

Master of Technology in Water Resources Engineering

Department of Civil Engineering

The overall credits structure

Category	PC	PE	OC	Total
Credits	39	15	0	54

Program Core

CVD831	Major Project Part-I	0	0	12	6
CVD832	Major Project Part-II	0	0	24	12
CVL730	Hydrologic Processes and Modeling	3	0	0	3
CVL731	Optimization Techniques in Water Resources	3	0	0	3
CVL732	Groundwater Hydrology	3	0	0	3
CVL733	Stochastic Hydrology	2	0	2	3
CVL734	Advanced Hydraulics	3	0	0	3
CVL735	Finite Element in Water Resources	3	0	0	3
CVP730	Simulation Laboratory-I	0	0	3	1.5
CVP731	Simulation Laboratory-II	0	0	3	1.5
Total Credits				39	

Program Electives

CVL736	Soft Computing Techniques in Water Resources	2	0	2	3
CVL737	Environmental Dynamics and Management	3	0	0	3
CVL738	Economic Aspects of Water Resources Development	3	0	0	3
CVL830	Groundwater Flow and Pollution Modeling	3	0	0	3
CVL831	Surface Water Quality Modeling and Control	3	0	0	3
CVL832	Hydroelectric Engineering	3	0	0	3
CVL833	Water Resources Systems	3	0	0	3
CVL834	Urban Water Infrastructure	3	0	0	3
CVL835	Eco-hydraulics and Hydrology	3	0	0	3
CVL836	Advanced Hydrologic Land Surface Processes	3	0	0	3
CVL837	Mechanics of Sediment Transport	2	0	2	3
CVL838	Geographic Information Systems	2	0	2	3
CVL839	Hydrologic Applications of Remote Sensing	2	0	2	3

Sem.	Courses (Number, abbreviated title, L-T-P, credits)						Lecture courses	Contact h/week				Credits
	L	T	P	Total								
I	CVL730 Hyd. Process (3-0-0) 3	CVL731 Opt. Tech. (3-0-0) 3	CVL732 GW Hyd. (3-0-0) 3	CVL735 Stochastic Hyd. (2-0-2) 3	PE-1 (3-0-0) 3 or (2-0-2) 3		5	14/13	0	2/4	16/17	15
II	CVL733 Adv. Hydraulics (3-0-0) 3	CVL734 Finite Element (3-0-0) 3	CVP730 Sim. Lab-I (0-0-3) 1.5	CVP731 Sim. Lab-II (0-0-3) 1.5	PE-2 (3-0-0) 3 or (2-0-2) 3	PE-3 (3-0-0) 3 or (2-0-2) 3	4	12-10	0	6-10	18-20	15
Summer	Major Project Part I (CEW)											0
III	CVD831 Major Project Part-I (0-0-12) 6			PE-4 (3-0-0) 3 or (2-0-2) 3	PE-5 (3-0-0) 3 or (2-0-2) 3		2	6-4	0	12-16	18-20	12
IV	CVD832 Major Project Part-II (0-0-24) 12						0	0	0	24	24	12

Total = 54