

# 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- (TRANSPORTATION 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
	Type	Code			L	T	P					
1	PCC	MVJ19CTE11	Traffic Engineering	Civil Engineering	4	0	0	3	50	50	100	4
2	PCC	MVJ19CTE12	Pavement Materials	Civil Engineering	4	0	0	3	50	50	100	4
3	PCC	MVJ19CTE13	Applied Soil Mechanics and Ground Improvement Techniques	Civil Engineering	4	0	0	3	50	50	100	4
4	PCC	MVJ19CTE14	Urban Transport Planning	Civil Engineering	4	0	0	3	50	50	100	4
5	PCC	MVJ19IPR15	Research Methodology and IPR	Civil Engineering	2	0	0	3	50	50	100	2
6	PCC	MVJ19CTEL16	Highway Materials Testing Lab	Civil Engineering	0	1	3	3	50	50	100	2
7	PCC	MVJ19CTEL17	Concrete and Geo technical engineering Lab	Civil Engineering	0	1	3	3	50	50	100	2
<b>Total</b>					<b>18</b>	<b>2</b>	<b>6</b>	<b>21</b>	<b>350</b>	<b>350</b>	<b>700</b>	<b>22</b>
Note: PCC: Professional Core Course												

**II SEMESTER M.TECH- (TRANSPORTATION 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	MVJ19CTE21	Pavement Design and Analysis	Civil Engineering	4	0	0	3	50	50	100	4
2	PCC	MVJ19CTE22	Transportation Economics And Evaluation	Civil Engineering	4	0	0	3	50	50	100	4
3	PCC	MVJ19CTE23	Railways and Airways	Civil Engineering	4	0	0	3	50	50	100	4
4	PE	MVJ19CTE24X	Professional Elective-1	Civil Engineering	3	0	0	3	50	50	100	3
5	PE	MVJ19CTE25X	Professional Elective-2	Civil Engineering	3	0	0	3	50	50	100	3
6	OE	MVJ19CTE26X	Open Elective	Civil Engineering	3	0	0	3	50	50	100	3
7	PCC	MVJ19CTEL27	Transportation Engineering Lab	Civil Engineering	0	1	3	3	50	50	100	2
8	PCC	MVJ19CTEP28	Mini Project	Civil Engineering	0	0	4	-	100	-	100	2
<b>Total</b>					<b>21</b>	<b>1</b>	<b>7</b>	<b>21</b>	<b>450</b>	<b>350</b>	<b>800</b>	<b>25</b>

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

Professional Elective-1		Professional Elective-2		Open Elective	
MVJ19CTE241	Theories of traffic flow	MVJ19CTE251	Pavement Management System	MVJ19CTE261	Sustainable Concepts in Civil Engineering
MVJ19CTE242	Geometric Design of Transportation facilities	MVJ19CTE252	Transportation Structures	MVJ19CTE262	Remote Sensing and GIS in Engineering
MVJ19CTE243	Transportation Systems	MVJ19CTE253	Applied Statistics	MVJ19CTE263	Occupational Health and Safety

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

S No	Course		Course Title	Teaching Department	Teaching hours/week			Examination				Credits
					Theory Lecture	Tutorial	Practical/Drawi ng	Duration in Hours	CIE Marks	SEE Marks	Total marks	
	L	T			P							
1	PCC	MVJ19CTE31	Pavement Construction Technology	Civil Engineering	4	0	0	3	50	50	100	4
2	PE	MVJ19CTE32X	Professional Elective-3	Civil Engineering	3	0	0	3	50	50	100	3
3	PE	MVJ19CTE33X	Professional Elective-4	Civil Engineering	3	0	0	3	50	50	100	3
4	Seminar	MVJ19CTE34	Technical Seminar	Civil Engineering	0	0	4	-	100	-	100	2
5	Project	MVJ19CTEP35	Evaluation of Project Phase-1	Civil Engineering	0	0	4	-	100	-	100	2
6	Internship	MVJ19CTE36	Internship (Completed during the intervening vacation of III and IV semesters- 6weeks)	Civil Engineering	0	0	0	3	50	50	100	6
<b>Total</b>					<b>10</b>	<b>0</b>	<b>8</b>	<b>12</b>	<b>400</b>	<b>200</b>	<b>600</b>	<b>20</b>

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

Professional Elective-3		Professional Elective-4	
MVJ19CTE321	Road Safety and Management	MVJ19CTE331	Rural Roads
MVJ19CTE322	Intelligent Transportation Systems	MVJ19CTE332	Environmental Impact Assessment of Transportation Projects
MVJ19CTE323	Infrastructure Management	MVJ19CTE333	Pavement Evaluation And Management

**IV SEMESTER M.TECH- (TRANSPORTATION 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	MVJ19CTEP41	Major Project Phase-2	Civil Engineering	0	0	38	3	50	50	100	19
2	CRT	MVJ19CTEC42	Certification	Industry / Institute	0	0	0	-	-	-	-	2
<b>Total</b>							<b>38</b>	<b>3</b>	<b>50</b>	<b>50</b>	<b>100</b>	<b>21</b>
Note: PCC: Professional Core Course												