

4

B.Tech. In Civil Engineering
Sem. VII & VIII
Academic Evaluation Scheme
Year 2018-19

Sardar Patel College of Engineering

Andheri (West), Mumbai 400 058

Credit System for Final Year B.Tech. in Civil Engineering (Semester - VII) Academic Year 2018-19

Sr. No.	Course	Code	Course Plan for Each Week (Hrs)				Credits	Evaluation (Points)							Total
			Lectures	Laboratory	Tutorial	T1		T2	End Semester		End Semester Weightage (%)	Practical	Term Work		
									Points	Duration (Hrs)					
Theory Courses															
1	Limit State Method For Reinforced Concrete Structures	PC-BTC701	3	--	1	4	20	20	100	3	60	--	25#	125	
2	Construction Engg.	PC-BTC702	3	--	1	4	20	20	100	3	60	--	25#	125	
3	Water Resources Engineering	PC-BTC703	3	--	--	3	20	20	100	3	60	--	--	100	
4	Environmental Engg-II	PC-BTC704	3	-	--	3	20	20	100	3	60	-	-	100	
5	Project-Stage I	PC-BTC705	--	(2+6) ^{\$}	--	4	--	--	--	--	--	25**	25##	50	
6	Elective - I	PEC-BTC711- PEC-BTC728	3	--	1	4	20	20	100	3	60		25#	125	
Laboratory Courses															
7	Environmental Engg-II (Lab.)	PC-BTC751	-	2	-	1	-	-				25#		25	
Total			15	2	12	23	--	--	--	--	--	--	--	650	
Choice based value added Courses															
8	Geographic Information System (GIS) and its Applications	VC-BTC-776	3	--	-	0	20	20	100	3	60	--	-	100	
8	Environmental Impact Assessment and Mgt.	VC-BTC-777	3	--	-	0	20	20	100	3	60	--	-	100	
9	Conventional and Nonconventional Materials in Highway Subgrade	VC-BTC-778	2		1	0	20	20	100	3	60	-	25	125	
10	Land use planning & Natural resources Management	VC-BTC-779	2	-	1	0	20	20	100	3	60	-	25	125	

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Assessment criteria for laboratory/Tutorial work. i.e. weightage for assessment shall be as follows:

(i) Attendance in Laboratory/Tutorial = 20%, (ii) Journal/Drawing sheet/Sketch book = 40%, (iii) MCQ/Oral/Test = 40%.

Students can take any one course from choice based value added courses.

Note: (1) Refer (i) Academic rules and regulations and (ii) Examination rules and regulations for further details.

(2) Laboratory course is considered as a separate head of passing.

(3) Student can opt for an online course available on <https://swayam.gov.in/> or <https://onlinecourses.nptel.ac.in/> and inform department by filling up registration form. After successful completion of the course and approval from the department UG committee, the course title can appear on the grade card of the student.

(4) The Mandatory courses are with Pass (P) and No Pass (NP) grades offered institute wide, available in both semesters of year and must be passed before obtaining degree.

(5) For value added and elective courses, minimum 20 students must be enrolled for the department to offer a particular course.

Students can take any one value added course.

(6) \$- Faculty contact hour = 2 & Self learning hour for student = 6

(7) ## Report

** Presentation and Viva Voce

** Examined by supervisor .

Elective Core – I

Sr. No.	Code	Elective
1	PEC-BTC711	Advanced Structural Analysis
3	PEC-BTC 713	Applied Hydrology and Flood Control
5	PEC-BTC 715	Advanced Surveying
7	PEC-BTC 717	Systems Approach in Civil Engineering
9	PEC-BTC719	Structural Dynamics
11	PEC-BTC721	Advanced Foundation Engineering
13	PEC-BTC723	Pavement Subgrade and Materials
15	PEC-BTC725	Design of Prestressed Concrete Structures
17	PEC-BTC727	Reinforced Concrete Repairs and Maintenance
18	PEC-BTC728	Conventional and Nonconventional Materials in Highway Subgrade

Sr. No.	Code	Elective
2	PEC-BTC712	Advanced Computaional Techniques
4	PEC-BTC714	Solid Waste Management
6	PEC-BTC716	Advanced Repair and Rehabilitation of Structures
8	PEC-BTC718	Risk and Value Management
10	PEC-BTC720	Advanced Structural Mechanics
12	PEC-BTC722	Ground Water Hydrology
14	PEC-BTC724	Air Pollution
16	PEC-BTC726	Traffic Engineering and Control

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Credit System for Final Year B.Tech. in Civil Engineering (Semester - VIII) Academic Year 2018-19

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			Lectures	Laboratory	Tutorial	T1		T2	End Semester		End Semester Weightage (%)	Practical	Term Work	
									Points	Duration (Hrs)				
Theory Courses														
1	Design and Drawing of Reinforced Concrete Structures	PC-BTC801	3	--	1	4	20	20	100	3	60		25	125
2	Quantity Survey, Estimation and Valuation	PC-BTC802	3	--	1	4	20	20	100	3	60		25	125
3	Construction Management	PC-BTC803	3	--	1	4	20	20	100	3	60		25	125
4	Project –Stage II*	PC-BTC804	-	(2+12) [§]	--	7	--	--	--	--	--	50**	50###	100
5	Entrepreneurship & Management	HSM-BTC805	2		--	2	20	20	100	3	60	--	--	100
6	Elective-II	PEC-BTC811 TO PEC-BTC826	3	--	1	4	20	20	100	3	60	--	25	125
Total			14	--	14	25	--	--	--	--	--	--	--	700
Choice based value added Courses														
7	Geographic Information System (GIS) and its Applications	VC-BTC-876	3	--	-	0	20	20	100	3	60	--	-	100
8	Environmental Impact Assessment and Management	VC-BTC-877	3	--	-	0	20	20	100	3	60	--	-	100
9	Low Cost Rural Roads	VC-BTC-878	2	--	1	0	20	20	100	3	60	--	25	125
10	Model village Development & Planning	VC-BTC-879	3	--	-	0	20	20	100	3	60	--	-	100

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Note: (1) Refer (i) Academic rules and regulations and (ii) Examination rules and regulations for further details.

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(6) \$- Faculty contact hour = 2 & Self learning hour for student = 12

(7) ## Report

** Presentation and Viva Voce

** Examined by supervisor and one internal examiner

Elective Core – II

Sr. No.	Code	Elective
1.	PEC-BTC811	Industrial Waste Treatment
3	PEC-BTC813	Pavement Design and Constriction
5	PEC-BTC815	Advanced Engineering Geology
7	PEC-BTC817	Geographic Information System
9	PEC-BTC819	Appraisal and Implementation of Infrastructure Projects
11	PEC-BTC821	Advanced Design of Steel Structures
13	PEC-BTC823	Building Services
15	PEC-BTC825	Transportation Planning and Economics

Sr. No.	Code	Elective
2	PEC- BTC812	Earthquake Engineering
4	PEC-BTC814	Water Resources Engineering and Mangement
6	PEC-BTC816	Rock Mechanics
8	PEC-BTC818	Environmental Impact Assessment & Audit
10	PEC-BTC820	Risk & Disaster Management
12	PEC-BTC822	Soil Dynamics
14	PEC-BTC824	Design of Hydraulic Structures
16	PEC-BTC826	Advanced Construction Engineering