	General Education Optional-II	3	X	----	----
2	CSE 4000 A	Final Year Design Project - I	2	X	----	----
3	CSE ****	Elective – I	3	X	----	----
4	CSE 4509	Operating Systems	3	X	Day 1	T1
5	CSE 4510	Operating Systems Laboratory	1	X	N/A	N/A
Trimester 11						
1	GED OPT3	General Education Optional – III	3		----	----
2	CSE ****	Elective – II	3		----	----
3	CSE ****	Elective – III	3		----	----
4	CSE 4000 B	Final Year Design Project - II	2	CSE 4000 A	N/A	N/A
5	CSE 4531	Computer Security	3	CSE 3711	Day 6	T3
Trimester 12						
	CSE 4000 C	Final Year Design Project - III	2	CSE 4000 A & CSE 4000 B	----	----
	EEE 4261	Green Computing	3	X	Day 5	T1
	CSE ****	Elective – IV	3		----	----
	CSE ****	Elective – V	3		----	----
General Education Optional-I, II, III in Trimester 9,10,11						
	ECO 4101	Economics	3	X	Day 6	T1
	ACT 2111	Financial and Managerial Accounting	3	X	Day 2	T3
	IPE 3401	Industrial and Operational Management	3	X	Day 1	T1
	TEC 2499	Technology Entrepreneurship	3	X	Day 3	T2
Elective – I, II, III, IV, V in Trimester 10,11,12 At least 3 courses must be completed in the major.						
Major: Computational Theory						
1	CSE 4611	Compiler Design	3	CSE 2233	Day 4	T1
2	CSE 4621	Computer Graphics	3	MATH 2201, MATH 2183	Day 2	T1
Major: Network and communications						
4	CSE 4783	Cryptography	3	CSE 2213	Day 6	T2
5	CSE 4777	Network Security	3	CSE 3711	Day 3	T3
Major: Systems						
7	CSE 4621	Computer Graphics	3	MATH 2183, MATH 2201	Day 2	T1
8	CSE 4587	Cloud Computing	3		Day 3	T3
Major: Data Science						
9	CSE 4889	Machine Learning	3	CSE 3811	Day 1	T3
10	CSE 4891	Data Mining	3	CSE 3811	Day 7	T1
12	CSE 4883	Digital Image Processing	3	CSE 3811	Day 4	T3
Major: Software Engineering						
13	CSE 4451	Human Computer Interaction	3		Day 3	T1
14	CSE 4435	Software Architecture	3		Day 4	T2
16	CSE 4181	Mobile Application Development	3	CSE 1115, CSE 1116	Day 6	T3
17	CSE 4495	Software Testing and Quality Assurance	3	CSE 3421	Day 7	T3
Major: Information and Communication Technology						
20	CSE 4181	Mobile Application Development	3	CSE 1115, CSE 1116	Day 6	T3
21	CSE 4587	Cloud Computing	3		Day 3	T3
22	CSE 4495	Software Testing and Quality Assurance	3	CSE 3421	Day 7	T3
23	CSE 4945	UI: Concepts and Design	3		Day 1	T2
Program: BSDS						
	Course Code	Title	Credits	Prerequisite		
1st Trimester						

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1	DS 1501	Programming for Data Science	3	X	Day 4	T2
2	DS 1502	Programming for Data Science Laboratory	1	X	N/A	N/A
3	ENG 1011	English I	3	X	Day 1	T1
4	BDS 1201	History of the Emergence of Bangladesh	2	X	Day 6	T1
2nd Trimester						
1	ENG 1013	English - II	3	ENG 1011	Day 1	T2
2	MATH 1151	Fundamental Calculus	3	X	Day 2	T2
3	DS 1115	Object Oriented Programming for Data Science	3	DS 1501 DS 1502	Day 6	T2
4	DS 1116	Object Oriented Programming for Data Science Laboratory	1	DS 1501 DS 1502	N/A	N/A
3rd Trimester						
1	DS 1101	Fundamentals of Data Science	3	DS 1115 DS 1116	Day 5	T2
2	BIO 3107	Biology	3	X	Day 3	T3
3	MATH 2107	Linear Algebra	3	X	Day 1	T3
4	PHY 2105	Physics	3	X	Day 7	T3
5	PHY 2106	Physics Lab	1	X	N/A	N/A
4th Trimester						
1	CSE 2215	Data Structures and Algorithms I	3	DS 1115 DS 1116	Day 4	T2
2	CSE 2216	Data Structures and Algorithms - I Laboratory	1	DS 1115 DS 1116	N/A	N/A
3	MATH 1153	Advanced Calculus	3	MATH 1151	Day 5	T1
4	CSE 2213	Discrete Mathematics	3	X	Day 3	T2
5		Humanities Optional - I (any one below)	3			
	ACT 2111	Financial and Managerial Accounting		X	Day 2	T3
	ECO 4101	Economics		X	Day 6	T1
	IPE 3401	Industrial and Operational Management		X	Day 1	T1
	SOC 2102	Society, Environment and Computing Ethics		X	Day 1	T3
	PSY 2101	Psychology		X	Day 7	T1
	TEC 2499	Technology Entrepreneurship		X	Day 3	T2
5th Trimester						
1	CSE 2217	Data Structures and Algorithms II	3	CSE 2215 CSE 2216	Day 5	T2
2	CSE 2218	Data Structures and Algorithms - II Laboratory	1	CSE 2215 CSE 2216	N/A	N/A
3	MATH 2205	Probability and Statistics	3	X	Day 2	T3
4	DS 3885	Data Wrangling	3	DS 1101	Day 1	T2
6th Trimester						
1	CSE 3521	Database Management Systems	3	X	Day 2	T1
2	CSE 3522	Database Management Systems Laboratory	1	X	N/A	N/A
3	DS 3101	Advanced Probability and Statistics	3	MATH 2205	Day 4	T3
4	DS 3521	Data Visualization	3	DS 3885	Day 6	T1
5	DS 3522	Data Visualization Lab	1	DS 3885	N/A	N/A
7th Trimester						
1	DS 4889	Machine Learning	3	MATH 1151 MATH 2107 MATH 2205	Day 1	T3
2	DS 4523	Simulation and Modeling	3	MATH 2107 MATH 2205	Day 4	T3
3	DS 4891	Data Analytics	3	DS 3885	Day 6	T2
4	DS 4892	Data Analytics Laboratory	1	DS 3885	N/A	N/A
5	DS 3120	Technical Report Writing and Presentation	2	X	N/A	N/A

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