

M.Tech., Civil Engineering
(Specialization in Geotechnical Engineering)
 (Regular, 2 Years, 4 Semesters, 68 Credits)

First Semester: Course Structure

Theory/ Practical	Sl no	Sub code	subject	Hours per week			Credit
				L	T	P	
Theory	1		Advanced Soil Mechanics	3	0	0	3
	2		Dynamics of Soil and Earthquake Engineering	3	0	0	3
	3		Continuum Mechanics	3	0	0	3
Practical	4		Geotechnical Lab	0	0	4	2
Programme Elective-I							
Theory	5		Program Elective -1	3	0	0	3
Open Elective-I							
Theory	6		Open Elective	3	0	0	3
Mandatory Learning Course							
Theory	7		Research Methodology and IPR	2	0	0	2
Audit Course-I							
Theory	8		Audit Course-I	2	0	0	0
Total				19	0	4	19

Program Elective-1

Sl no	Code	Subject
1		Rock Mechanics
2		Nature and Behavior of Soils and Rocks
3		Any other subject offered from time to time with the approval

Second Semester: Course Structure

Theory/ Practical	Sl no	Sub code	subject	Hours per week			credit
				L	T	P	
Theory	1		Advanced Foundation Engineering	3	0	0	3
	2		Geotechnical In-situ Testing and Instrumentation	3	0	0	3
	3		Earth and Rockfill Dams	3	0	0	3
Practical	4		Software Lab	0	0	4	2
Programme Elective-2							
Theory	5		Program Elective -2	3	0	0	3
Program Elective-3							
Theory	6		Program Elective-3	3	0	0	3
Audit Course-2							
Theory	7		Audit Course-2	2	0	0	0
Total				17	0	4	17

Program Elective-2

Sl no	Code	Subject
1		Finite Element Analysis
2		Ground Improvements Techniques
3		Any other subject offered from time to time with the approval

Program Elective-3

Sl no	Code	Subject
1		Environmental Geotechnics
2		CAD of Foundations
3		Any other subject offered from time to time with the approval

Third Semester: Course Structure

Theory/ Practical	Sl no	Sub code	Subject	Hours per week			Credit
				L	T	P	
Practical	1		Mini Project	0	0	8	4
	2		Dissertation Phase – I	0	0	24	12
Total				0	0	32	16

Fourth Semester: Course Structure

Theory/ Practical	Sl no	Sub code	Subject	Hours per week			Credit
				L	T	P	
Practical	1		Dissertation Phase – II	0	0	32	16
Total				0	0	32	16