



DELHI TECHNOLOGICAL UNIVERSITY

(Formerly Delhi College of Engineering)

Shahbad Daulatpur, Main Bawana Road, Delhi-42

Scheme for Part Time M.Tech. as per NEP-2020

DEPARTMENT OF CIVIL ENGINEERING

M.TECH. STRUCTURAL ENGINEERING (STE)

	SEMESTER I				
Code	Type	Cr	L-T-P	Total Credits	Level
STE501	Departmental Core-1	4	3-0-2	12	500-599*
STE503	Departmental Core-2	4	3-0-2		
STE505	Departmental Core-3	4	3-0-2		
	SEMESTER II				
	Type	Cr	L-T-P	Total Credits	Level
STE502	Departmental Core-4	4	3-1-0	12	500-599*
STE504	Departmental Core-5	4	3-0-2		
STE520	Departmental Elective-2	4	3-0-2		
STE522			3-1-0		
STE524			3-0-2		
STE526			3-1-0		
	NHEQF Level				6.5
	SEMESTER III				
	Type	Cr	L-T-P	Total Credits	Level
STE507	Departmental Core-6	4	3-1-0	12	500-599*
STE511	Departmental Elective-1	4	3-0-2		
STE513			3-0-2		
STE515			3-0-2		
STE517			3-1-0		
	Self-Study Course		-		
STE551	Seminar	2			
STE553	MOOC/ SWAYAM*				
Skill Enhancement Course 1**			-		
STE541	Skill Enhancement Course 1	2			
	Audit Course**				
UEC501	English for Research Paper Writing	0	2-0-0		
UEC503	Disaster Management		2-0-0		
UEC505	Sanskrit for Technical Knowledge		2-0-0		
UEC507	Value Education		2-0-0		
UEC509	Constitution of India		2-0-0		

UEC511	Pedagogy Studies		2-0-0		
UEC513	Stress Management by Yoga		1-0-2		
UEC515	Personality Development through Life Enlightenment Skills		2-0-0		
UCE517	Multi-Dimensional Poverty Indices for Developing Countries		2-0-0		
	SEMESTER IV				
	Type	Cr	L-T-P	Total Credits	Level
STE530 STE532 STE534 STE536	Departmental Elective-3	4	3-0-2 3-1-0 3-1-0 3-0-2	12	500-599*
UCC502	Research Methodology and IPR**	4	3-1-0		
Skill Enhancement Course 2/ Industrial Training**					
GTE540	Industrial Training	4	0-0-8 /		
GTE542	Skill Enhancement Course (A)		0-0-8 /		
GTE544	Skill Enhancement Course (B)		2-0-4		
	NHEQF Level				6.5
	SEMESTER V				
	Type	Cr	L-T-P	Total Credits	Level
STE601	Departmental Core-7	4	3-1-0	16	600-699*
OCE601	Open Elective 1	4	3-1-0/3-0-2/2-0-4/0-0-8		
STE603	Minor Project/ Research Thesis/Patent	8	-		
	SEMESTER VI				
	Type	Cr	L-T-P	Total Credits	Level
	Major Project/ Research Thesis/Patent	16	-	16	-
	NHEQF Level				7.0
*Level: Refer to the draft UGC Curriculum and credit framework for the PG Programme.					
Note: The list of self-study course (SSC) subjects shall be available with the PG Section, and credits not to exceed 16 in the program. The open elective course (OEC) will be chosen from other departments' OECs.					

**DELHI TECHNOLOGICAL UNIVERSITY
SCHEME OF TEACHING AND EVALUATION**

**DEPARTMENT OF CIVIL ENGINEERING
M.TECH. STRUCTURAL ENGINEERING (STE)
Scheme for Part Time M. Tech. as per NEP-2020**

Teaching Scheme					Contact Hours/ Week			Relative Weightage (%)				
S. No.	Subject Code	Course Title	Subject Area	Credit	L	T	P	CW S	PRS/ STS/ CMS	M TE	ET E	PRE
SEMESTER I												
1	STE501	Structural Dynamics	DCC-1	4	3	0	2	15	25	20	40	-
2	STE503	Applied Numerical Methods	DCC-2	4	3	0	2	15	25	20	40	-
3	STE505	Design of Advanced Reinforced Concrete Structures	DCC-3	4	3	0	2	15	25	20	40	-
Total Credits				12								
SEMESTER II												
1	STE502	Finite Element Methods in Structural Engineering	DCC-5	4	3	1	0	25	-	25	50	-
2	STE504	Advanced Theory of Structures	DCC-6	4	3	0	2	15	25	20	40	-
3	STE520	Earthquake-Resistant Design of Structures	DEC-2	4	3	0	2	15	25	20	40	-
4	STE522	Soil Structure Interaction			3	1	0	25	-	25	50	-
5	STE524	Design of Hydraulic Structures			3	0	2	15	25	20	40	-
6	STE526	Cyclonic Risk and Hazard Assessment			3	1	0	25	-	25	50	-
Total Credits				12								
SEMESTER III												
1	STE507	Theory of Elasticity and Plasticity	DCC-4	4	3	1	0	25	-	25	50	-
2	STE511	Advanced Concrete Technology	DEC1	4	3	0	2	15	25	20	40	-
3	STE513	Reliability Analysis of Structures			3	0	2	15	25	20	40	-
4	STE515	Forensic Structural Engineering			3	0	2	15	25	20	40	-
5	STE517	Analysis and Design of Bridges			3	1	0	25	-	25	50	-

	Self-Study Course*												
6	STE551	Seminar	SSC	2	-	-	-	-	40	--		60	
7	STE553	MOOC/ SWAYAM *											
	Skill Enhancement Course 2/ Industrial Training												
8	STE541	Introduction to AI Techniques in Structural Engineering	SEC1	2	1	0	2	15	25	20	40	-	
	Audit Course (Non-Credit)**												
9	UEC501	English for Research Paper Writing	AC	0	2	0	2	25	-	25	50	-	
10	UEC503	Disaster Management		0	2	0	0	25	-	25	50	-	
11	UEC505	Sanskrit for Technical Knowledge		0	2	0	0	25	-	25	50	-	
12	UEC507	Value Education		0	2	0	0	25	-	25	50	-	
13	UEC509	Constitution of India		0	2	0	0	25	-	25	50	-	
14	UEC511	Pedagogy Studies		0	2	0	0	25	-	25	50	-	
15	UEC515	Personality Development through Life Enlightenment Skills		0	2	0	0	25	-	25	50	-	
16	UEC513	Stress Management by Yoga		0	1	0	2	15	25	20	40	-	
17	UCE517	Multi-Dimensional Poverty Indices for Developing Countries		0	2	0	0	25	-	25	50	-	
Total Credits				12									
SEMESTER IV													
1	STE530	Wind Engineering	DEC-3	4	3	0	2	15	25	20	40	-	
2	STE532	Design of Advanced Steel Structures			3	1	0	25	-	25	50	-	
3	STE534	Retrofitting of Structures			3	1	0	25	-	25	50	-	
4	STE536	Disaster Management and Mitigation			3	0	2	15	25	20	40	-	
5	UCC502	Research Methodology and IPR	UCC-1	4	3	1	0	25	-	25	50	-	
6	STE540	Industrial Training	SEC-2	4	0	0	8	--	40	--	--	60	
7	STE542	Computational Lab- Structures			0	0	8	-	50	-	-	50	
8	STE544	Modeling & Simulation in Structural Engineering			2	0	4	15	25	20	40	-	
Total Credits				12									
SEMESTER V													
1	STE601	Design of Pre-Stressed Concrete	DCC-7	4	3	1	0	25	-	25	50	-	
2	OCE601	Economic and Social Resilience through Sustainable Infrastructure	OEC-1	4	3	1	0	25	-	25	50	-	
3	STE603	Minor Project/ Research Thesis/ Patent	DCC-8	8	0	0	0	-	40	-	-	60	
Total Credits				16									
SEMESTER VI													
1	STE602	Major Project/ Research Thesis/ Patent	DCC-9	16	0	0	-	-	40	-	-	60	
Total Credits				16									