DEPARTMENT OF WATER RESOURCES DEVELOPMENT AND MANAGEMENT INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

Program Code:

XXX M.Tech. (Drinking Water and Sanitation)

Department:

WR Department of Water Resources Development and Management

Year:

T

Teaching Scheme				Contact Hours/Week			Exam Duration		Relative Weight (%)					
S. No.	Subject Code	Course Title	Subject Area	Credits	L	Т	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
		Se	mester	· I (Aut	tumn)									
1.,	WRN-503	Water Resources Planning and Management	PCC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
2.	WRN-507	Drinking-Water and Sanitation Sustainability	PCC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
3.	WRN-509	Water Sanitation, Hygiene and Infrastructural Management	PCC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
4.	WRN-516	Rural and Urban Water Supply	PCC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
5.		Program Elective-I	PEC	4	-	-	-	-	-	-	-	-	-	-
		Total		20										
		S	emester	-II (Sp	ring)								l.	
1.	WRN-506	Mini Project on Drinking Water and Sanitation	PCC	2	ě	18	4		3	-	50) -	•	50
2.	WRN-700	Seminar	SEM	2	-	3=8	-	-	-	-	-	-	100	-
3.		Program Elective-II	PEC	4	0.00	-	-		(-	-	-	-	-	-
4.		Program Elective-III	PEC	4	-	-	-	-	-	-	-	-	-	-
5.		Program Elective-IV	PEC	4	-	-	-	-	-	-	-	-	-	-
6.		Program Elective-V	PEC	4										
		Total		20										

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Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	Т	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
		S	emester-	I (Au	tumn)								1	I.
l _e	WRN-701A	Thesis Stage-I (to be continued next semester)	DIS	12	-		-	-	-	-	-	-	100	-
		Total		12										
Note	e: Students ca	nn take 1 or 2 audit courses as advised by the	e superv Semester			red.	•				1		·	1
1.	WRN-701B	Thesis Stage-II (continued from III semester)	DIS	18	•	-	-	-	1	-	-	-	100	-
		Total		18										

Summary										
Semester	1	2	3	4						
Semester-wise Total Credits	20	20	12	18						
Total Credits		70								

Program Elective Courses for M.Tech. (Drinking Water and Sanitation)

Teaching Scheme						Conta ours/V		Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	Т	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
1.	WRN-501	System Design Techniques	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
2.	WRN-580	Renewable Energy System Technology	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
3.	WRN-581	Water Quality Monitoring and Modeling	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
4.	WRN-586	Groundwater Development and Management	PEC	4	3	1	0	3	0	20-35	5	20-30	40-50	-
5.	WRN-587	Watershed Development and Management	PEC	4	3	1	0	3	0	20-35	41	20-30	40-50	743
6.	WRN-588	Remote Sensing and GIS Applications in Water Systems	PEC	4	3	1	0	3	0	20-35		20-30	40-50	
7.	WRN-589	Drinking-Water for Low-Income Societies	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
8.	WRN-590	Wastewater and Fecal Sludge Management	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
9.	WRN-591	Resilience, Shocks and Emergencies	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
10.	WRN-592	Management and Operation of Water Utilities	PEC	4	3	1	0	3	0	20-35	150	20-30	40-50	
11.	WRN-593	Water Works Engineering	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
12.	WRN-594	Flow Hydraulics and Urban Drainage	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
13.	WRN-595	Circular Water Economy	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
14.	WRN-596	Sustainable Water Resources	PEC	4	3	1	0	3	0	20-35	-	20-30	40-50	-