

BVM Engineering College (An Autonomous Institution)**Civil Engineering Department****M. Tech. Infrastructure Engineering and Technology****Semester 1**

Sr. No	Course Code	Name of Course	L	T	P	H	C
1	5IF01	Infrastructure Planning and Finance	3	1	0	4	4
2	5IF02	Sustainable Urban Planning	3	1	0	4	4
3	5IF03	Infrastructure Engineering & Technology Studio - I	0	0	4	4	2
4	5CE03	Research Methodology	1	0	2	3	2
5		Program Elective - I	3	0	2	5	4
6		Program Elective - -II	3	1	0	4	4
7		Program Elective - III	2	1	0	3	3
Total			15	4	8	27	23
Program Elective - I							
1	5EN01	Theory of Water and Waste Water Engineering -I	3	0	2	5	4
2	5IF41	Urban Infrastructure Planning & Management	3	0	2	5	4
3	5IF42	Electrical & Mechanical System in Infrastructure Engineering	3	0	2	5	4
4	5IF43	Fundamental design study of various infrastructure	3	0	2	5	4
5	5SE46	Structural Health Monitoring	3	0	2	5	4
6	5MA01	Data Analytics in Engineering	3	0	2	5	4
Program Elective - II							
1	5IF44	Project Procurement systems	3	1	0	4	4
2	5IF45	Reliability Engineering	3	1	0	4	4
3	5TE46	Water Transport System	3	1	0	4	4
4	5IF46	Infrastructure Informatics	3	1	0	4	4
5	5TE41	Transportation Planning and Practices	3	1	0	4	4
6	5IF47	Irrigation and Water Distribution Systems	3	1	0	4	4

Program Elective - III							
1	5IF48	Introduction to Green Buildings	2	1	0	3	3
2	5IF49	Municipal Rules and By-laws	2	1	0	3	3
3	5IF50	Geotechnical Landfill Design and Maintenance	2	1	0	3	3
4	5IF51	Reuse & Recycle Technology	2	1	0	3	3
5	5IF52	Renewable Energy Technology	2	1	0	3	3
6	5IF53	Contracts and Arbitration	2	1	0	3	3

Semester 2							
Sr. No	Course Code	Name of Course	L	T	P	H	C
1	5IF04	Infrastructure Project Management	3	1	0	4	4
2	5IF05	Construction Technology and Management	3	1	0	4	4
3	5IF06	Infrastructure Engineering & Technology Studio - II	0	0	4	4	2
4		Program Elective - IV	3	0	2	5	4
5		Program Elective - V	3	1	0	4	4
6		Program Elective - VI	2	1	0	3	3
7	5IF07	Seminar	0	0	2	2	1
Total			14	4	8	26	22

Program Elective - IV							
1	5IF54	Advanced Concrete Technology	3	0	2	5	4
2	5CE41	GIS and GPS in Civil Engineering	3	0	2	5	4
3	5IF55	City Micro-drainage System	3	0	2	5	4
4	5EN04	Theory of Water and Waste Water Engineering-II	3	0	2	5	4
5	5IF56	Application of Geotechnics in Infrastructure	3	0	2	5	4
6	5IF57	Project Management	3	0	2	5	4

Program Elective - V							
1	5CM50	Project Risk Analysis and Mitigation Techniques	3	1	0	4	4
2	5TE04	Pavement Analysis and Design	3	1	0	4	4
3	5IF58	Urban Governance And Legislation	3	1	0	4	4
4	5TE45	Railway Infrastructure Planning and Design	3	1	0	4	4
5	5SE50	Design of Pre-stressed Concrete Structures	3	1	0	4	4
6	5EN48	Environmental Impact Assessment	3	1	0	4	4

Program Elective - VI							
1	5IF59	Design of Intelligent Buildings and Cities	2	1	0	3	3
2	5IF60	Water Harvesting, Conservation and Intelligent Control	2	1	0	3	3
3	5IF61	Infrastructure Economics	2	1	0	3	3
4	5IF62	Project Formulation and Appraisal	2	1	0	3	3
5	5IF63	Laws for Engineers	2	1	0	3	3
6	5IF64	Sustainable Development	2	1	0	3	3

Semester 3							
Sr. No	Course Code	Name of Course	L	T	P	H	C
1		Program Elective - VII	3	1	0	4	4
2		Open Elective - I	3	0	0	3	3
3	6IF31	Dissertation Phase - 1	0	0	20	20	10
Total			6	1	20	27	17

Program Elective - VII							
1	6IF41	Value Engineering	3	1	0	4	4
2	6IF42	Eco-Friendly Technologies	3	1	0	4	4
3	6IF43	Soft Computing Techniques	3	1	0	4	4
4	6CM41	Management Information Systems	3	1	0	4	4
5	6IF44	Management of Human Resources, Safety and Quality	3	1	0	4	4

Open Elective-I							
1.	6CM81	Strategic Management	3	0	0	3	3
2.	6CM82	Disaster Management	3	0	0	3	3

3.	6EE81	Renewable Energy Systems	3	0	0	3	3
4.	6EN81	Rural Sanitation	3	0	0	3	3
5.	6EN82	Analytical Methods for Environmental Monitoring	3	0	0	3	3
6.	6MD81	Robust Design	3	0	0	3	3
7.	6MD82	Optimization Techniques	3	0	0	3	3
8.	6MD83	Reliability Engineering and Quality Control	3	0	0	3	3
9.	6SE81	Disaster Management and Mitigation	3	0	0	3	3
10.	6TE81	Road Safety and Environmental Impact Assessment	3	0	0	3	3
11.	6TE82	Transportation System Analysis	3	0	0	3	3
Semester 4							
Sr. No	Course Code	Name of Course	L	T	P	H	C
1	6IF32	Dissertation Phase - 2	0	0	32	32	16
Total			0	0	32	32	16
Total Credit Distribution			35	9	68	112	78