

M.Tech in Water Resources Engineering and Management

Proposed NEW Modified Course Structure:

SEMESTER-1

Course No.	Course Name	L	T	P	C
CE551	Surface Water Hydrology	3	0	0	6
CE553	Advanced Hydraulic Engineering	3	0	2	8
CE554	Advanced Fluid Mechanics	3	0	0	6
CExxx	Elective I	3	0	0	6
CExxx	Elective II	3	0	0	6
		15	0	2	32
		Contact Hours 17			

SEMESTER-2

Course No.	Course Name	L	T	P	C
CE552	Water Resources Systems Analysis, Planning & Management	3	0	0	6
CE556	Subsurface Hydrology	3	0	0	6
CExxx	Elective III	3	0	0	6
CExxx	Elective IV	3	0	0	6
CExxx	Elective V	3	0	0	6
		15	0	0	30
		Contact Hours 15			

SEMESTER-3

Course No.	Course Name	L	T	P	C
CE696	Project and Dissertation	0	0	24	24
		0	0	24	24
		Contact Hours			

SEMESTER-4

Course No.	Course Name	L	T	P	C
CE697	Project and Dissertation	0	0	24	24
		0	0	24	24
		Contact Hours			

Total credits 110

(Students can opt for any course for Elective-II, III, IV, and V, provided there are no exam clashes and no conflicts raised by DPPC.)

LIST OF ELECTIVES

Course No.	Course Name	L	T	P	C
Elective-I					
CE601	Numerical Methods	3	0	0	6
CE602	Optimization Methods	3	0	0	6
XXXXX	Any course on Probability or Statistics	3	0	0	6
XXXXX	Any course on Advanced Mathematics	3	0	0	6
Elective-II, III, IV, V					
CE555	Principles of Water Quality and EIA	2	0	2	6
CE557	Environmental Hydrology	2	0	2	6
CE558	Fuzzy Logic and Artificial Intelligence in Civil Engineering	3	0	0	6
CE559	Watershed Management and Remote Sensing Applications	3	0	0	6
CE560	Computational Methods in Hydraulics and Environmental Engineering Applications	3	0	0	6
CE561	Water Power Engineering	3	0	0	6
CE562	Transient Flow Analysis	3	0	0	6
CE563	Flow and Transport Processes in Fractured Media	3	0	0	6
CE564	Stochastic Hydrology	3	0	0	6
CE565	Introduction to Multiphase Flow in Porous Media	3	0	0	6
CE567	Sediment Dynamics in Fluvial Systems	3	0	0	6
CE568	Environmental Management of Water Resources	3	0	0	6
CE570	River Engineering	3	0	0	6
CE572	Pollution and Contaminant Flux in Water Environment	3	0	0	6
CE5XX	Hydroclimatology	3	0	0	6

(Any masters and higher-level courses as elective deemed fit for the program and have no restrictions from DPPC)