



SCHOOL OF CIVIL ENGINEERING

CURRICULUM

B. Tech. Civil Engineering

Breakup of Courses

Sl. No.	Category	Credits
1	University Core	70
2	University Elective	12
3	Programme Core	61
4	Programme Elective	37
	Minimum credits required to qualify	180
	Credits Offered	180

University Core Courses (70 Credits)

Course Code	Course Title	L	T	P	J	C	Pre requisites
CHY1002	Environmental Sciences	3	0	0	0	3	NONE
CHY1701	Engineering Chemistry	3	0	2	0	4	NONE
CLE3099	Industry Internship (II)	0	0	0	0	2	NONE
CLE3999	Technical Answers for Real World Problems (TARP)	1	0	0	8	3	PHY1999
CLE4098	Comprehensive Examination	0	0	0	0	2	NONE
CLE4099	Capstone Project	0	0	0	0	20	NONE
CSE1001	Problem Solving and Programming	0	0	6	0	3	NONE
CSE1002	Problem Solving and Object Oriented Programming	0	0	6	0	3	NONE
ENG1011	English for Engineers	0	0	4	0	2	NONE
EXC4097	Co-Extra Curricular	0	0	0	0	2	NONE
FLC4097	Foreign Language Courses	2	0	0	0	2	NONE
HUM1021	Ethics and Values	2	0	0	0	2	NONE
MAT1011	Calculus for Engineers	3	0	2	0	4	NONE

MAT2001	Statistics for Engineers	3	0	2	0	4	MAT1011
MGT1022	Lean Start-up Management	1	0	0	4	2	NONE
PHY1701	Engineering Physics	3	0	2	0	4	NONE
PHY1999	Introduction to Innovative Projects	1	0	0	4	2	NONE
STS4097	Soft Skills (6 courses)	0	0	0	0	6	NONE
Total Credits						70	

University Elective: 12 Credits

Programme Core Courses (61 Credits)

S. No.	Course Code	Course Title	L	T	P	J	C	Pre requisites
1.	CLE1003	Surveying	3	0	2	4	5	MAT1011
2.	CLE1004	Soil Mechanics and Foundation Engineering	3	0	2	0	4	MAT1011
3.	CLE1006	Environmental Engineering	2	0	2	4	4	MAT1011
4.	CLE1007	Construction Materials and Techniques	3	0	0	0	3	NONE
5.	CLE2001	Building Drawing	1	0	2	4	3	CLE1007
6.	CLE2002	Strength of Materials	2	2	2	0	4	MEE1002
7.	CLE2003	Structural Analysis	2	2	0	0	3	CLE2002
8.	CLE2004	Water Resource Engineering	2	0	2	4	4	MEE1004
9.	CLE2005	Transportation Engineering	2	0	0	4	3	CLE1007
10.	CLE3001	Quantity Surveying and Estimating	2	0	0	0	2	CLE2001
11.	CLE3002	Basics of Structural Design	2	2	2	0	4	CLE2003
12.	MAT2002	Applications of Differential and difference equations	3	0	2	0	4	MAT1011
13.	MAT3003	Complex variables and Partial Differential Equations	3	2	0	0	4	MAT2002
14.	MAT3005	Applied Numerical Methods	3	2	0	0	4	MAT2002
15.	MEE1001	Engineering Drawing	1	0	4	0	3	NONE
16.	MEE1002	Engineering Mechanics	2	2	0	0	3	NONE
17.	MEE1004	Fluid Mechanics	2	2	2	0	4	NONE
Total Credits							61	

Programme Electives (37 Credits):

Sl. No.	Course Code	Course Title	L	T	P	J	C	Pre requisites
1.	CLE1010	Natural Disaster Mitigation and Management	3	0	0	0	3	NONE
2.	CLE1011	Engineering Geology	2	0	0	0	2	NONE
3.	CLE1013	Environmental Impact Assessment	3	0	0	0	3	CHY1002
4.	CLE1016	Urban Planning	3	0	0	0	3	NONE
5.	CLE2007	Advanced Concrete Technology	3	0	2	4	5	CLE1007
6.	CLE2008	Construction Planning and Management	3	0	0	0	3	CLE1007
7.	CLE2009	Advanced Soil Mechanics	2	2	0	0	3	CLE1004
8.	CLE2010	Ground Improvement Techniques	2	0	0	4	3	CLE1004
9.	CLE2011	Soil Dynamics and Machine Foundation	2	2	0	0	3	CLE1004
10.	CLE2013	Advanced Foundation Engineering	2	2	0	0	3	CLE1004
11.	CLE2014	Geotechnical Earthquake Engineering	2	0	0	4	3	CLE1004
12.	CLE2015	Hydraulic Structures and Machinery	2	2	2	0	4	MEE1004
13.	CLE2017	Hydrology	3	0	0	0	3	MEE1004
14.	CLE2018	Industrial Wastes Treatment and Disposal	2	0	0	4	3	CLE1006
15.	CLE2019	Pollution Control and Monitoring	2	0	0	4	3	CLE1006
16.	CLE2020	Solid Waste Management	2	0	0	4	3	CLE1006
17.	CLE2022	Economics and Business Finance for Civil Engineers	3	0	0	0	3	CLE1007
18.	CLE2023	GIS and Remote Sensing	2	0	2	0	3	CLE1003
19.	CLE3004	Advanced Structural Analysis	2	2	2	0	4	CLE2003
20.	CLE3005	Ground Water Engineering	3	0	0	0	3	CLE2004
21.	CLE3007	Traffic Engineering	2	0	0	4	3	CLE2005
22.	CLE3008	Transport Planning and Management	2	0	0	4	3	CLE2005
23.	CLE3010	Architecture and Town Planning	2	0	0	4	3	CLE2001
24.	CLE3011	Finite Element Methods	2	2	0	0	3	CLE2003
25.	CLE4001	Design of Steel Structures	3	0	2	0	4	CLE3002
26.	CLE4002	Design of Advanced Concrete	2	0	0	4	3	CLE3002

Sl. No.	Course Code	Course Title	L	T	P	J	C	Pre requisites
		Structures						
27.	CLE4003	Prestressed Concrete Design	3	0	0	0	3	CLE3002
28.	CLE4004	Seismic Design of Structures	2	2	0	0	3	CLE3002
29.	MEE1024	Operations Research	2	2	0	0	3	MAT2001