

IF559 : City Micro-drainage System**CREDITS = 5 (L=3, T=2)****M. Tech First year, 2nd Semester****Teaching and Assessment Scheme:**

Teaching Scheme			Credits	Assessment Scheme				
L	T	P		Theory		Practical		Total Marks
				ESE	CE	ESE	CE	
3	2	0	5	70	30	30	20	150

Course Contents:

Unit No.	Topics	Teaching Hours
1	Water logging from storm water—Hydrological input—topographical survey—Outlet from command area.	12
2	roadways— underground drainage network—self cleansing velocity	10
3	design of pumping stations—zero output design—separation of solid waste	10
4	Design of mechanical devices—electronic monitoring systems, alarm and automatic remedial measures.	10
	TOTAL HOURS	42

Reference books:

- Urban Stormwater Management Planning with Analytical Probabilistic Models Barry J. Adams, Fabian Papa, Wiley, 27-Mar-2000.
- Urban drainage modeling: proceedings of the specialty symposium held in conjunction with the World Water and Environmental Resources Congress, May 20-24, 2001, Orlando, Florida.
- Real Time Control of Urban Drainage Systems: the State-of-the-Art. Editor(s): W. Schilling 1989.