

MANIPAL UNIVERSITY JAIPUR
Department of Civil Engineering
B Tech (Civil Engineering)
Batch – 2020-2024

Year	THIRD SEMESTER						FOURTH SEMESTER					
	Sub. Code	Subject Name	L	T	P	C	Sub. Code	Subject Name	L	T	P	C
II	BB0025	Value, Ethics and Governance	2	0	0	2	EO2001	Economics	3	0	0	3
	MA2104	Engineering Mathematics – III	2	1	0	3	MA2207	Engineering Mathematics – IV	2	1	0	3
	CV2101	Fluid Mechanics	3	1	0	4	CV2201	Engineering Geology	3	0	0	3
	CV2102	Building Materials & Construction Technology	3	1	0	4	CV2202	Water Supply Engineering	3	1	0	4
	CV2103	Surveying	3	1	0	4	CV2203	Analysis of Indeterminate Structures	3	1	0	4
	CV2104	Structural Analysis	3	1	0	4	*****	Open Elective – I	3	0	0	3
	CV2130	Material Testing Lab	0	0	2	1	CV2230	Geology Lab	0	0	2	1
	CV2131	Surveying Practice	0	0	3	1	CV2231	Fluid Mechanics Lab	0	0	2	1
							CV2232	Building Drawing and Design	1	0	3	2
		16	5	5	23			18	3	7	24	
	Total Contact Hours (L + T + P)		26			Total Contact Hours (L + T + P) + OE		28				
III	FIFTH SEMESTER						SIXTH SEMESTER					
	BB0026	Organisation and Management	3	0	0	3	CV3201	Applied Geotechnical Engineering	3	1	0	4
	CV3101	Geotechnical Engineering	3	1	0	4	CV3202	Design of Steel Structures	3	1	0	4
	CV3102	Highway Engineering	3	1	0	4	CV3204	Water Resources Engineering	3	0	0	3
	CV3103	Design of Reinforced Concrete Structures	3	1	0	4	CV32XX	Program Elective – I	3	0	0	3
	CV3104	Waste Water Management	3	1	0	4	CV32XX	Program Elective – II	3	0	0	3
	*** **	Open Elective – II	3	0	0	3	*** **	Open Elective – III	3	0	0	3
	CV3130	Geotechnical Engineering Lab	0	0	2	1	CV3230	Computer Aided Design Lab	0	0	2	1
	CV3131	Environmental Engineering Lab	0	0	2	1	CV3231	Highway Engineering Lab	0	0	2	1
							CV3233	Estimation and Costing Practice	0	0	3	1
							CV3270	Project Based Learning	0	0	2	1
			18	4	4	24			17	3	9	24
	Total Contact Hours (L + T + P) + OE		26			Total Contact Hours (L + T + P) + OE		29				
IV	SEVENTH SEMESTER						EIGHTH SEMESTER					
	CV41XX	Program Elective – III	2	1	0	3	CV4270	Major Project	0	0	0	12
	CV41XX	Program Elective – IV	2	1	0	3						
	CV41XX	Program Elective – V	2	1	0	3						
	CV41XX	Program Elective – VI	2	1	0	3						
	CV41XX	Program Elective – VII	2	1	0	3						
	CV4170	Minor Project	0	0	3	1						
	CV4171	Industrial Training	0	0	0	1						
	CV4172	Survey Camp	0	0	3	1						
		10	5	6	18						12	
	Total Contact Hours (L + T + P)		21			Total Credit= 169 (Including First Year)						

Minor Specializations	Other Programme Electives	Open Electives
<p>I. Structural Engineering</p> <ol style="list-style-type: none"> CV3240 Finite Element Analysis CV3241 Advanced Design of Reinforced Concrete Structures CV4140 Earthquake Resistant Design of Structures CV4141 Design of Pre-stressed Concrete Structures <p>II. Environmental Engineering</p> <ol style="list-style-type: none"> CV3242 Environmental Impact Assessment CV3243 Air Pollution and Control CV4142 Solid and Hazardous Waste Management CV4143 Industrial Wastewater Treatment 	<ol style="list-style-type: none"> CV3244 Remote Sensing and GIS CV3245 Hydraulics and Hydraulic Machines CV3246 Sanitation Technology CV3248 Railways and Airport Engineering CV4144 Repair and Rehabilitation of Structures CV4145 Advanced Concrete Technology CV4146 Estimation Costing and Valuation CV4147 Contract Management and Arbitration CV4148 Construction Project Management CV4149 Ground Improvement Techniques CV4150 Rock Mechanics and Underground Excavation CV4151 Urban Transportation Planning CV4152 Traffic Systems and Engineering CV4153 Hydrological Analysis CV4154 Water Resources Planning and Management CV4155 Bridge Engineering 	<ol style="list-style-type: none"> CV2080 Environmental Impact Assessment CV2081 Contract Management CV2082 Building Planning CV3080 Geographical Information System CV3081 Environmental Management CV3082 Advanced Fluid Mechanics CV3083 Solid Waste Management CV3084 Rural Water Supply and Sanitation