

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
I M.TECH. WATER RESOURCES & ENVIRONMENTAL ENGINEERING

SEMESTER - I

S.No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE52014	Environmental Chemistry	3	-	-	3	-	70	30	-	-	100
2	CE52013	Design of Diversion Structures	3	-	-	3	-	70	30	-	-	100
3	CE50009	Advanced Concrete Technology	3	-	-	3	-	70	30	-	-	100
4		Elective - I	3	-	-	3	-	70	30	-	-	100
5		Elective - II	3	-	-	3	-	70	30	-	-	100
6	CE52454	Concrete Technology Lab.	-	-	2	-	1	-	-	40	60	100
7	CE52455	Diversion Structures Lab.	-	-	2	-	1	-	-	40	60	100
8	CE52456	Computing Techniques Lab.	-	-	4	-	2	-	-	40	60	100
9	CE52457	Environmental Chemistry Lab.*	-	-	2	-	-	-	-	50	-	50
10	CE52498	Comprehensive Viva	-	-	-	-	-	-	-	-	100	100
Total			15	0	10	15	4	350	150	170	280	950

* Non Credit Mandatory Subject

SEMESTER - II

S.No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE52512	Design of Storage Structures	3	-	-	3	-	70	30	-	-	100
2	CE52513	Stochastic Hydrology	3	-	-	3	-	70	30	-	-	100
3	CE52515	Water Resources Systems Engg.	3	-	-	3	-	70	30	-	-	100
4		Elective III	3	-	-	3	-	70	30	-	-	100
5		Elective IV	3	-	-	3	-	70	30	-	-	100
6	CE52853	Storage Structure Lab.	-	-	2	-	1	-	-	40	60	100
7		Elective III Lab	-	-	2	-	1	-	-	40	60	100
8		Elective IV Lab	-	-	4	-	2	-	-	40	60	100
9	CE52898	Comprehensive Viva	-	-	-	-	-	-	-	-	100	100
Total			15	0	8	15	4	350	150	120	280	900

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
I M.TECH. WATER RESOURCES & ENVIRONMENTAL ENGINEERING

List of Electives

Elective I		Semester I
S.No.	Subject Code	Subject
1	CE52201	Hydrologic Analysis
2	CE52202	Advanced Fluid Mechanics
3	CE52203	Air Pollution & Control Technology
4	CE52204	Finite Element Applications in Water Resources

Elective II		Semester I
S.No.	Subject Code	Subject
1	CE52301	Ground Water Hydrology
2	CE52302	Hydraulics of Water Transmission and Distribution
3	CE52303	Design of Hydraulic & PHE Structures
4	CE52304	Advanced Construction Planning and Management

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
I M.TECH. WATER RESOURCES & ENVIRONMENTAL ENGINEERING

List of Electives

Elective III		Semester II
S.No.	Subject Code	Subject
1	CE52706	Water Management
2	CE52707	Unit Operation I : Advanced Water Treatment
3	CE52708	Geospatial Technologies in Water Resources
4	CE52709	Hydropower Engineering
5	CE52710	Environmental Impact Assessment of Water Resources Projects

Elective IV		Semester II
S.No.	Subject Code	Subject
1	CE52751	Advanced Hydrological Modeling
2	CE52752	Unit Operation II : Advanced Sewage Treatment
3	CE52753	Watershed Conservation and Management
4	CE52754	Climate Change and Adaptation in Water Management
5	CE52755	Regional Water Resources Planning and its Economics

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
I M.TECH. WATER RESOURCES & ENVIRONMENTAL ENGINEERING

List of Electives (Lab.)

Elective III Lab.		Semester II
S.No.	Subject Code	Subject
1		Water Management Lab.
2	CE52801	Unit Operation I : Advanced Water Treatment Lab.
3		Geospatial Technologies in Water Resources Lab.
4		Hydropower Engineering Lab.
5		Environmental Impact Assessment of Water Resources Projects Lab.

Elective IV Lab.		Semester II
S.No.	Subject Code	Subject
1		Advance Hydrological Modeling Lab.
2	CE52825	Unit Operation II : Advanced Sewage Treatment Lab.
3		Watershed Conservation and Management Lab.
4		Climate Change and Adaptation in Water Management Lab.
5		Regional Water Resources Planning and its Economics Lab.

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
II M.TECH. WATER RESOURCES & ENVIRONMENTAL ENGINEERING

SEMESTER - III

S.No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE52931	*Industrial Training	-	-	8	-	4	-	-	50	-	50
2	CE52932	Dissertation Phase-I	-	-	20	-	10	-	-	40	60	100
3	MA52902	**Research Methodology & IPR	2	-	-	2	-	70	30	-	-	100
Total			2	0	28	2	14	70	30	90	60	250

* Industrial training to be carried out between II and III semester during vacation

** This course can be studied online with prior permission of HOD, however, End-semester examination will be conducted in the Institute.

SEMESTER - IV

S.No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE52952	Dissertation Phase-II	-	-	32	-	16	-	-	80	120	200
Total			0	0	32	0	16	0	0	80	120	200