



**2nd year B.Tech. Civil & Infrastructure Engineering
Program Structure
For AY 2020-21**

Cat	Course	LTP	C H	NC	GC	Cat	Course	LTP	C H	NC	GC
I Semester						II Semester					
IE	Engineering Mechanics	2-1-0	3	-	3	IE	Introduction to Electrical Engineering	3-0-2	5	-	4
IS	Chemistry	3-0-0	3	-	3	IE	Introduction to Computer Science	3-0-2	5	-	4
IS	Physics	3-0-0	3	-	3	IE	Introduction to Bioengineering	3-0-2	5	-	4
IS	Chemistry Lab	0-0-2	2	-	1						
IS	Physics Lab	0-0-2	2	-	1	0					
IS	Mathematics I	3-1-0	4	-	4	IS	Mathematics II	3-1-0	4	-	4
IE	Engineering Visualization	0-0-2	2	-	1	IE	Engineering Realization	0-0-2	1	-	1
NE	Engineering Design I	0-0-2	2	1	-	NE	Engineering Design II	0-0-2	2	1	-
NH	Communication Skill I	0-0-2	2	1	-	NH	Communication Skill II	0-0-2	2	1	-
NH	Social Connect and responsibilities I	0-0-1	1	0.5	-	NH	Social Connect and responsibilities II	0-0-1	1	0.5	-
NH	Performing Arts I /Sports I	0-0-1	1	0.5	-	NH	Performing ArtsII/Sports II	0-0-1	1	0.5	-
Total		11-2-12	25	3	16	Total		12-1-14	26	3	17
III Semester						IV Semester					
LS	Probability, Statistics and Stochastic Process	3-1-0	4	-	4	IE	Structure of Materials Corrosion Polymers	3 × 1-0-0	3	-	3
IE	Thermodynamics	3-1-0	4	-	4	PC	Mechanics of solids	3-1-0	6		4
PC	Geoinformatics	3-0-2	6		4	PC	Fluid Mechanics	3-1-2	6		5
IE	Introduction to Machine Learning	3-0-2	5	-	4	IE	Signals and Systems	3-1-0	4	-	4
LS	Introduction to Analytical Mechanics	3-0-0	3	-	3	IH	Humanities I	3-0-0	3	-	3

NE	Intro. To Profession	0-0-2	2	1		PC	Data Structure and Algorithm	3-0-2	3	-	4	
Total		15-2-6	24	1	19	Total		18-1-6	25	-	23	
V Semester						VI Semester						
PC	Transportation Engineering	3-0-0	3		3	PC	Water Resources Engineering	3-0-2	5		4	
PC	Structural Analysis	3-0-2	5		4	PC	Reinforced Concrete Design	3-0-2	5		4	
PC	Environmental Engineering	3-0-2	5		4	PC	Smart Infrastructure Engineering	3-0-0	3		3	
PC	Geotechnical Engineering	3-1-0	4		4	PC	Advanced Structural Analysis	3-0-2	5		4	
PC	Construction Technology and Practices	3-0-2	5		4	PC	Geotechnical Engineering Lab	0-0-2	2		1	
IH	Humanities II	3-0-0	3	-	3	PE	Programme/O pen Elective	3-0-0	3		3	
NH	Professional Ethics I	0-1-0		1	-	NH	Professional Ethics II	0-1-0		1	-	
Total		18-2-6	25	1	22	Total		15-1-8	23	1	19	
VII Semester						VIII Semester						
PP	B. Tech. Project	0-0-6	6	-	3	IH	Humanities IV	3-0-0	3	-	3	
PE/OE	Programme/Open Electives	8-0-0	8	-	8	PE/OE	Programme/Open Electives	15-0-0	15	-	15	
IH	Humanities III	3-0-0	3	-	3							
IS	Environmental Science	2-0-0	2	-	2							
Total		13-0-6	19	-	16	Total		18-0-0	18	-	18	
									Total of Graded Credit		-	150
									Non-Graded Credit		9	-
									Non-Graded Design Credits		6	-
									Grand Total		165	