Program Schemes for ME Civil Engineering (Structural and Construction Engineering)

Cluster: Engineering and Technology **Institute: UIE**

Department: Civil Engineering **Type of Program: PG**

Semester: 1st **Batch: 2026**

Course Name	L	T	P	C	Course Category
Advanced Concrete Technology	2	0	2	3	Program Core
Finite Element Method	3	0	2	4	Program Core
Construction Project Management	2	0	2	3	Program Core
Pre-Stressed Concrete Design	3	0	0	3	Program Core
Modern Construction Materials	3	0	0	3	Program Core
Research Methodology	3	0	0	3	Program Core
Project-I	0	0	0	2	Project
BIM Lab	0	0	2	2	Program Core

Semester: 2nd **Batch: 2026**

Course Name	L	T	P	C	Course Category
Earthquake Resistant Design of Structures	3	0	2	4	Program Core
AI in Structural Engineering	2	0	2	3	Program Core
Planning & Design of Smart Cities	3	0	0	3	Program Core
Program Elective-I	3	0	0	3	Program Elective
Program Elective-II	3	0	0	3	Program Elective
Structural Design and Detailing Lab	0	0	2	2	Program Core
Project-II	0	0	0	2	Project
Aptitude-I (For TPP)	0	0	4	2	Ability Enhancement
Soft Skills-I (For TPP)	0	0	4	2	Skill Enhancement
Quantitative Aptitude and Reasoning (Non TPP)	0	0	0	1	Ability Enhancement
Professional Skills Development (Non TPP)	0	0	0	1	Skill Enhancement
Program Elective-I					
Design and Construction of Bridge Structures	3	0	0	3	Program Elective
Analysis and Design of Foundation	3	0	0	3	Program Elective
Theory of Elasticity and Plasticity	3	0	0	3	Program Elective
Program Elective-II					
Infrastructure Development and Management	3	0	0	3	Program Elective
Contract Laws and Regulations Design	3	0	0	3	Program Elective
Project Risk Analysis and Mitigation Techniques	3	0	0	3	Program Elective

Semester: 3rd **Batch: 2026**

Course Name	L	T	P	C	Course Category
Dissertation Part I	0	0	0	10	Project
Research Seminar	0	0	0	3	Skill Enhancement
Open Elective- I	3	0	0	3	Open Elective
Open Elective- II	3	0	0	3	Open Elective
Summer Internship	0	0	0	2	Internship
Aptitude-II (For TPP)	0	0	2	1	Ability Enhancement
Soft Skills-II (For TPP)	0	0	2	1	Skill Enhancement
Statistical Data Analysis (Non TPP)	0	0	0	1	Ability Enhancement
Finance & Economics (Non TPP)	0	0	0	1	Skill Enhancement
Emerging Research Tools and Technologies	0	0	0	1	Ability Enhancement
Business Planning & Legal Basics	0	0	0	1	Skill Enhancement

Semester: 4th **Batch: 2026**

Course Name	L	T	P	C	Course Category
Dissertation Part II	0	0	0	14	Project