



School of CIVIL Engineering
Program Structure of B.Tech.(Civil) Four Year Full Time Degree
(Applicable for Entry Batch 2020)

1 st Semester						
S. No.	Course Code	Course Title	L	T	S/ P	C
1	MTL 1025	Engineering Mathematics-I	3	0	0	3
2	CEL1001	Introduction to Civil Engineering	1	0	0	NC
3	LNL 1411	Professional Communication	2	0	0	2
4	PHL 1012	Engineering Physics	3	0	0	3
5	EEL 1006	Fundamentals of Electrical Engineering	3	0	0	3
6	MEL 1039	Engineering Graphics with CAD	1	0	2	2
7	CSL 1022	Introduction to C Programming	3	0	0	3
8	PCN1010	NSS	0	0	0	NC
9	LNP 1411	Professional Communication Lab	0	0	2	1
10	PHP 1012	Engineering Physics Lab	0	0	2	1
11	EEP 1006	Fundamentals of Electrical Engineering Lab	0	0	2	1
12	CSP 1022	Introduction to C Programming Lab	0	0	2	1
		Induction Program				NC
Total Credits						20
3 rd Semester						
S. No.	Course Code	Course Title	L	T	S/ P	C
1	CEL 2021	Strength of Materials	3	0	0	3
2	CEL 2022	Concrete Technology	3	0	0	3
3	CEL 2041	Fluid Mechanics -I	3	0	0	3
4	PCL 2042	Introduction to Logic	3	0	0	3
5	XXXX	Open Elective-I	3	0	0	3
6	CEL2061	Geotechnical Engineering-I	3	0	0	3
7	MTN 2023	Integral Transforms & complex analysis	3	0	0	N C
8	CEC 2071	Summer Internship/Training-I	0	0	0	1
9	CEP 2021	Strength of Materials Lab	0	0	2	1
10	CEP 2022	Concrete Technology Lab	0	0	2	1
11	CEP 2041	Fluid Mechanics-I Lab	0	0	2	1
Total Credits						22

2 nd Semester						
S. No	Course Code	Course Title	L	T	S/P	C
1	MTL 1026	Engineering Mathematics-II	3	0	0	3
2	CEL 1011	Applied Mechanics	3	1	0	4
3	CSL 1028	Programming using Python	2	0	0	2
4	PCL 1067	Discourse on Human Virtues	3	0	0	3
5	CEL 1012	Building Materials and Construction	3	0	0	3
6	MEP 1114	Engineering Workshop	0	0	2	1
7	LNP 1412	Language Lab	0	0	2	1
8	CSP 1028	Programming using Python Lab	0	0	4	2
9	CEP 1012	Building Materials and Construction Lab	0	0	2	1
Total Credits						20
4 th Semester						
S. No	Course Code	Course Title	L	T	S/ P	C
1	CEL 2023	Structural Analysis-I	3	1	0	4
2	CEL 2031	Design of Concrete Structures-I	3	1	0	4
3	CEL 2042	Fluid Mechanics-II	3	1	0	4
4	CEL 2081	Transportation Engineering-I	3	0	0	3
5	CEL 2051	Surveying for Civil Engineering	2	1	0	3
6	CEL 2062	Geotechnical Engineering-II	3	0	0	3
7	CEP 2051	Surveying for Civil Engineering Lab	0	0	2	1
8	CEP 2062	Geotechnical Engineering-II Lab	0	0	2	1
9	CEP 2081	Transportation Engineering-I Lab	0	0	2	1
Total Credits						24



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5 th Semester						
S. No	Course Code	Course Title	L	T	S/P	C
1	CEL 3024	Structural Analysis-II	3	0	0	3
2	CEL 3032	Design of Concrete Structures-II	3	0	0	3
3	CEL 3091	Environmental Engineering -I	3	0	0	3
4	CEL 3082	Transportation Engineering-II	3	0	0	3
5	CEL 3101	Construction Management Estimation & Costing	3	0	0	3
6	CEE 3XXX	School Elective-I	3	0	0	3
7	PCN3079	Constitution of India	1	0	0	0
8	CEC 3072	Summer Internship/Training-II	-	-	-	1
9	CEP 3091	Environmental Engineering –I Lab	0	0	2	1
10	CEP 3024	Structural Analysis–II Lab	0	0	2	1
Total Credits						21
7 th Semester						
Sl. No	Course Code	Course Title	L	T	S/P	C
1	CEL 4034	Design of Steel Structures-II	3	0	0	3
2	CEE 4XXX	School Elective-III	3	0	0	3
3	XXXX	Open Elective-III	3	0	0	3
4	CEE 4XXX	School Elective-III	3	0	0	3
5	CED 4111	Minor Project				4
6	BUL 4011	Entrepreneurship Management	3	0	0	3
7	CEC 4073	Summer Internship/Training-III				2
9	CEP 4034	Design of Steel Structures-II Lab	0	0	2	1
Total Credits						22

6 th Semester						
S. No	Course Code	Course Title	L	T	S/P	C
1	CEL 3033	Design of Steel Structures-I	3	0	0	3
2	CEL 3043	Water Resources Engineering	3	0	0	3
3	CEL 3092	Environmental Engineering-II	3	0	0	3
4	CEL 3063	Rock Mechanics & Tunneling Technology	3	0	0	3
5	XXXX	Open Elective-II	3	0	0	3
6	CEE 3XXX	School Elective-II	3	0	0	3
7	CEP 3025	Computer Aided Design & Drawing	0	0	2	1
8	CEP 3043	Water Resources Engineering Lab	0	0	2	1
9	CEP 3092	Environmental Engineering-II Lab	0	0	2	1
Total Credits						21
8 th Semester						
Sl. No	Course Code	Course Title	L	T	S/P	C
1	CED 4112	Major Project (**)	-	-	-	10
2	CEE XXXX	School Elective-IV (**)	3	0	0	0
3	XXXX	Open Elective-IV (**)	3	0	0	0
4	CED 4113	Internship/Industrial Training (**)	-	-	-	10
Total Credits						10

Total Minimum Credits to be earned in order to become eligible for award of B. Tech. – Civil Four Year Full Time Degree: 160

** (Major project + SE IV +OE-III) or Internship in 8th Semester

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LIST OF SCHOOL ELECTIVES						
S. No.	Course Code	Course Title	L	T	S	C
A	CEE 3111	a. Advance Construction practice				
	CEE 3064	b. Advance Foundation Engineering				
	CEE 3052	c. Remote Sensing and GIS				
	CEE 3044	d. Advance Hydraulic				
	CEE 3113	e. Introduction to Engineering Seismology	3	0	0	3
	CEE 3112	f. Glass in Buildings: Design and applications				
	CEE 3083	g. Introduction to Multimodal Urban Transportation Systems (MUTS)				
B	CEE 3027	a. Advanced Structural Analysis	3	0	0	3
	CEE 3065	b. Engineering Geology				
	CEE 3093	c. Air and Noise pollution control				
	CEE 3102	d. Construction Equipment's & Automation				
C	CEE 4035	a. Earthquake Resistant Design	3	0	0	3
	CEE 4094	b. Solid and hazardous waste management				
	CEE 4083	c. High speed railway Engineering				
	CEE 4066	d. Reinforced Earth and Geotextiles				
D	CEE 4036	a. Pre stressed Concrete	3	0	0	NC
	CEE 4045	b. Industrial waste water treatment and management				
	CEE 4037	c. Bridge Engineering				
	CEE 4067	d. Earth and Earth Retaining Structures				

Note – In addition to the above mentioned courses MOOC (SYAYAM/NPTEL) may also be offered as School or Open Elective, as decided by AAC of School from time to time

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