

Program Elective Courses (Surface Water)

S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
1.	HYN-511	Hydrologic elements and analysis	PEC	4	3	1	-	3	-	25	-	25	50	-
2.	HYN-512	Computer Programming	PEC	2	1	-	2	1	-	15	25	20	40	-
3.	HYN-513	Hydrometeorology and climate change	PEC	4	3	1	2/2	3	-	20	20	20	40	-
4.	HYN-518	Water resources planning and Management	PEC	4	3	1	-	3	-	25	-	25	50	-
5.	HYN-525	Water Resources systems	PEC	4	3	1	-	3	-	25	-	25	50	-
6.	HYN-527	Groundwater hydrology	PEC	4	3	1	2/2	3	-	20	20	20	40	-
7.	HYN-528	Groundwater systems analysis	PCC	4	3	1	-	3	-	25	-	25	50	-
8.	HYN-529	Geophysical investigations	PCC	4	3	1	2/2	3	-	20	20	20	40	-
9.	HYN-531	Watershed Behavior and Conservation Practices	PEC	4	3	1	-	3	-	25	-	25	50	-
10.	HYN-535	Environmental quality	PEC	4	3	1	2/2	3	-	20	20	20	40	-
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-540	Water Resources Economics	PEC	4	3	1	-	3	-	25	-	25	50	-
14.	HYN-542	Urban Hydrology	PEC	4	3	1	-	3	-	25	-	25	50	-
15.	HYN-543	Flood forecasting	PEC	4	3	1	-	3	-	25	-	25	50	-
16.	HYN-545	Surface Water quality modeling	PEC	4	3	1	-	3	-	25	-	25	50	-
17.	HYN-546	Hydroinformatics	PEC	4	3	1	2/2	3	-	20	20	20	40	-
18.	HYN-551	Physical Hydrology	PEC	4	3	1	-	3	-	25	-	25	50	-
19.	HYN-552	Numerical methods in hydrology	PEC	2	2	1/2	-	2	-	25	-	25	50	-
20.	HYN-553	Experimental hydrology	PEC	2	-	-	4	-	2	-	50	-	-	50
21.	HYN-554	Soil and Water Remediation	PEC	4	3	1	2/2	3	-	20	20	20	40	-
22.	HYN-555	Soft-computing techniques in hydrology	PEC	2	2	1/2	-	2	-	25	-	25	50	-
23.	HYN-556	Environmental Quality Lab	PEC	2	-	-	4	-	2	-	50	-	-	50
24.	HYN-560	Soil and groundwater contamination modelling	PCC	4	3	1	2/2	3	-	20	20	20	40	-
25.	HYN-562	Irrigation and drainage engineering	PEC	4	3	1	2/2	3	-	20	20	20	40	-
26.	HYN-571	Watershed modeling and simulation	PCC	4	2	1	2	2	-	15	25	20	40	-