

**Department Of Civil Engineering**  
**M TECH. (GEOTECHNICAL ENGINEERING)**  
**Scheme of Instruction and Examination**  
(with effect from 2015-16 academic year)

**I – SEMESTER**

Code No.	Course title	Scheme of Instruction			Scheme of Examination			Total	Credits
		Lec	Tut	Total	Exam (hrs)	Ext	Sess		
GT 1.1	Advanced Soil Mechanics	4	--	4	3	70	30	100	4
GT 1.2	Advanced Foundation Engineering	4	--	4	3	70	30	100	4
GT 1.3	Geosynthetics and Reinforced Soil Structures	4	--	4	3	70	30	100	4
GT 1.4	Earthquake Geotechnical Engineering	4	--	4	3	70	30	100	4
GT 1.5	a) Subsoil Exploration b) Geotechnics of Industrial Wastes c) Soil Science	4	--	4	3	70	30	100	4
GT 1.6	a) Rock Mechanics b) Pavement Analysis and Design c) R S & GIS Applications	4	--	4	3	70	30	100	4
GT 1.7	Soil and Rock Mechanics Lab.	--	3	3	Viva	50	50	100	2
GT 1.8	Geosynthetics Lab.	--	3	3	Viva	50	50	100	2
<b>Total</b>		<b>24</b>	<b>6</b>	<b>30</b>		<b>520</b>	<b>280</b>	<b>800</b>	<b>28</b>

**II – SEMESTER**

Code No.	Course title	Scheme of Instruction			Scheme of Examination			Total	Credits
		Lec	Tut	Total	Exam (hrs)	Ext	Sess		
GT 2.1	Soil Dynamics and Machine Foundations	4	--	4	3	70	30	100	4
GT 2.2	Ground Improvement Techniques	4	--	4	3	70	30	100	4
GT 2.3	Earth and Earth Retaining Structures	4	--	4	3	70	30	100	4
GT 2.4	Geoenvironmental Engineering	4	--	4	3	70	30	100	4
GT 2.5	a) Problematic Soils b) Reliability Analysis c) Finite Element Methods of Analysis	4	--	4	3	70	30	100	4
GT 2.6	a) Marine Substructures b) Forensic Geotechnical Engineering c) Geotechnics of Underground Structures	4	--	4	3	70	30	100	4
GT 2.7	Design Project	--	3	3	Viva	50	50	100	2
GT 2.8	Seminar	--	3	3	Viva	50	50	100	2
<b>Total</b>		<b>24</b>	<b>6</b>	<b>30</b>		<b>520</b>	<b>280</b>	<b>800</b>	<b>28</b>

**III and IV SEMESTERS**

Code No	Course title	Scheme of Examination	Total Marks	Credits
GT3.1	Dissertation (Preliminary)	Viva-voce	<b>100</b>	<b>10</b>
GT4.1	Dissertation (Final)	Defence and Viva-voce	<b>100</b>	<b>14</b>