

DEPARTMENT OF HYDROLOGY

P.G. Diploma/M.Tech. (Ground Water Hydrology)

Program Elective Courses (Ground Water)

Teaching Scheme							Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE		
1.	HYN-511	Hydrologic elements and analysis	PEC	4	3	1	-	3	-	25	-	25	50	-		
2.	HYN-513	Hydrometeorology and climate change	PEC	4	3	1	2/2	3	-	20	20	20	40	-		
3.	HYN-514	Hydrogeology	PEC	4	3	1	2/2	3	-	20	20	20	40	-		
4.	AHN-516	Hydro Mechanical Equipment	PCC	4	3	1	2/2	3	-	20	20	20	40	-		
5.	HYN-518	Water resources planning and Management	PEC	4	3	1	-	3	-	25	-	25	50	-		
6.	HYN-522	Stochastic hydrology	PEC	4	3	1	-	3	-	25	-	25	50	-		
7.	HYN-523	Surface water modeling and simulation	PCC	4	2	1	2	2	-	15	25	20	40	-		
8.	HYN-526	Deterministic hydrology	PEC	4	3	1	-	3	-	25	-	25	50	-		
9.	HYN-531	Watershed Behavior and Conservation Practices	PEC	4	3	1	-	3	-	25	-	25	50	-		
10.	HYN-532	Environmental planning and assessment of projects	PEC	4	3	1	-	3	-	25	-	25	50	-		
11.	HYN-537	Remote sensing and GIS applications	PEC	4	3	1	2	3	-	15	25	20	40	-		
12.	HYN-538	Hydrological data collection, processing and analysis	PEC	4	3	1	2/2	3	-	20	20	20	40	-		
13.	HYN-539	Isotope hydrology	PEC	4	3	1	2/2	3	-	20	20	20	40	-		
14.	HYN-544	Hydrogeology of hard rocks	PEC	4	3	1	-	3	-	25	-	25	50	-		
15.	HYN-545	Surface Water quality modeling	PEC	4	3	1	-	3	-	25	-	25	50	-		
16.	HYN-546	Hydroinformatics	PEC	4	3	1	2/2	3	-	20	20	20	40	-		
17.	HYN-552	Numerical methods in hydrology	PEC	2	2	1/2	-	2	-	25	-	25	50	-		
18.	HYN-553	Experimental hydrology	PEC	2	-	-	4	-	2	-	50	-	-	50		
19.	HYN-554	Soil and Water Remediation	PEC	4	3	1	2/2	3	-	20	20	20	40	-		
20.	HYN-555	Soft-computing techniques in hydrology	PEC	2	2	1/2	-	2	-	25	-	25	50	-		
21.	HYN-556	Environmental Quality Lab	PEC	2	-	-	4	-	2	-	50	-	-	50		
22.	HYN-561	Multi-phase flow through porous media	PEC	4	3	1	2/2	3	-	20	20	20	40	-		
23.	HYN-562	Irrigation and drainage engineering	PEC	4	3	1	2/2	3	-	20	20	20	40	-		
24.	HYN-563	Vadose zone hydrology	PEC	4	3	1	2/2	3	-	20	20	20	40	-		
25.	HYN-566	Groundwater protection and regulation	PEC	2	2	1/2	-	2	-	25	-	25	50	-		
26.	HYN-571	Watershed modeling and simulation	PCC	4	2	1	2	2	-	15	25	20	40	-		