

2-year M.Tech course curriculum
Structural Engineering, Department of Civil Engineering
Curriculum: July 2023

Course Curriculum

Semester 1

Sr. No.	Course Name	Code	Credit	Course type
1	Advanced Structural Mechanics	CE50110	3	Department core
2	Applied Elasticity and Plasticity	CE50120	3	Department core
3	Structural Engineering Lab	CE50141	1	Department core
4	Elective I (Basket 1)	XXXX	3	Department elective
5	Elective II (Basket 1)	XXXX	3	Department elective
6	English Communication	CEXXXX	1	Soft skills
Total credits			14	

Semester 2

Sr. No.	Course Name	Code	Credit	Course type
1	Finite Element Analysis	CE50130	3	Department core
2	Structural Dynamics	CE50140	3	Department core
3	Finite Element Lab	CE50131	1	Department core
4	Elective-III (Basket 2)	XXXX	3	Department elective
5	Elective-IV (Basket 2)	XXXX	3	Department elective
6	Industrial Seminar	CE50106	1	Life skills
Total credits			14	

Semester 3

Sr. No.	Course Name	Code	Credit	Course type
1	Master's thesis	CE60015	12	Thesis

Semester 4

Sr. No.	Course Name	Code	Credit	Course type
1	Master's thesis	CE60025	12	Thesis

Electives placed into respective baskets

Course Name	Code	Credit
Basket 1: For Electives I and II		
Advanced Reinforced Concrete Design	CE50212	3
Advanced Structural Steel Design	CE50232	3
Mathematical Methods in Civil Engineering	CE50170	3
Advanced Concrete Technology	CE50190	3
Fracture Mechanics	CE50350	3
Structural Reliability Analysis	CE50180	3
Basket 2: For Electives III & IV		

Structural Condition Assessment and Strengthening	CE50224	3
Prestressed Concrete Design	CE60222	3
Stability of Structures	CE50150	3
Design Studio	CE50002	3
Bridge Engineering	CE50214	3
Applied Finite Elements	CE50240	3
Theory of Plates and Shells	CE60160	3
Design of Cold-Formed Light Gauge Steel Structures	CE50270	3