

National Institute of Technology Raipur (C.G.)

Department of Civil Engineering

M.Tech. in CIVIL with specialization in Structural Engineering

Course of Study

M.Tech. First Semester

S.No.	Board of Studies	Sub. Code	Subject Name	Periods/week			Examination Scheme					Total Marks	Credits L+(T+P)/2
				L	T	P	TA	FE	SE	ESE	Pract. ESE		
1	Civil Engg.	CI42111(CI)	Advanced Solid Mechanics	3	1	-	20	15	15	100	-	150	4
2	Civil Engg.	CI40112(CI)	Numerical Methods	3	1	-	20	15	15	100	-	150	4
3	Civil Engg.	CI42113(CI)	Structural Dynamics	3	1	-	20	15	15	100	-	150	4
4	Civil Engg.	**	Elective –I	3	1	-	20	15	15	100	-	150	4
5	Civil Engg.	##	Elective –II	3	1	-	20	15	15	100	-	150	4
6	Civil Engg.	CI42121(CI)	Advanced Concrete Technology Lab	-	-	3	75	-	-	-	50	125	2
7	Civil Engg.	CI42122(CI)	Experimental stress analysis Lab	-	-	3	75	-	-	-	50	125	2
Total				15	5	6	250	75	75	500	100	1000	24

List of Elective Subjects

S.No.	Electives	Subject Code	Subject Name
1	Elective I **	CI42131(CI)	Advanced Pre-stressed Concrete
2		CI42132(CI)	Advanced Structural Analysis
3	Elective II ##	CI42133(CI)	Advanced Concrete Technology
4		CI42134(CI)	Theory of Structural Elastic Stability
5		CI42135(CI)	Theory of Plates and Shells

National Institute of Technology Raipur (C.G.)

Department of Civil Engineering

M.Tech. in CIVIL with specialization in Structural Engineering

Course of Study						M.Tech. Second Semester							
S.No.	Board of Studies	Sub. Code	Subject Name	Periods/week			Examination Scheme					Total Marks	Credits L+(T+P)/2
				L	T	P	TA	FE	SE	ESE	Pract. ESE		
1	Civil Engg.	CI42211(CI)	Advanced Structural Design	3	1	-	20	15	15	100	-	150	4
2	Civil Engg.	CI42212(CI)	Finite Element Method	3	1	-	20	15	15	100	-	150	4
3	Civil Engg.	CI42213(CI)	Seismic Analysis and Design of Structures	3	1	-	20	15	15	100	-	150	4
4	Civil Engg.	\$\$	Elective III	3	1	-	20	15	15	100	-	150	4
5	Civil Engg.	***	Elective IV	3	1	-	20	15	15	100	-	150	4
6	Civil Engg.	CI42221(CI)	Computer Applications Lab	-	-	3	75	-	-	-	50	125	2
7	Civil Engg.	CI42222(CI)	Structural Dynamics Lab	-	-	3	75	-	-	-	50	125	2
Total				15	5	6	250	75	75	500	100	1000	24

List of Elective Subjects

S.No.	Electives	Subject Code	Subject Name
1	Elective III \$\$	CI40271(CI)	Construction Planning & Management (Open Elective)
2		CI42231(CI)	Structural Health Monitoring, Repairs and Rehabilitation of Structures
3		CI42232(CI)	Advanced Foundation Engineering
4	Elective IV ***	CI40272(CI)	Reliability Engineering (Open Elective)
5		CI42233(CI)	Ground Improvement Techniques
6		CI42234(CI)	Earthquake Hazard Analysis
7		CI42235(CI)	Non-Linear Analysis

National Institute of Technology Raipur (C.G.)

Department of Civil Engineering

M.Tech. in CIVIL with specialization in Structural Engineering

Course of Study

M.Tech. Third Semester

S.No.	Board of Studies	Sub. Code	Subject Name	Periods/week			Examination Scheme					Total Marks	Credits L+(T+P)/2
				L	T	P	TA	FE	SE	ESE	Pract. ESE		
1	Civil Engg.	CI42321(CI)	Preliminary work on Dissertation	-	-	24	100	-	-	-	200	300	12
2	Civil Engg.	CI42322(CI)	Comprehensive Viva Voce & Seminar	-	-	-	-	-	-	-	200	200	4
			Total	0	0	24	100	0	0	0	400	500	16

National Institute of Technology Raipur (C.G.)

Department of Civil Engineering

M.Tech. in CIVIL with specialization in Structural Engineering

Course of Study

M.Tech. Fourth Semester

S.No.	Board of Studies	Sub. Code	Subject Name	Periods/week			Examination Scheme					Total Marks	Credits L+(T+P)/2
				L	T	P	TA	FE	SE	ESE	Pract. ESE		
1	Civil Engg.	CI42421(CI)	Dissertation	-	-	32	200	-	-	-	300	500	16
			Total	0	0	32	200	0	0	0	300	500	16