

### B.Tech. CSE Course Structure (2025-2029) Cyber Security(EC-Council)

Sr. No.	Semester	Course Code	Course Title	L	T	P	Contact Hrs.	Credits	Type
1	1	DEN001C	Communication Skills	1	0	0	1	1	AEC
2	1	DEN001D	Communication Skills Lab	0	0	2	2	1	AEC
3	1	DMA024A	Mathematics-I	3	1	0	4	4	Foundation
4	1	DPH001B	Applied Physics	3	0	0	3	3	Foundation
5	1	DCO013A	Computer Programming and Logical Thinking*	3	0	0	3	3	Foundation
6	1	DPH002B	Applied Physics Lab	0	0	2	2	1	Foundation
7	1	DCO014A	Computer Programming and Logical Thinking Lab*	0	0	2	2	1	Foundation
8	1	JIC001A	Entrepreneurship Development	0	0	2	2	1	Multi-disciplinary
9	1	BCO570A	Digital Data and AI Literacy	0	0	4	4	2	SEC
10	1	DCH010A	Environment Education	2	0	0	2	0	VAC
1	2	DEN002C	Professional Skills	1	0	0	1	1	AEC
2	2	DEN002D	Professional Skills Lab	0	0	2	2	1	AEC
3	2	<i>DMA025A</i>	Mathematics-II	3	1	0	4	4	Foundation
4	2	DCO001B	Computer Programming in C++	2	0	0	2	2	Foundation
5	2	DCO002B	Computer Programming in C++ Lab	0	0	4	4	2	Foundation
6	2	BCO506A	Introduction To Linux Lab	0	0	2	2	1	Foundation
7	2	DCO018A	Advance Excel	0	0	4	4	2	SEC
8	2		Inculcation of Human Values and Professional Ethics in Higher Education Institutions	2	0	0	2	2	VAC
9	2	DCO006A	Engineering workshop	0	0	2	2	1	Foundation
10	2	DLW001A	Indian Constitution	2	0	0	2	0	VAC
11	2	BCO173B	Certified Secure Computer User	2	0	0	2	2	Core

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1	3	BCO011B	Computer Networks	3	0	0	3	3	Core
2	3	BCO002B	Data Structures and Algorithms	3	1	0	4	4	Core
3	3	BAS007B	Discrete Mathematics	3	0	0	3	3	Foundation
4	3	BCO001B	Software Engineering	3	0	0	3	3	Foundation
5	3	BCO008B	Operating Systems	3	0	0	3	3	Core
6	3	BCO005B	Data Structure and Algorithms Lab	0	0	2	2	1	Core
7	3	BCO014B	Operating Systems Lab	0	0	2	2	1	Core
8	3	BCO594A	Computer Networks Lab	0	0	2	2	1	Core
9	3	DBA112A	Leadership and Management Skills	2	0	0	2	2	AEC
10	3	BCO610A	Prompt Engineering for C and C++	0	0	4	4	2	SEC
11	3		Any of IKS Basic Courses	2	0	0	2	2	VAC
12	3	BCO339A	EC-Council Certified Security Specialist	4	0	0	4	4	Core
1	4		Open Elective-I	3	0	0	3	3	Multidisciplinary
2	4	BCO081C	Python Programming	2	0	0	2	2	Core
3	4	BCO009B	Computer Organization and Design	3	0	0	3	3	Core
4	4	BCO010C	Database Management Systems	3	1	0	4	4	Core
5	4	BCO094B/ BCO101A	Google Cloud Computing Fundamental/ Salesforce Administrator LAB	0	0	2	2	1	Department Elective
6	4	BCO013B	Database Management Systems Lab	0	0	2	2	1	Core
7	4	BCO082C	Python Programming Lab	0	0	4	4	2	Core
8	4		Universal Human Value	2	0	0	2	2	AEC
9	4	BCO612A	Competitive Coding using AI (DSA)	0	0	4	4	2	SEC
10	4		Any of IKS Elective Course	2	0	0	2	2	VAC
11	4	BCO340A	Certified Network Defender	4	0	0	4	4	Core

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1	5	BCO017A	Formal Languages & Automation Theory	3	1	0	4	4	Core
2	5	BCO023A	Design & Analysis of Algorithms	3	1	0	4	4	Core
3	5	BCO652A	Introduction to Cyber Crimes & Law	3	0	0	3	3	Core
4	5	BCO434A	Information Security	3	0	0	3	3	Core
5	5	BCO074B	Minor Project	0	0	8	8	4	Core
6	5		Open Elective II	3	0	0	3	3	Multi-disciplinary
7	5	BCO025B	Design & Analysis of Algorithms Lab	0	0	2	2	1	Core
8	5	BCO435A	Information Security Lab	0	0	2	2	1	Core
9	5	BCO571A	Prompt Engineering With Java and Python	0	0	4	4	2	SEC
10	5	BCO319A	Certified Ethical Hacker	4	0	0	4	4	Core
1	6	BCO028A	Compiler Construction	3	1	0	4	4	Core
2	6	BCO188A	Cyber Forensics & Investigation	3	0	0	3	3	Core
3	6	BCO189A	Web and Android Security	3	0	0	3	3	Core
4	6	BCO007A	Computer Graphics	3	0	0	3	3	Core
5	6	BCO031B	Compiler Design Lab	0	0	2	2	1	Core
6	6	BCO461A	Web and Android Security Lab	0	0	2	2	1	Core
7	6	BCO015B	Computer Graphics Lab	0	0	2	2	1	Core
8	6		Open Elective III	3	0	0	3	3	Multi-disciplinary
9	6	BCO642A	Machine Learning	1	0	0	1	1	Core
10	6	BCO643A	Machine Learning and Capstone Project Using Prompt Engineering	0	0	6	6	3	Core

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1	7	BCO653A	Advanced Cyber Security Techniques	3	0	0	3	3	Core
2	7	BCO654A	Application of AI in Cyber Security	3	0	0	3	3	Core
3	7	BCO655A	Network & Cloud Security	3	0	0	3	3	Core
4	7	BCO656A	Advanced Cyber Security Lab	0	0	2	2	1	Core
5	7	BCO657A	Network Security Lab	0	0	2	2	1	Core
6	7	BCO207A	Technical Writing	0	0	2	2	1	Core
1	8	BCO034C	Industrial Project/Dissertation	0	0	32	32	16	Core

Total Cred 170