

**DAYANANDA SAGAR UNIVERSITY**  
SHAVIGE MALLESHWARA HILLS, KUMARASWAMY LAYOUT  
BENGALURU – 560 111, KARNATAKA.

**SCHOOL OF ENGINEERING**



**SCHEME & SYLLABUS**  
**FOR**  
**BACHELOR OF TECHNOLOGY (B.Tech) – I YEAR**  
**COMMON TO ALL BRANCHES**  
**(With effect from 2021-22)**

**SCHEME - B.TECH – 2021-22 ONWARDS**  
**I SEM – CHEMISTRY CYCLE**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	101-105 & 121-123	21EN1101	LINEAR ALGEBRA AND CALCULUS	CR	3	1	-	-	4	*	***
2	101-105 & 121-123	21EN1102	ENGINEERING CHEMISTRY	CR	3	-	2	-	4	*	***
3	101-105 & 121-123	21EN1103	BASIC ELECTRICAL ENGINEERING	CR	3	-	-	-	3	*	***
4	101-105 & 121-123	21EN1104	ELEMENTS OF MECHANICAL ENGINEERING	CR	2	-	2	-	3	*	***
5	101-105 & 121-123	21EN1105	FUNDAMENTALS OF PROGRAMMING	CR	3	-	4	-	5	*	***
6	101-105 & 121-123	21EN1106	ENVIRONMENTAL SCIENCES	CR	2	-	-	-	2	*	***
7	101-105 & 121-123	21EN1107	KANNADA KALI/MANASU	CR	1	-	-	-	1	*	***
					<b>17</b>	<b>01</b>	<b>08</b>	<b>--</b>	<b>22</b>		

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits

**SCHEME - B.TECH – 2021-22 ONWARDS**  
**I SEM - PHYSICS CYCLE**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	101-105 & 121-123	21EN1101	LINEAR ALGEBRA AND CALCULUS	CR	3	1	-	-	4	*	***
2	101-105 & 121-123	21EN1108	ENGINEERING PHYSICS	CR	3	-	2	-	4	*	***
3	101-105 & 121-123	21EN1109	BASIC ELECTRONICS	CR	3	-	2	-	4	*	***
4	101-105 & 121-123	21EN1110	ENGINEERING GRAPHICS AND DESIGN	CR	1	-	4	-	3	*	***
5	101-105 & 121-123	21EN1111	ENGINEERING MECHANICS	CR	2	-	-	-	2	*	***
6	101-105 & 121-123	21EN1112	BIOLOGICAL SCIENCES	CR	2	-	-	-	2	*	***
7	101-105 & 121-123	21EN1113	TECHNICAL COMMUNICATION	CR	2	-	-	-	2	*	***
8	101-105 & 121-123	21EN1114	DESIGN THINKING	CR	-	-	2	-	1	*	***
					<b>16</b>	<b>01</b>	<b>10</b>	<b>--</b>	<b>22</b>		
9	101-105 & 121-123	21AU0004	CONSTITUTION OF INDIA AND ETHICS	AU	02	--	--	--	--	*	***

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**SCHEME - B.TECH – 2021-22 ONWARDS**  
**II SEM - CHEMISTRY CYCLE**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	101-105 & 121-123	21EN1201	TRANSFORMS AND DIFFERENTIAL EQUATIONS	CR	3	1	-	-	4	*	***
2	101-105 & 121-123	21EN1102	ENGINEERING CHEMISTRY	CR	3	-	2	-	4	*	***
3	101-105 & 121-123	21EN1103	BASIC ELECTRICAL ENGINEERING	CR	3	-	-	-	3	*	***
4	101-105 & 121-123	21EN1104	ELEMENTS OF MECHANICAL ENGINEERING	CR	2	-	2	-	3	*	***
5	101-105 & 121-123	21EN1105	FUNDAMENTALS OF PROGRAMMING	CR	3	-	4	-	5	*	***
6	101-105 & 121-123	21EN1106	ENVIRONMENTAL SCIENCES	CR	2	-	-	-	2	*	***
7	101-105 & 121-123	21EN1107	KANNADA KALI/MANASU	CR	1	-	-	-	1	*	***
					<b>17</b>	<b>01</b>	<b>08</b>	<b>--</b>	<b>22</b>		

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**SCHEME - B.TECH – 2021-22 ONWARDS**  
**II SEM – PHYSICS CYCLE**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	101-105 & 121-123	21EN1201	TRANSFORMS AND DIFFERENTIAL EQUATIONS	CR	3	1	-	-	4	*	***
2	101-105 & 121-123	21EN1108	ENGINEERING PHYSICS	CR	3	-	2	-	4	*	***
3	101-105 & 121-123	21EN1109	BASIC ELECTRONICS	CR	3	-	2	-	4	*	***
4	101-105 & 121-123	21EN1110	ENGINEERING GRAPHICS AND DESIGN	CR	1	-	4	-	3	*	***
5	101-105 & 121-123	21EN1111	ENGINEERING MECHANICS	CR	2	-	-	-	2	*	***
6	101-105 & 121-123	21EN1112	BIOLOGICAL SCIENCES	CR	2	-	-	-	2	*	***
7	101-105 & 121-123	21EN1113	TECHNICAL COMMUNICATION	CR	2	-	-	-	2	*	***
8	101-105 & 121-123	21EN1114	DESIGN THINKING	CR	-	-	2	-	1	*	***
					<b>16</b>	<b>01</b>	<b>10</b>	<b>--</b>	<b>22</b>		
9	101-105 & 121-123	21AU0004	CONSTITUTION OF INDIA AND ETHICS	AU	02	--	--	--	--	*	***

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**DAYANANDA SAGAR UNIVERSITY**

**SCHOOL OF ENGINEERING**



**SCHEME & SYLLABUS  
FOR  
BACHELOR OF TECHNOLOGY (B.Tech)  
COMPUTER SCIENCE & ENGINEERING**

**(3<sup>rd</sup> to 4<sup>th</sup> 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		

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