

MTech-Structural Engineering
COURSE STRUCTURE:
Batch 2020-2022

I Semester

Sl. No	Type	Code	Course Name	L Hrs.	T Hrs.	P Hrs.	Credits
1	PCC	MTCE131	Advanced Structural Analysis	3	0	0	3
2	PCC	MTCE132	Advanced Solid	3	0	0	3
3	PEC	MTCE133	Elective - I	3	0	0	3
4	PEC	MTCE134	Elective - II	3	0	0	3
5	PCC	MTCE151	Structural Design Lab	0	0	2	2
6	PCC	MTCE152	Advanced Concrete Lab	0	0	2	2
7	MLC	MLC136	Research Methodology and	2	0	0	2
8	Audi	AC131	Audit Course I	2	0	0	0
9	MC	HE171	Holistic education	1	0	0	1
			Total				19

II Semester

Sl. No	Type	Code	Course Name	L Hrs.	T Hrs.	P Hrs.	Credits
1	PCC	MTCE231	FEM in Structural	3	0	0	3
2	PCC	MTCE232	Structural Dynamics	3	0	0	3
3	PEC	MTCE233	Elective - III	3	0	0	3
4	PEC	MTCE234	Elective - IV	3	0	0	3
5	PCC	MTCE251	Model Testing Lab	0	0	2	2
6	PCC	MTCE252	Numerical Analysis Lab	0	0	2	2
7	PCC	MTCE272	Mini Project	0	0	4	2
8	Audit	AC231	Audit Course-2	2	0	0	0
9	MC	HE271	Holistic education	1	0	0	1
			Total				19

III Semester

Sl. No	Type	Code	Course Name	L Hrs.	T Hrs.	P Hrs.	Credits
1	PEC	MTCE331	Elective - V	3	0	0	3
2	OEC	MTCE332	Open Elective	3	0	0	3
3	PROJ	MTCE371	Dissertation Phase – I	0	0	0	10
			Total				16

IV Semester

Sl. No	Type	Code	Course Name	L Hrs.	T Hr	P Hrs.	Credits
1	PROJ	MTCE471	Project Work (Phase II) and Dissertation	3	0	32	16
			Total				16

Elective - I

- A. 1. Theory of Thin Plates and Shells
- B. 2. Theory and Applications of Cement Composites
- C. 3. Theory of Structural Stability

Elective - II

1. Analytical and Numerical Methods for Structural Engineering
2. Structural Health Monitoring
3. Structural Optimization

Elective - III

1. Advanced Steel Design
2. Design of Formwork
3. Design of High-Rise Structures
4. Design of Masonry Structures

Elective - IV

1. Design of Advanced Concrete Structures
2. Advanced Design of Foundations
3. Soil Structure Interaction
4. Design of Industrial Structure

Elective - V
1. Design of Plates and Shells
2. Analytical and Finite Element Analysis of Laminated Composite
3. Fracture Mechanics of Concrete Structures
4. Design of Prestressed Concrete Structure

Open Elective
1. Business Analytics
2. Industrial Safety
3. Operations Research
4. Cost Management of Engineering Projects
5. Composite Materials
6. Waste to Energy

Audit Course 1 & 2
1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development through Life Enlightenment Skills.

Batch 2019-2021

III Semester

Sl. No	Type	Code	Course Name	L Hrs.	T Hrs.	P Hrs.	Credits
1	PEC	MTCE331	Elective - V	3	0	0	3
2	OEC	MTCE332	Open Elective	3	0	0	3
3	PROJ	MTCE371	Dissertation Phase – I	0	0	0	10
			Total				16

IV Semester

Sl. No	Type	Code	Course Name	L Hrs.	T Hr	P Hrs.	Credits
1	PROJ	MTCE471	Project Work (Phase II) and Dissertation	3	0	32	16
			Total				16

2019 Batch

Elective - I
A. 1. Theory of Thin Plates and Shells
B. 2. Theory and Applications of Cement Composites
C. 3. Theory of Structural Stability

Elective - II
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2. Structural Health Monitoring
3. Structural Optimization

Elective - III
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