

**Table 2: Academic Curriculum for Master of Technology /P.G. Diploma in
IRRIGATION WATER MANAGEMENT (IWM)**

Teaching Scheme					Contact Hours per Week			Exam. Duration (Hrs.)		Relative Weightage (%)				
S.No	SUBJECT CODE	COURSE TITLE	SUBJECT AREA	CREDITS	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
1st YEAR					I SEMESTER (AUTUMN)									
1.	WRN-571	Design of Irrigation Structures and Drainage Works	PCC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
2.	WRN-572	On Farm Development	PCC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
3.	WRN-573	Principles and Practices of Irrigation	PCC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
4.		Program Elective Course	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
5.		Program Elective Course	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
Sub Total				20										
II SEMESTER (SPRING)														
1.	WRN-501	System Design Techniques	PCC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
2.		Program Elective Course	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
3.		Program Elective Course	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
4.		Program Elective Course	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
5.		Program Elective Course	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
6.	WRN-700	Research Methodology and Skill Development	SEM	2	-	-	-	-	-	-	-	-	100	-
Sub Total				20										
Note: P.G. Diploma course in IWM shall be of ONE YEAR duration comprising of semesters I and II only, with a minimum credits of 40														
Summer Internship / minor project for diagnostic analysis to be evaluated in the 3 rd semester (2 credits)														
2nd YEAR					III SEMESTER (AUTUMN)									
1.	WRN-701A	Thesis Stage 1	DIS	12	-	-	-	-	-	-	-	-	100	-
2.		Summer internship or mini project		2										
Sub Total				14										
* to be continued and grade to be awarded in the next semester														
IV SEMESTER (SPRING)														
1.	WRN-701B	Thesis Stage 2 (contd. From 3 rd Semester)	DIS	18	-	-	-	-	-	-	-	-	100	-
Sub Total				18										
Total				70										

(Signature)

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PROGRAMME ELECTIVES COURSES (IWM)

S.No	SUBJECT CODE	COURSE TITLE	SUBJECT AREA	CREDITS	L	T	P	Theory	Practical	CWS	PRS	MTE	EYE	PRE
1.	WRN-503	Water Resources Planning and Management	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
2.	WRN-504	Applied Hydrology	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
3.	WRN-513	Earth and Rockfill Dams	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
4.	WRN-516	Rural and Urban Water Supply	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
5.	WRN-520	Environmental Impact Assessment of Water resource projects	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
6.	WRN-522	Climate Change and Water Resources	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
7.	WRN-572	Soil and Agronomy	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
8.	WRN-576	Operation Maintenance and Management of Irrigation Systems	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
9.	WRN-577	Water and Land Laws	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
10.	WRN-578	Rural Sociology and Irrigation Economics	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
11.	WRN-579	Evaluation of Irrigation Project	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
12.	WRN-580	Renewable Energy System Technology	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
13.	WRN-581	Water Quality Monitoring and Modeling	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
14.	WRN-582	Theory of Seepage	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
15.	WRN-584	Cropping System Modeling	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
16.	WRN-585	Environmental Impact of Irrigated Agriculture	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
17.	WRN-586	Groundwater Development and Management	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
18.	WRN-587	Watershed Development and Management	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
19.	WRN-588	Remote Sensing and GIS Applications in Water Systems	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
20.	WRN-596	Sustainable Water Resources	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
21.	WRN-597	Machine Learning Models in Water Resources Planning and Management	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-
22.	WRN-598	Smart Irrigation Systems	PEC	4	3	1	-	3	-	20-35	-	20-30	40-50	-

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