

M.Tech (Civil)

Semester I				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 1	3 1 0	4	Numerical Methods in Civil Engg	NCEC503
DC 2	3 1 0	4	Mechanics of Deformable Solids	NCEC501
DC 3	3 1 0	4	Mechanics of Geomaterials	NCEC502
DE 1	3 0 0	3	--	
DE 2	3 0 0	3	--	
DP 1	0 0 3	1.5	Computational Laboratory-I	NCEC504
DP 2	0 0 3	1.5	Civil Engineering Model Development Laboratory	NCEC505
DP 3	0 0 3	1.5	Term Project-I	NCEC506
Total Credits 22.5				

Semester II				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 4	3 1 0	4	Transportation System, Design, and Management	NCEC507
DC 5	3 1 0	4	Engineering Hydrology and Hydraulics	NCEC508
DC 6	3 1 0	4	Finite Element Method	NCEC509
DE 3	3 0 0	3	--	
RM	3 0 0	3	Research Methodology	NCEC595
DP 4	0 0 3	1.5	Advanced Testing Laboratory	NCEC510
DP 5	0 0 3	1.5	Term Project-II	NCEC511
DP 6	0 0 3	1.5	Computational Laboratory-II	NCEC512
Total Credits 22.5				

Semester III				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 1	0 0 0	20	Thesis	NCEC597
Total Credits 20				

Semester IV				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 2	0 0 0	20	Thesis	NCEC598
Total Credits 20				

Discontinued from the Academic Year 2025-26

M.Tech (Civil- Structural Engineering)

Semester I				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 1	3 1 0	4	Numerical Methods in Civil Engineering	
DC 2	3 1 0	4	Theory of Elasticity and Plasticity	
DC 3	3 1 0	4	Structural Dynamics	
DE 1	3 0 0	3	--	
DE 2	3 0 0	3	--	
DP 1	0 0 3	1.5	Structural Engineering Laboratory	
DP 2	0 0 3	1.5	Computational Laboratory - I	
DP 3	0 0 3	1.5	Term Project-I	
Total Credits 22.5				

Semester II				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 4	3 1 0	4	Finite Element Method in Structural Analysis	
DC 5	3 1 0	4	Theory of Elastic Stability	
DC 6	3 1 0	4	Earthquake Resistant Design of Structures	
DE 3	3 0 0	3	--	
RM	3 0 0	3	Research Methodology	
DP 4	0 0 3	1.5	Advanced Structural Engineering Laboratory	
DP 5	0 0 3	1.5	Computational Laboratory - II	
DP 6	0 0 3	1.5	Term Project-II	
Total Credits 22.5				

Semester III				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 1	0 0 0	20	Thesis	NCEC597
Total Credits 20				

Semester IV				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 2	0 0 0	20	Thesis	NCEC598
Total Credits 20				

M.Tech (Civil- Transportation Engineering)

Semester I				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 1	3 1 0	4	Numerical Methods in Civil Engineering	
DC 2	3 1 0	4	Transportation Statistics and Microsimulation	
DC 3	3 1 0	4	Traffic Engineering and Design	
DE 1	3 0 0	3	--	
DE 2	3 0 0	3	--	
DP 1	0 0 3	1.5	Advanced Pavement Material Laboratory	
DP 2	0 0 3	1.5	Transportation Planning Laboratory	
DP 3	0 0 3	1.5	Term Project-I	
Total Credits 22.5				

Semester II				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 4	3 1 0	4	Travel Behaviour Modelling	
DC 5	3 1 0	4	Road Safety and Risk Analysis	
DC 6	3 1 0	4	Advanced Highway Design and Analysis	
DE 3	3 0 0	3	--	
RM	3 0 0	3	Research Methodology	
DP 4	0 0 3	1.5	Pavement Design Laboratory	
DP 5	0 0 3	1.5	Traffic Engineering Laboratory	
DP 6	0 0 3	1.5	Term Project-II	
Total Credits 22.5				

Semester III				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 1	0 0 0	20	Thesis	NCEC597
Total Credits 20				

Semester IV				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 2	0 0 0	20	Thesis	NCEC598
Total Credits 20				

M.Tech (Civil- Water Resource Engineering)

Semester I				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 1	3 1 0	4	Numerical Methods in Civil Engineering	
DC 2	3 1 0	4	River Engineering	
DC 3	3 1 0	4	Engineering Hydrology and Hydraulics	
DE 1	3 0 0	3	--	
DE 2	3 0 0	3	--	
DP 1	0 0 3	1.5	Computational Laboratory-I	
DP 2	0 0 3	1.5	Water Resource Engineering Laboratory-I	
DP 3	0 0 3	1.5	Term Project-I	
Total Credits 22.5				

Semester II				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 4	3 1 0	4	Geoinformatics in Civil Engineering	
DC 5	3 1 0	4	Hydroclimatology	
DC 6	3 1 0	4	Hydrogeology and Well Hydraulics	
DE 3	3 0 0	3	--	
RM	3 0 0	3	Research Methodology	
DP 4	0 0 3	1.5	Computational Laboratory-II	
DP 5	0 0 3	1.5	Water Resource Engineering Laboratory-II	
DP 6	0 0 3	1.5	Term Project-II	
Total Credits 22.5				

Semester III				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 1	0 0 0	20	Thesis	NCEC597
Total Credits 20				

Semester IV				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 2	0 0 0	20	Thesis	NCEC598
Total Credits 20				

M.Tech (Civil- Geotechnical Engineering)

Semester I				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 1	3 1 0	4	Numerical Methods in Civil Engineering	
DC 2	3 1 0	4	Slope and Retaining Structures	
DC 3	3 1 0	4	Mechanics of Geomaterial	
DE 1	3 0 0	3	--	
DE 2	3 0 0	3	--	
DP 1	0 0 3	1.5	Experimental Geotechnics I: Laboratory Testing	
DP 2	0 0 3	1.5	Computer Modelling of Geotechnical Systems-I	
DP 3	0 0 3	1.5	Term Project - I	
Total Credits 22.5				

Semester II				
Course Type	L-T-P	Credits	Name of the Course	Course Code
DC 4	3 1 0	4	Ground Improvement and Geosynthetics	
DC 5	3 1 0	4	Geoenvironmental Engineering	
DC 6	3 1 0	4	Advanced Foundation Engineering	
DE 3	3 0 0	3	--	
RM	3 0 0	3	Research Methodology	
DP 4	0 0 3	1.5	Experimental Geotechnics II: In-situ Testing	
DP 5	0 0 3	1.5	Computer Modelling of Geotechnical Systems -II	
DP 6	0 0 3	1.5	Term Project -II	
Total Credits 22.5				

Semester III				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 1	0 0 0	20	Thesis	NCEC597
Total Credits 20				

Semester IV				
Course Type	L-T-P	Credits	Name of the Course	Course Code
TU 2	0 0 0	20	Thesis	NCEC598
Total Credits 20				