

MVJ College of Engineering, Whitefield, Bangalore

An Autonomous Institution, Affiliated to VTU, Belagavi

Scheme of Teaching and Examination 2019-20

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

Effective from the academic year 2019-20

I SEMESTER M.TECH- (STRUCTURAL ENGINEERING)

S No	Course		Course Title	Teaching Department	Teaching hours/week			Examination			Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in Hours	CIE Marks	SEE Marks		Total marks
	L	T			P							
1	PCC	MVJ19CSE11	Advanced Design of RC Structures	Civil Engineering	4	0	0	3	50	50	100	4
2	PCC	MVJ19CSE12	Mechanics of Deformable Bodies	Civil Engineering	4	0	0	3	50	50	100	4
3	PCC	MVJ19CSE13	Structural Dynamics	Civil Engineering	4	0	0	3	50	50	100	4
4	PCC	MVJ19CSE14	Special Concrete	Civil Engineering	4	0	0	3	50	50	100	4
5	PCC	MVJ19IPR15	Intellectual Property Rights	Civil Engineering	2	0	0	3	50	50	100	2
6	PCC	MVJ19CSEL16	Advanced Concrete Lab	Civil Engineering	0	1	3	3	50	50	100	2
7	PCC	MVJ19CSEL17	Structural Software Lab-1	Civil Engineering	0	1	3	3	50	50	100	2
Total					18	2	6	21	350	350	700	22

Note: PCC: Professional Core Course

II SEMESTER M.TECH- (STRUCTURAL ENGINEERING)

S No	Course		Course Title	Teaching Department	Teaching hours/week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in Hours	CIE Marks	SEE Marks	Total marks	
	L	T			P							
1	PCC	MVJ19CSE21	Advanced Design of Steel Structures	Civil Engineering	4	0	0	3	50	50	100	4
2	PCC	MVJ19CSE22	Finite Element Method of Analysis	Civil Engineering	4	0	0	3	50	50	100	4
3	PCC	MVJ19CSE23	Earthquake Resistance Structures	Civil Engineering	4	0	0	3	50	50	100	4
4	PE	MVJ19CSE24X	Professional Elective-1	Civil Engineering	3	0	0	3	50	50	100	3
5	PE	MVJ19CSE25X	Professional Elective-2	Civil Engineering	3	0	0	3	50	50	100	3
6	OE	MVJ19CSE26X	Open Elective	Civil Engineering	3	0	0	3	50	50	100	3
7	PCC	MVJ19CSEL27	Structural Software Lab-2	Civil Engineering	0	1	3	3	50	50	100	2
8	PCC	MVJ19CSE28	Mini Project	Civil Engineering	0	0	4	-	100	-	100	2
Total					21	1	7	21	450	350	800	25

Note: PCC: Professional Core Course , PE: Professional Elective, OE: Open Elective

Professional Elective-1		Professional Elective-2		Open Elective	
MVJ19CSE241	Advanced Design of Pre-stressed Concrete Structures	MVJ19CSE251	Advanced Structural Analysis	MVJ19CSE261	Sustainable Concepts in Civil Engineering
MVJ19CSE242	Stability of Structures	MVJ19CSE252	Design of High Rise Structures	MVJ19CSE262	Remote Sensing and GIS in Engineering
MVJ19CSE243	Design of Precast & Composite Structures	MVJ19CSE253	Design of Industrial Structures	MVJ19CSE263	Occupational Health and Safety
MVJ19CSE244	Reliability Analysis of Structures	MVJ19CSE254	Structural Health Monitoring		

III SEMESTER M.TECH- (STRUCTURAL ENGINEERING)

S No	Course		Course Title	Teaching Department	Teaching hours/week			Examination				Credits
					Theory Lecture	Tutorial	Practical /Drawing	Duration in Hours	CIE Marks	SEE Marks	Total marks	
	L	T			P							
1	PCC	MVJ19CSE31	Design of Concrete Bridges	Civil Engineering	4	0	0	3	50	50	100	4
2	PE	MVJ19CSE32X	Professional Elective-3	Civil Engineering	3	0	0	3	50	50	100	3
3	PE	MVJ19CSE33X	Professional Elective-4	Civil Engineering	3	0	0	3	50	50	100	3
4	Seminar	MVJ19CSE34	Technical Seminar	Civil Engineering	0	0	4	-	100	-	100	2
5	Project	MVJ19CSEP35	Evaluation of Project Phase-1	Civil Engineering	0	0	4	-	100	-	100	2
6	Internship	MVJ19CSE36	Internship (Completed during the intervening vacation of III and IV semesters- 6weeks)	Civil Engineering	0	0	0	3	50	50	100	6
Total					10	0	8	12	400	200	600	20
Note: PCC: Professional Core Course, PE: Professional Elective												

Professional Elective-3		Professional Elective-4	
MVJ19CSE321	Design of Substructures	MVJ19CSE331	Fracture Mechanics applied to concrete
MVJ19CSE322	Repair and Rehabilitation of Structures	MVJ19CSE332	Design of Masonry Structures
MVJ19CSE323	Theory of Plates and Shells	MVJ19CSE333	Design of Formwork

IV SEMESTER M.TECH- (STRUCTURAL ENGINEERING)

S No	Course		Course Title	Teaching Department	Teaching hours/week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in Hours	CIE Marks	SEE Marks	Total marks	
	L	T			P							
1	Project	MVJ19CSEP41	Major Project Phase-2	Civil Engineering	0	0	38	3	50	50	100	19
2	CRT	MVJ19CSEC42	Certification	Industry / Institute	0	0	0	-	-	-	-	2
Total							38	3	50	50	100	21
Note: PCC: Professional Core Course												