

School Name: School of Engineering
Department of Civil Engineering
Programme Name: BTech Civil Engineering
Scheme: 2016-2020

I SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	C
1	LLL111	Basic English	3	0	0	3
2	MAT113	Differential and Integral Calculus	3	0	0	3
3	PHY111	Modern Physics	3	0	0	3
4	PHY151	Physics Lab I	0	0	2	1
5	CHY111	General Chemistry	3	0	0	3
6	CHY151	Chemistry Lab I	0	0	2	1
7	EEE101	Basic Electrical and Electronics Engineering	3	0	0	3
8	EEE151	Basic Electrical and Electronics Engineering Lab	0	0	2	1
9	EVS102	Environmental Science & Energy	3	0	0	3
10	MEE152	Workshop Practice	0/0	0/0	2 OR 4	1 OR 2
Total credits						22/23

II SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	C
1	LLL123	English Proficiency and Aptitude Building-1	0	0	4	2
2	MAT122	Matrices & Ordinary Differential Equations	3	1	0	4
3	PHY121	Condensed Matter Physics	3	0	0	3
4	PHY141	Physics Lab II	0	0	2	1
5	CHY122	Nano Science and Nano Technology	3	0	0	3
6	CHY141	Chemistry Lab II	0	0	2	1
7	HUM201	Psychology & Sociology	2	0	0	2
8	CSE101	Computer Programming and Problem Solving	3	0	0	3
9	CSE151	Computer Programming and Problem Solving Lab	0	0	2	1
10	LLL101	Universal Human Values and Ethics	3	0	0	3
11	MEE151	Engineering Graphics	0/0	0/0	4 OR 2	2 OR 1
Total credits						25/24

III SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	C
1	MAT212	Vector Calculus, Functions of Complex Variable & PDE	3	1	0	4
2	LLL213	English Proficiency and Aptitude Building-2	0	0	4	2
3	CLE211	Engineering Mechanics	3	0	0	3
4	CLE212	Engineering Geology	2	0	0	2
5	CLE213	Surveying	3	0	0	3
6	CLE214	Fluid Mechanics	3	0	0	3
7	CLE215	Building Materials and Technology	2	0	0	2
8	CLE252	Engineering Geology Laboratory	0	0	2	1
9	CLE253	Surveying Practices	0	0	2	1
10	CLE254	Fluid Mechanics Laboratory	0	0	2	1
11	CLP257	Civil CAD	0	0	2	1
Total credits						23

IV SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	C
1	LLL222	English Proficiency and Aptitude Building-3	0	0	4	2
2	MAT222	Numerical Methods	3	0	0	3
3	CLE230	Hydraulics and Hydraulics Machines	3	0	0	3
4	CLE223	Strength of Materials	3	0	0	3
5	CLE229	Concrete Technology	2	0	0	2
6	CLE227	Principles and Design of Water Supply and Treatment Systems	3	0	0	3
7	CLE231	Construction Planning and Management	3	0	0	3
8	MAT241	Numerical Methods lab	0	0	2	1
9	CLE243	Strength of Materials Laboratory	0	0	2	1
10	CLE244	Hydraulics and Hydraulic Machines Laboratory	0	0	2	1
11	CLE247	Concrete Testing Laboratory	0	0	2	1
12	CLE248	Water Analysis Laboratory	0	0	2	1
Total credits						24

V SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	C
1	LLL312	English Proficiency & Aptitude Building-4	0	0	4	2
2	MAT311	Probability and Statistics	3	0	0	3
3	CLE312	Structural Analysis	3	0	0	3
4	CLE331	Reinforced Concrete Structures	3	0	0	3
5	CLE332	Highway Engineering	3	0	0	3
6	CLE333	Soil Mechanics	3	0	0	3
7	CLE334	Water Resources Engineering	2	0	0	2
8	MGT302	Industrial Economics & Management	3	0	0	3
9	CLE335	Soil Mechanics Laboratory	0	0	2	1
10	CLE356	Highway Engineering Laboratory	0	0	2	1
Total credits						24

VI SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	C
1	LLL322	Campus to Corporate	0	0	4	2
2	CLE321	Quantity Surveying and Estimating	2	0	0	2
3	CLE322	Advanced Structural Analysis	3	0	0	3
4	CLE323	Principles and Design of Waste Water Treatment & Disposal Systems	3	0	0	3
5	CLE324	Geotechnical Engineering	3	0	0	3
6	CLE325	Transportation Engineering	3	0	0	3
7	CLE373	Pollution Control and Monitoring (Elective I)	3	0	0	3
8	CLE341	Structural Analysis Laboratory	0	0	2	1
9	CLE342	CAD Lab-I	0	0	2	1
10	ITS318P	IT Skills in C & C++ Programming	0	0	2	1
11	ITS319P	IT Skills in Databases	0	0	2	1
Total credits						23

VII SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	C
1	CLE413	Design of Steel Structures	3	0	0	3
2	CLE402	Air and Noise Pollution (Elective- II)	3	0	0	3
3	CLE403	Ground Water Engineering (Elective III)	3	0	0	3
4	CLE405	Open Channel Flow (Elective IV)	3	0	0	3
5	CLE466	Advanced Concrete Design (Elective V)	3	0	0	3
6	CLE454	CAD Lab-II	0	0	2	1
7	CLE456	Industrial Internship	-	-	-	1
8	CLE496	Capstone Design (Part I)	-	-	-	5
Total credits						22

VIII SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	C
1	CLE499	Capstone Design (part II)	-	-	-	15
Total credits						15

List of elective courses

Sl. No.	Course Code	Course Title	L	T	P	C
1	CLE371	Socio-Economic Studies & EIA	3	0	0	3
2	CLE372	Ground Improvement Techniques	3	0	0	3
3	CLE373	Pollution Control and Monitoring	3	0	0	3
4	CLE374	Natural Disaster Mitigation and Management	3	0	0	3
5	CLE375	Engineering Hydrology	3	0	0	3
6	CLE376	Renewable Sources of Energy & Hydro power Engineering	3	0	0	3
7	CLE377	Transport Planning and Management	3	0	0	3
8	CLE378	Traffic Engineering	3	0	0	3
9	CLE379	Open Channel Hydraulics	3	0	0	3
10	CLE381	Architecture and Town Planning	3	0	0	3
11	CLE382	Advanced Surveying	3	0	0	3
12	CLE383	Economics and Project Finance for Civil Engineers	3	0	0	3
13	CLE384	Highway Pavement Design	3	0	0	3

14	CLE385	Earthquake Engineering	3	0	0	3
15	CLE386	Structures on Expansive Soils	3	0	0	3
16	CLE401	Industrial Wastes Treatment and Disposal	3	0	0	3
17	CLE402	Air and Noise Pollution	3	0	0	3
18	CLE403	Ground Water Engineering	3	0	0	3
19	CLE404	River Engineering	3	0	0	3
20	CLE405	Open Channel Flow	3	0	0	3
21	CLE406	Mass Transport Management	3	0	0	3
22	CLE407	Operation and Management of Irrigation & Drainage Systems	3	0	0	3
23	CLE408	Water Resources Systems Engineering	3	0	0	3
24	CLE409	Soil Dynamics and Machine Foundation	3	0	0	3
25	CLE461	Advance Hydraulic Structures Design	3	0	2	3
26	CLE462	Tunnel Engineering	3	0	0	3
27	CLE463	Applications of Matrix Methods in Structural Analysis	3	0	0	3
28	CLE465	Dynamics of Structures	3	0	0	3
29	CLE466	Advanced Concrete Design	3	0	0	3
30	CLE467	Pre Stressed Concrete Structures	3	0	0	3
31	CLE468	Bridge Engineering	3	0	0	3