

# MVJ College of Engineering, Whitefield, Bangalore

An Autonomous Institution, Affiliated to VTU, Belagavi

Scheme of Teaching and Examination 2020-21

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

Effective from the academic year 2020-21

## 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	MVJ20CSE11	Advanced Design of RC Structures	Civil Engineering	4	0	0	3	50	50	100	4
2	PCC	MVJ20CSE12	Mechanics of Deformable Bodies	Civil Engineering	4	0	0	3	50	50	100	4
3	PCC	MVJ20CSE13	Structural Dynamics	Civil Engineering	4	0	0	3	50	50	100	4
4	PCC	MVJ20CSE14	Special Concretes	Civil Engineering	3	0	0	3	50	50	100	3
5	PCC	MVJ20CSE15	Repairs and Rehabilitation of Structures	Civil Engineering	3	0	0	3	50	50	100	3
6	PCC	MVJ20CSEL16	Advanced Concrete Lab	Civil Engineering	0	1	3	3	50	50	100	2
7	PCC	MVJ20CSEL17	Structural Software Lab-I	Civil Engineering	0	1	3	3	50	50	100	2
8	PCC	MVJ20IPR18	Research Methodology and IPR	Civil Engineering	2	0	0	3	50	50	100	2
<b>Total</b>					<b>20</b>	<b>2</b>	<b>6</b>	<b>24</b>	<b>400</b>	<b>400</b>	<b>800</b>	<b>24</b>

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	MVJ20CSE21	Advanced Design of Steel Structures	Civil Engineering	4	0	0	3	50	50	100	4
2	PCC	MVJ20CSE22	Finite Element Method	Civil Engineering	4	0	0	3	50	50	100	4
3	PCC	MVJ20CSE23	Earthquake Resistant Structures	Civil Engineering	4	0	0	3	50	50	100	4
4	PCC	MVJ20CSE24	Design of Concrete Bridges	Civil Engineering	4	0	0	3	50	50	100	4
5	PE	MVJ20CSE25X	Professional Elective -1	Civil Engineering	3	0	0	3	50	50	100	3
6	PE	MVJ20CSE26X	Professional Elective -2	Civil Engineering	3	0	0	3	50	50	100	3
7	PCC	MVJ20CSEL27	Structural Software Lab-2	Civil Engineering	0	1	3	3	50	50	100	2
8	PCC	MVJ20CSE28	Technical Seminar	Civil Engineering	-	-	-	-	100	-	100	2
<b>Total</b>					<b>22</b>	<b>1</b>	<b>3</b>	<b>21</b>	<b>450</b>	<b>350</b>	<b>800</b>	<b>26</b>

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

Professional Elective-1		Professional Elective-2	
MVJ20CSE251	Design of Precast & Composite Structures	MVJ20CSE261	Advanced Structural Analysis
MVJ20CSE252	Design of Sub Structures	MVJ20CSE262	Design of High Rise Structures
MVJ20CSE253	Sustainable Concepts in Structural Engineering	MVJ20CSE263	Design of Industrial Structures
MVJ20CSE254	Stability of Structures	MVJ20CSE264	Design of Masonry Structures

### III SEMESTER M.TECH- (STRUCTURAL ENGINEERING)

S No	Course		Course Title	Teaching Department	Teaching hours/week			Examination				Credits
	Type	Code			Theory Lecture	Tutorial	Practical/ Drawing	Duration in Hours	CIE Marks	SEE Marks	Total marks	
					L	T	P					
1	PCC	MVJ20CSE31	Minor Project	Civil Engineering	0	0	8	3	50	50	100	4
2	PCC	MVJ20CSE32	Major Project Phase-1	Civil Engineering	0	0	8	3	50	50	100	4
3	PCC	MVJ20CSEI33	Internship	Civil Engineering	0	0	20	3	50	50	100	10
<b>Total</b>							<b>12</b>	<b>9</b>	<b>150</b>	<b>150</b>	<b>300</b>	<b>18</b>
Note: PCC: Professional Core Course												

**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	PCC	MVJ20CSEP41	Major Project Phase-2	Civil Engineering	0	0	36	3	50	50	100	18
2	CRT	MVJ20CSEC42	Certification	Industry / Institute	0	0	0	-	-	-	-	2
<b>Total</b>							<b>36</b>	<b>3</b>	<b>50</b>	<b>50</b>	<b>100</b>	<b>20</b>
Note: PCC: Professional Core Course												