

MANIPAL UNIVERSITY JAIPUR
Department of Civil Engineering, B Tech (Civil Engineering)
Admission Batch – 2025 to 2028

Year	FIRST SEMESTER						SECOND SEMESTER					
	Sub. Code	Subject Name	L	T	P	C	Sub. Code	Subject Name	L	T	P	C
I	CHY1001	Engineering Chemistry & Lab	2	0	2	3	PHY1001	Engineering Physics & Lab	2	1	2	4
	MAS1001	Calculus & Matrices	2	1	0	3	MAS1002	Computational Mathematics	2	1	0	3
	ECE1002	Electronic Circuits	2	1	0	3	CHY1002	Environmental Studies	2	0	0	2
	MEE1008	Basic Mechanical Engineering	3	0	0	3	EEE1001	Electrical Technology	2	0	0	2
	CSC1101	Problem-Solving Using Computers	2	1	0	3	CIV1002	Engineering Materials and Mechanics	2	1	0	3
	DOA1001	Universal Human Values	1	0	0	1	MEE1038	Creativity & Innovation IDEA Lab	1	0	2	2
	CSC1130	Problem-Solving Using Computers Lab	0	0	2	1	BIT1001	Biology for Engineers	2	0	0	2
	LLC1011	Communication Skills	2	0	0	2	MEE1037	MATLAB for Engineers Lab	0	0	2	1
	MEE1036	Engineering Graphics	0	0	2	1	DOA1002	Wellness and Community Services	1	0	0	1
	Total		14	3	6	20	Total		14	3	6	20
II	THIRD SEMESTER						FOURTH SEMESTER					
	MAS2001	Statistics and Probability	3	0	0	3	DOA2101	Principles of Management	3	0	0	3
	MEE2001	Engineering Economics	3	0	0	3	CIV2201	Structural Analysis	3	1	0	4
	CIV2101	Fluid Mechanics	4	0	0	4	CIV2203	Environmental Engineering – 1	4	0	0	4
	CIV2102	Surveying and Practices	3	0	3	4	CIV2204	Concrete Technology	3	0	0	3
	CIV2103	Strength of Materials	3	1	0	4	CIV2205	Construction Project Management	3	1	0	4
	CIV2104	Building Materials and Construction Technology	4	0	0	4	LLC2211	Technical Report Writing	2	0	0	2
	CIV2130	Material Testing Lab	0	0	2	1	CIV2230	Environmental Engineering Lab	0	0	2	1
	CIV2131	Fluid Mechanics Lab	0	0	2	1	CIV2270	Project Based Learning-1	0	0	6	3
	Total		20	1	7	24	Total		18	2	8	24
III	FIFTH SEMESTER						SIXTH SEMESTER					
	CIV3101	Geotechnical Engineering	3	1	0	4	CIV3202	Design of Steel Structures	3	1	0	4
	CIV3102	Design of Reinforced Concrete Structures	3	1	0	4	CIV3203	Water Resources Engineering	3	0	0	3
	CIV3103	Environmental Engineering – 2	3	0	0	3	CIV32XX	Programme Elective-2	3	0	0	3
	CIV3104	Highway Engineering	3	1	0	4	CIV32XX	Programme Elective-3	3	0	0	3
	CIV31XX	Programme Elective-1	3	0	0	3	CIV32XX	Programme Elective-4	3	0	0	3
	CIV3130	Geotechnical Engineering Lab	0	0	2	1	XXX00XX	Open Elective-1	3	0	0	3
	CIV3131	Highway Engineering Lab	0	0	2	1	CIV3231	Computer Aided Design Lab	0	0	2	1
	CIV3132	Building Drawing Lab	0	0	2	1	CIV3232	Estimating and Costing Practice	0	0	4	2
	CIV3170	Project Based Learning-2	0	0	6	3						
	CIV31XX	Minor Specialization - 1/ Honors	3	0	0	3	CIV32XX	Minor Specialization - 2/ Honors	3	0	0	3
	Total		15	3	12	24	Total		18	1	6	22
	Minor Specialization/ Honors Total		18	3	12	27	Minor Specialization/ Honors Total		21	1	6	25
IV	SEVENTH SEMESTER						EIGHTH SEMESTER					
	CIV41XX	Programme Elective-5	3	0	0	3	CIV4270	Major Project	0	0	24	12

	CIV41XX	Programme Elective-6	3	0	0	3	CIV4271	Minor Specialization/ Honors (Research Project)	0	0	36	18
	XXX00XX	Open Elective-2	3	0	0	3						
	XXX00XX	Open Elective-3	3	0	0	3						
	CIV4170	Internship (Industry/ Research/ Industry Certification)	0	0	0	2						
	CIV41XX	Minor Specialization - 3/ Honors	3	0	0	3						
	CIV41XX	Minor Specialization - 4/ Honors	3	0	0	3						
	Total		12	0	0	14	Total		0	0	24	12
	Minor Specialization/ Honors Total		18	0	0	20	Minor Specialization/ Honors Total		0	0	36	18

- Total Credit= 160 (Higher Sem: 120 + First year: 40)
- Total Credit= 178 (Higher Sem: 120 + Minor: 18 + First year: 40)

Programme Electives:

Sem-5	Sem-6	Sem-7
Program Elective 1 CIV3141: Advanced Concrete Technology CIV3146: Remote Sensing and Geographic Information Systems CIV3147: Computational Hydraulics CIV3148: Engineering Geology CIV3149: Climate Change Impact	Program Elective 2 Program Elective 3 Program Elective 4 CIV3240: Railways and Airport Engineering CIV3242: Real Estate Valuation CIV3243: Applied Geotechnical Engineering CIV3244: Advanced Reinforced Concrete Design CIV3246: Contract Management And Arbitration CIV3248: Photogrammetry CIV3249: Remote Sensing and GIS for Rural Development CIV3250: Environmental Impact Assessment CIV3251: Repair And Rehabilitation of Structures CIV3252: Fundamentals of AI and ML in Civil Engineering CIV3253: Advanced Structural Analysis CIV3254: Traffic Systems And Engineering	Program Elective 5 Program Elective 6 CIV4141: Design of Pre-Stressed Concrete Structures CIV4143: Bridge Engineering CIV4144: Finite Element Method CIV4145: Earthquake Resistant Design of Structures CIV4147: Building Information Modelling CIV4148: Lean Construction Technology CIV4150: Admixtures and Special Concretes CIV4151: Essentials of Biomimetics for Construction Engineering

Open Electives:

CIV0001: Basics of Remote Sensing and GIS CIV0002: Integrated Waste Management for a Smart City CIV0003: Introduction to Multimodal Urban Transportation Systems CIV0004: Building Planning CIV0005: Environmental Impact Assessment and Management CIV0006: Solid Waste Management CIV0007: Rural Water Supply and Sanitation
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