Sardar Patel College of Engineering Andheri (West), Mumbai 400 058
Year: 2017-18

M.Tech. (Civil) with Structural Engineering Courses (Semester – I) Academic year 2017-18

Sr. No	Course	Code	Course Plan for Each Week (Hrs)			Credits			Evaluation (Points)				Total
			Lectures	Laboratory	Tutorial		T1	T2	End Semester Points	End Semester Duration	End Semester Weightage (%)	In Semester Evaluation	
1	Advanced Solid Mechanics	MTST101	3	--	2	4	20	20	100	3	60	25	125
2	Structural Dynamics	MTST102	3	--	2	4	20	20	100	3	60	25	125
3	Non-linear Analysis	MTST103	3	--	2	4	20	20	100	3	60	25	125
4	Advanced Structural Analysis	MTST104	3	--	2	4	20	20	100	3	60	25	125
5	Elective-I	MTST105 TO MTST110 OR	3	--	2	4	20	20	100	3	60	25	125
		Institute	3	--	2	4	20	20	100	3	60	25	125
6	Structural Engg Lab	MTST121	--	4	-	2	--	--	--	--	--	125	125
Total			**15**	**4**	**10**	**22**	**--**	**--**	**---**		**--**	**--**	**750**
5	Research Methodology	Institute	3	---	---	AU	20	20	100	3	60	25	125
6	Design Studio-I	MTSTDS1		2		AU						100	100

NOTE - Test 1, Test 2 and end semester weightage points will be added and shown as the theory points in the mark sheet. Duration of Test 1, Test 2 is of 1 hour. For passing, Student must secure minimum 50% points in each course with all heads of passing taken together and minimum 50% points in the end semester examination.

Students will have to take any one course at s.no 5.

Sardar Patel College of Engineering Andheri (West), Mumbai 400 058
Year: 2017-18

Elective – I Courses

Sr. No.	Code	Elective
1.	MTST105	Numerical Methods
2.	MTST106	Analysis of Composite Structures
3.	MTST107	Advanced Foundation Engineering
4.	MTST108	Structural Optimization
5.	MTST109	Design of Pre-stressed Concrete Structures
6	MTST110	Advanced Concrete Technology

Sardar Patel College of Engineering Andheri (West), Mumbai 400 058
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M.Tech. (Civil) with Structural Engineering Courses (Semester – II) Academic year 2017-18

Sr. No	Course	Code	Course Plan for Each Week (Hrs)			Credits			Evaluation (Points)				Total
			Lectures	Laboratory	Tutorial		T1	T2	End Semester Points	End Semester Duration	End Semester Weightage (%)	In Semester Evaluation	
1	Finite Element Analysis	MTST151	3	--	2	4	20	20	100	3	60	25	125
2	Theory of Plates	MTST152	3	--	2	4	20	20	100	3	60	25	125
3	Bridge Engineering	MTST153	3	--	2	4	20	20	100	3	60	25	125
4	Earthquake Engineering	MTST154	3	--	2	4	20	20	100	3	60	25	125
5	Elective-II	MTST156 TO MTST160 OR	3	--	2	4	20	20	100	3	60	25	125
		Institute	3	--	2	4	20	20	100	3	60	25	125
6	Seminar	MTST171	--	--	4	2	--	--	--	--	--	125	125
Total			**15**	**--**	**14**	**22**	**--**	**--**	**---**		**--**	**--**	**750**
7	Research Methodology	Institute	3	---	---	AU	20	20	100	3	60	25	125
8	Design Studio-II	MTSTDS2		2		AU						100	100

NOTE - Test 1, Test 2 and end semester weightage points will be added and shown as the theory points in the mark sheet. Duration of Test 1, Test 2 is of 1 hour. For passing, Student must secure minimum 50% points in each course with all heads of passing taken together and minimum 50% points in the end semester examination.

Students will have to take any one course at s.no 5.

Sardar Patel College of Engineering Andheri (West), Mumbai 400 058
Year: 2017-18

Elective – II Courses

Sr. No.	Code	Elective
1.	MTST156	Advanced Design of Concrete Structures
2.	MTST157	Reliability Based Civil Engg. Design
3.	MTST158	Theory of Shells
4.	MTST159	Aalysis of Offshore Structures
5.	MTST160	Structural Instrumentation and Rehabilitation of Structures

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M.Tech. (Civil) with Structural Engineering Courses (Semester – III) Academic year 2017-18

Sr. No	Course	Code	Course Plan for Each Week (Hrs)			Credits	Evaluation (Points)		Total
			Lectures	Lab	Tutorial		Report	Seminar	
1	Seminar on Literature Review	MTST176	--	--	$4^{\#}+12^{\$}$	8	50*	50*	100
2	Dissertation Stage-I Seminar	MTST177	--	_	$2^{\#}+14^{\$}$	8	50*	50*	100
Total			--	--	**$6^{\#}+26^{\$}$**	**16**	--	--	**200**

* Examined by supervisor and at least one internal examiner. $^{\#}$Contact hours with mentor/supervisor/guide, $^{\$}$Self learning hours
For passing, Student must secure minimum 50% points in each Course with all headof passing taken together and minimum 50% points in the end semester examination.

M.Tech. (Civil) with Structural Engineering Courses (Semester – IV)

Sr. No	Course	Code	Course Plan for Each Week (Hrs)			Credits	Evaluation (Points)		Total
			Lectures	Lab	Tutorial		Report	Seminar	
1	Dissertation Stage-II Seminar (Pre-Synopsis)	MTST178	--	--	$4^{\#}+12^{\$}$	8	50*	50*	100
2	Dissertation & Viva-Voce	MTST179	--	_	$6^{\#}+18^{\$}$	12	100**	50**	150
Total			--	--	**$10^{\#}+30^{\$}$**	**20**	--	--	**250**

* Examined by supervisor and at least one internal examiner

** Examined by supervisor and one approved external examiner. $^{\#}$Contact hours with mentor/supervisor/guide, $^{\$}$Self learning hours For passing, Student must secure minimum 50% points in each Course with all headof passing taken together and minimum 50% points in the end semester examination.