

DAYANANDA SAGAR UNIVERSITY

SCHOOL OF ENGINEERING



**SCHEME & SYLLABUS
FOR
BACHELOR OF TECHNOLOGY (B.Tech)
COMPUTER SCIENCE & ENGINEERING
(up to 6th Semester)
(CSE)
(With effect from 2021-22)**

SCHEME – B.TECH — 2021-22 ONWARDS

III SEM - COMPUTER SCIENCE & ENGINEERING

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	103	21CS2301	DISCRETE MATHEMATICAL STRUCTURES	CR	3	-	-	-	3	*	***
2	103	21CS2302	DATA STRUCTURES	CR	3	-	-	-	3	*	***
3	103	21CS2303	DIGITAL ELECTRONICS & LOGIC DESIGN	CR	3	-	-	-	3	*	***
4	103	21CS2304	FULL STACK DEVELOPMENT	CR	2	-	2	-	3	*	***
5	103	21CS2305	COMPUTATIONAL THINKING WITH PYTHON	CR	2	-	2	-	3	*	***
6	103	21CS2306	INTRODUCTION TO NETWORKS & CYBERSECURITY	CR	3	-	-	-	3	*	***
7	103	21CS2307	DATA STRUCTURES LAB	CR	-	-	2	-	1	*	***
		21CS2308	DIGITAL ELECTRONICS & LOGIC DESIGN LAB				2		1		
9	103	21CS2309	MANAGEMENT AND ENTREPRENEURSHIP	CR	2	-	-	-	2	*	***
10	103	21CS2310	LIBERAL STUDIES – I	CR	1	-	-	-	1	*	***
					19	-	08	-	23		

CR – CREDIT, AU – AUDIT, L – LECTURE, T – TUTORIAL, P – PRACTICAL, S/P – SEMINAR/PROJECT, C – NO. OF CREDITS

SCHEME – B.TECH — 2021–22 ONWARDS

IV SEM – COMPUTER SCIENCE & ENGINEERING

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	103	21CS2401	PROBABILITY AND STATISTICS	CR	3	-	-	-	3	*	***
2	103	21CS2402	DESIGN AND ANALYSIS OF ALGORITHMS	CR	3	-	-	-	3	*	***
3	103	21CS2403	PRINCIPLES OF MICROPROCESSORS AND COMPUTER ORGANIZATION	CR	4	-	-	-	4	*	***
4	103	21CS2404	FINITE AUTOMATA & FORMAL LANGUAGES	CR	3	-	2	-	4	*	***
5	103	21CS2405	SOFTWARE ENGINEERING AND PROJECT MANAGEMENT	CR	3	-	-	-	3	*	***
6	103	21CS2406	LINUX PROGRAMMING & SCRIPTING	CR	2	-	2	-	3	*	***
7	103	21CS2407	DESIGN AND ANALYSIS OF ALGORITHMS LAB	CR	-	-	2	-	1	*	***
8	103	21CS2408	MICROPROCESSORS LABORATORY	CR	-	-	2	-	1	*	***
9	103	21CS2409	SPECIAL TOPICS – I	CR	-	-	-	4	2	*	***
10	103	21CS2410	LIBERAL STUDIES – II	CR	1	-	-	-	1	*	***
					19	-	08	04	25		

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SCHEME - B.TECH - 2021-22 ONWARDS

V SEM - COMPUTER SCIENCE & ENGINEERING

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	103	21CS3501	DATABASE MANAGEMENT SYSTEMS	CR	3	-	-		3	*	***
2	103	21CS3502	OBJECT ORIENTED DESIGN AND PROGRAMMING	CR	3	-	-	-	3	*	***
3	103	21CS3503	OPERATING SYSTEMS	CR	3	1	-	-	4	*	***
4	103	21CS3504	MACHINE LEARNING	CR	3	-	-	2	4	*	***
5	103	21CS35XX	PROFESSIONAL ELECTIVE-1	CR	3	-	-	-	3	*	AS INDICATED IN ELECTIVE LIST
6	103	21OEXXX	OPEN ELECTIVE-1	CR	3	-	-	-	3	*	***
7	103	21CS3505	DATABASE MANAGEMENT SYSTEMS LABORATORY	CR	-	-	2	-	1	*	***
8	103	21CS3506	OPERATING SYSTEMS LABORATORY	CR	-	-	2	-	1	*	***
9	103	21CS3507	SPECIAL TOPICS -II	CR		-	-	4	2	*	***
					18	1	4	6	24		

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SCHEME - B.TECH - 2021-22 ONWARDS
V SEM-PROFESSIONAL ELECTIVE - I

S L	COURSE CODE	COURSE TITLE	SCHEME OF TEACHING						PREREQUISITE		
			L	T	P	S/P	C	SEM	COURSE CODE		
1	21CS3508	GRAPH THEORY	03	-	-	-	03	-	**		
2	21CS3509	MICROCONTROLLERS AND EMBEDDED SYSTEMS	03	-	-	-	03	-	**		
3	21CS3510	INTERNET OF THINGS	03	-	-	-	03	-	**		
4	21CS3511	AGILE SOFTWARE ENGINEERING	03	-	-	-	03	-	**		
5	21CS3512	DATA WAREHOUSE AND DATA MINING	03	-	-	-	03	-	**		
6	21CS3513	MOBILE COMPUTING AND APPS DEVELOPMENT	03	-	-	-	03	-	**		
7	21CS3514	MOOC	-	-	-	-	03	-	**		

SCHEME – B.TECH – 2021–22 ONWARDS

VI SEM – COMPUTER SCIENCE & ENGINEERING

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING						PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE	
1	103	21CS3601	COMPILER DESIGN AND SYSTEM SOFTWARE	CR	3	1	-	-	4	*	***	
2	103	21CS3602	COMPUTER NETWORKS	CR	3	-	-	-	3	*	***	
3	103	21CS3603	CLOUD COMPUTING	CR	3	-	-	-	3	*	***	
4	103	21CS36XX	PROFESSIONAL ELECTIVE-2	CR	3	-	-	-	3	*	AS INDICATED IN ELECTIVE LIST	
5	103	21CS36XX	PROFESSIONAL ELECTIVE-3	CR	3	-	-	-	3	*		
6	103	21OEXXXX	OPEN ELECTIVE-2	CR	3	-	-	-	3	*	***	
7	103	21CS3604	COMPILER DESIGN AND SYSTEM SOFTWARE LAB	CR	-	-	2	-	1	*	***	
8	103	21CS3605	COMPUTER NETWORKS LAB	CR	-	-	2	-	1	*	***	
					18	02	04	-	21			

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VI SEM-PROFESSIONAL ELECTIVE – II & III

SL	COURSE CODE	COURSE TITLE	SCHEME OF TEACHING					PREREQUISITE	
			L	T	P	S/P	C	SEM	COURSE CODE
1	21CS3606	BLOCK CHAIN AND DISTRIBUTED LEDGER	3	-	-	-	03	*	***
2	21CS3607	MACHINE LEARNING FOR HEALTHCARE	3	-	-	-	03	*	***
3	21CS3608	DEEP LEARNING	3	-	-	-	03	*	***
4	21CS3609	DIGITAL IMAGE PROCESSING	3	-	-	-	03	*	***
5	21CS3610	HUMAN COMPUTER INTERFACE	3	-	-	-	03	*	***
6	21CS3611	UG RESEARCH PROJECT-I/PRODUCT DEVELOPMENT FOUNDATION-I	-	-	-	06	03	*	***
7	21CS3612	GAME THEORY	3	-	-	-	03	*	***
8	21CS3613	DATA SCIENCE	3	-	-	-	03	*	***
9	21CS3614	BIG DATA ANALYTICS	3	-	-	-	03	*	***
10	21CS3615	QUANTUM COMPUTATION	3	-	-	-	03	*	***
11	21CS3616	MOOC	3	-	-	-	03	*	***