

Program Structure (B.Tech Civil Engineering)

Semester-First						
S.No.	Course Code	Course Name	L	T	P	C
1	BCS01T1001	Data Analytics inclusive Excel and Tableau	1	0	2	2
2	BCS01T1002	AI Fundamentals	2	0	0	2
3	BCS01T1003	Programming for Problem Solving C	1	0	4	3
4	BLL01T1003	Communication Skill	2	0	0	2
5	BBS01T1001	Multi Variable Calculus	3	0	2	4
6	BEE01T1003	Basic Electrical and Electronics Engineering	2	0	2	3
7	BBS01T1002	Semi-conductor Physics	2	0	2	3
8	BME01T1001	Engineering Graphics and Introduction to Digital Fabrication	1	0	2	2
9	BBSUCT1004	Environmental Sciences	2	0	0	0
Total						21
Semester-Second						
S.No.	Course Code	Course Name	L	T	P	C
1	BBS01T1008	Biology for Engineers	3	0	0	3
2	BEE01T1004	Embedded Technology and IoT	1	0	2	2
3	BBS01T1003	Linear Algebra & Differential Equations	3	0	0	3
4	BEE01T1005	Introduction to Digital Systems	2	0	2	3
5	BCS01T1010	Introduction to Python Programming	2	0	2	3
6	BCE01T3201	Engineering Mechanics	1	0	2	2
7	BLEUCT1003	Creativity, Innovation and Entrepreneurship & IPR	1	0	2	2
8	BLEUCT1002	Creative & Liberal Arts	0	0	2	1
9	BME01T1002	Engineering workshop	1	0	2	2
10	BCS01T1007	Alexa Skilling	0	0	2	0
Total						21
Semester-Third						
S.No.	Course Code	Course Name	L	T	P	C
1	MATH2001	FUNCTIONS OF COMPLEX VARIABLES AND TRANSFORMS	3	0	0	3
2	SLBT2021	ENGLISH PROFICIENCY AND APTITUDE BUILDING - 3	0	0	4	2
3	BCE01T3301	Mechanics of Materials	3	0	0	3
4	BCE01T3302	Fluid Mechanics	3	0	0	3
5	BCE01T3303	Surveying	3	0	0	3
6	BCE01P3302	Fluid Mechanics Lab	0	0	2	1
7	BCE01P3303	Surveying Practices	0	0	2	1
8	BCE01P3304	Engineering Drawing	0	0	4	2
9	BCE01P3301	Mechanics of Materials Lab	0	0	2	1
10	BCSUCT1002	Disruptive Technologies {Introduction to Cloud, Introduction to IOT, Introduction to Sensors and Tra	0	0	4	2

11	BCSUCT100 1	AI and its Applications	0	0	4	2
Total						23
Semester-Fourth						
S.No.	Course Code	Course Name	L	T	P	C
1	MATH2003	PROBABILITY AND STATISTICS	3	0	0	3
2	SLBT2022	ENGLISH PROFICIENCY AND APTITUDE BUILDING - 4	0	0	4	2
3	BCE01T3401	Structural Analysis	3	0	0	3
4	BCE01T3402	Construction Engineering	3	0	0	3
5	BCE01T3403	Geotechnical Engineering	3	0	0	3
6	BCE01T3404	Hydrology & Hydraulic Systems	3	0	0	3
7	BCE01T3701	Remote Sensing & Geographical Information System	3	0	0	3
8	BCE01P3401	Structural Analysis Lab	0	0	2	1
9	BCE01P3402	Construction Engineering Lab	0	0	2	1
10	BCE01P3403	Geotechnical Engineering Lab	0	0	2	1
Total						23
Semester-Fifth						
S.No.	Course Code	Course Name	L	T	P	C
1	BCE01T3501	Design of Reinforced Concrete Structures	3	0	0	3
2	BCE01T3502	Transportation Engineering-I	3	0	0	3
3	BCE01T3503	Water Supply & Treatment Systems	3	0	0	3
4	BCE01T5701	Program Elective - I (Advanced Structural Analysis)	2	0	0	2
5	BCE01T3507	Engineering Economics and Management	3	0	0	3
6	BCE01P3502	Transportation Engineering Lab	0	0	2	1
7	BCE01P3503	Water Quality Analysis Lab	0	0	2	1
8	SLBT3031	English Proficiency and Aptitude Building - 4 (Soft Skill-5)	0	0	4	2
9	BCE01P3505	Industrial Internship - I	0	0	0	1
10	BCE01P3504	CAD Lab - I (AUTOCAD)	0	0	4	2
11	BCE01P3701	Remote Sensing and GIS Lab	0	0	2	1
12	BCE01P3506	Surveying Camp	0	0	0	1
Total						23
Semester-Sixth						
S.No.	Course Code	Course Name	L	T	P	C
1	BCE01T3601	Design of Steel Structures	3	0	0	3
2	BCE01T3602	Transportation Engineering - II	3	0	0	3
3	BCE01T3603	Waste Water Treatment & Disposal Systems	3	0	0	3
4	BCE01T3604	Quantity Surveying and Estimating	2	0	0	2
5	BCE01P3605	Analysis and Design Lab (STAAD PRO)	0	0	2	1
6	BCE01P3606	Design and Innovation	0	0	2	1
7		Open Elective - I	3	0	0	3
8		Program Elective - II	2	0	0	2
9	BCE01P3607	Applications of 3D printing	0	0	2	1

10		Foreign Language (German / Japanese / French)	0	0	4	2
11	SLBT3002	Campus to Corporate	0	0	4	2
12		Ethics and Professional Competency	0	0	2	1
13		Excel Training & PPT Training	0	0	1	1
Total						25
Semester-Seventh						
S.No.	Course Code	Course Name	L	T	P	C
1		Program Elective - III	2	0	0	2
2		Program Elective - IV	2	0	0	2
3		Program Elective - V	2	0	0	2
4		Program Elective - VI	2	0	0	2
5	BCE01P3998	Capstone Phase-1	0	0	0	6
6	BCE01P3703	Industrial Internship - II	0	0	0	2
Total						16
Semester-Eighth						
S.No.	Course Code	Course Name	L	T	P	C
1	BCE01P3999	Capstone Phase-2	0	0	0	10
Total						10

List of Program Electives

Sr.No	Course Code	Course Name	L	T	P	C
1	BCE01T5501	Advanced Geotechnical Engineering	2	0	0	2
2	BCE01T5502	Ground Improvement Techniques	2	0	0	2
3	BCE01T5503	Soil Dynamics and Machine Foundation	2	0	0	2
4	BCE01T5504	Structures on Expansive Soils	2	0	0	2
5	BCE01T5505	Foundation Engineering	2	0	0	2
6	BCE01T5601	Mass Transport Management	2	0	0	2
7	BCE01T5602	Traffic Engineering	2	0	0	2
8	BCE01T5603	Highway Pavement Design	2	0	0	2
9	BCE01T5604	Pavement Constructions	2	0	0	2
10	BCE01T5605	Transportation Safety and Environment	2	0	0	2
11	BCE01T5621	Pollution Control and Monitoring	2	0	0	2
12	BCE01T5622	Air and Noise Pollution	2	0	0	2
13	BCE01T5623	Solid Waste Management	2	0	0	2
14	BCE01T5624	Bioenergy Technologies	2	0	0	2
15	BCE01T5625	Environmental Ecology	2	0	0	2
16	BCE01T5701	Advanced Structural Analysis	2	0	0	2
17	BCE01T5702	Rehabilitation of structures & Vaastu Principles	2	0	0	2
18	BCE01T5703	Bridge Engineering	2	0	0	2
19	BCE01T5704	Earthquake Engineering	2	0	0	2
20	BCE01T5705	Advanced Concrete Design	2	0	0	2
21	BCE01T5721	Construction Planning and Management	2	0	0	2
22	BCE01T5722	Economics and Project Finance for Civil Engineers	2	0	0	2

23	BCE01T5723	Construction Contracts Administration and Management	2	0	0	2
24	BCE01T5724	Value Engineering and Valuation	2	0	0	2
25	BCE01T5725	Infrastructure Development	2	0	0	2