

# DELHI TECHNOLOGICAL UNIVERSITY

## SCHEME OF TEACHING AND EVALUATION

### MASTER OF TECHNOLOGY IN STRUCTURAL ENGINEERING ( STE )

The following alphanumeric coding scheme has been adopted

Core Courses XXXYMN

Elective Courses XXXYCMN

XXX abbreviates a particular M. Tech. program, Y – (5 for M. Tech. 1 st year, 6 for M. Tech. 2 nd year),

C – credit of the course (4/3/2),

MN – Subject code (Odd number for odd semester and even number for even semester courses)

### Semester-I

	S. No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
<b>Group A</b>	1	STE501	Structural Dynamics	Core	4	3	0	2	15	25	20	40	-	<b>17</b>
	2	STE503	Computational Methods in Structural Engineering	Core	4	3	0	2	15	25	20	40	-	
<b>Group B</b>	3	STE5401/5403/.....	Elective 1	Elective	4	3	0	2	15	25	20	40	-	
	4	STE5301/5303/.....	Elective 2	Elective	3	3	0	0	15	25	20	40	-	
	5	STE5201/5203/...../ UEC5201/5203/.....	Elective 3/University Elective I	Elective	2	2/1	0	0/2	20/15	0/25	30/20	50/40	-	

### Semester-II

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
<b>Group C</b>	1	STE502	Advanced Theory of Structures	Core	4	3	0	2	15	25	20	40	-	<b>17</b>

	2	STE504	Finite Element Method of Structural Analysis	Core	4	3	0	2	15	25	20	40	-
<b>Group D</b>	3	STE5402/5404/.....	Elective 4	Elective	4	3	0	2	15	25	20	40	-
	4	STE5302/5304/.....	Elective 5	Elective	3	3	0	0	20	0	30	50	-
	5	STE5202/5204/.....	Elective 6	Elective	2	2/1	0	0/2	20/15	0/25	30/20	50/40	-

### Semester-III

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits	
	<b>Track 1</b>														
	1	STE651	Research Project	Core	12	0	0	12	0	-	0	100	0	<b>12</b>	
	<b>Track 2</b>														
<b>Group E</b>	1	STE601	Major Project I	Core	3	0	0	6	0	-	0	100	0		
	2	STE6401/6403/.....	Elective 7	Elective	4	3	0	2	15	25	20	40	-		
	3	STE6301/6303/.....	Elective 8	Elective	3	3 / 2	0	0/2	20/15	0/25	30/20	50/40	-		
	4	STE6201/6203/.....	Elective 9	Elective	2	2	0	0	20	-	30	50	-		

### Semester-IV

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
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<b>Group F</b>	<b>Track 1</b>													<b>12</b>
	1	STE652+B20	Research Project	Core	12	0	0	12	0	-	0	100	0	
	<b>Track 2</b>													
	1	STE602	Major Project II	Core	12						40	60		

**List of Elective Courses**

<b>LIST OF ELECTIVES :</b>													
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 1</b>	1	STE5401	Design of Advanced Reinforced Concrete Structures	Elective	4	3	0	2	15	25	20	40	-
	2	STE5403	Design of Advanced Steel Structures		4	3	0	2	15	25	20	40	-
	3	STE5405	Prestressed Concrete Design		4	3	0	2	15	25	20	40	-
	4	STE5407	Cyclone Risk and Hazard Assessment		4	3	0	2	15	25	20	40	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 2</b>	1	STE5301	Theory of Plates & Shells	Elective	3	3	0	0	20	0	30	50	-
	2	STE5303	Theory of Elasticity & Plasticity		3	3	0	0	20	0	30	50	-
	3	STE5305	Stability Analysis of		3	3	0	0	20	0	30	50	-

			Structures										
	4	STE5307	Advanced Building and Construction Management		3	3	0	0	20	0	30	50	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 3</b>	1	STE5201	Seminar	Elective	2	0	0	2	-	100	-	-	-
	2	STE5203	Advanced Concrete Technology		2	2	0	0	20	0	30	50	-
	3	STE5205	Design of Fibre Reinforced Composite Structures		2	1	0	2	15	25	20	40	-
	4	STE5207	Low Cost Housing		2	2	0	0	20	0	30	50	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 4</b>	1	STE5402	Analysis and Design of Bridges	Elective	4	3	0	2	15	25	20	40	-
	2	STE5404	Design of Tall Buildings		4	3	0	2	15	25	20	40	-
	3	STE5406	Wind Engineering		4	3	0	2	15	25	20	40	-
	4	STE5408	Earthquake Resistant Design of Structures		4	3	0	2	15	25	20	40	-
	5	STE5410	Reliability Analysis of Structures		4	3	0	2	15	25	20	40	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 5</b>	1	STE5302	MINOR PROJECT	Elective	3	0	0	-	-	40	-	-	60
	2	STE5304	Soil Structure Interaction		3	3	0	0	20	0	30	50	-

	3	STE5306	Design of Masonry Structures		3	3	0	0	20	0	30	50	-
	4	STE5308	Disaster Mitigation and Management		3	3	0	0	20	0	30	50	-
	5	STE5310	Random Vibration		3	3	0	0	20	0	30	50	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 6</b>	1	STE5202	Durability of Concrete Structures	Elective	2	1	0	2	15	25	20	40	-
	2	STE5204	Building Services		2	2	0	0	20	0	30	50	-
	3	STE5206	Waste to Energy		2	2	0	0	20	0	30	50	-
	4	STE5208	Blast Resistant Design of Structures		2	2	0	0	20	0	30	50	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 7</b>	1	STE6401	Design of Hydraulic Structures	Elective	4	3	0	2	15	25	20	40	-
	2	STE6403	Soil Dynamics		4	3	0	2	15	25	20	40	-
	3	STE6405	Seismic Hazard and Risk Assessment		4	3	0	2	15	25	20	40	-
	4	STE6407	Retrofitting of Structures		4	3	0	2	15	25	20	40	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 8</b>	1	STE6301	Instrumentation and Rehabilitation of Structures	Elective	3	3	0	0	20	0	30	50	-
	2	STE6303	Structural Vibration Control		3	3	0	0	20	0	30	50	-

