

**Sardar Patel College of Engineering Andheri (West), Mumbai 400 058**

**Year: 2020-21**

**S.Y.B.Tech. In Civil Engineering Sem. III & IV**

**Academic Evaluation Scheme**

**Year 2020-21**

Sardar Patel College of Engineering Andheri (West), Mumbai 400 058

Academic Book

Year: 2020-21

Scheme for S.Y.B.Tech.in Civil Engineering, (Semester - III)

Academic Year 2020-21

Sr. No.	Course Name	Code	Course Plan per Week (Hrs)			Credits	In semester Evaluation (Points)		End Semester Evaluation (Points)		End semester weightage (%)	Term work / Practical (Note 3)	Total Points
			L	P	T		T-I	T-II	Points	Time (Hrs)			
<b>Core Courses</b>													
1	Engineering Mathematics III	BS-BTC301	2	0	0	2	20	20	100	3	60%	0	100
2	Mechanics of Materials	ES-BTC302	3	0	0	3	20	20	100	3	60%	0	100
3	Basics of Surveying	PC-BTC303	2	0	0	2	20	20	100	3	60%	0	100
4	Building Drawing with CAD	ES-BTC304	2	0	0	2	20	20	100	3	60%	0	100
5	Engineering Geology	BS-BTC305	2	0	0	2	20	20	100	3	60%	0	100
6	Fluid Mechanics	PC-BTC306	3	0	0	3	20	20	100	3	60%	0	100
7	Building Materials and Construction	PC-BTC307	2	0	1	3	20	20	100	3	60%	25#	125
<b>Laboratory Courses (Note 2&amp;3)</b>													
8	Mechanics of Materials(Lab)	ES-BTC351	0	2	0	1	0	0	0	0	0%	25#	25
9	Basics of Surveying (Lab.)	PC-BTC352	0	2	0	1	0	0	0	0	0%	25#	25
10	Fluid Mechanics (Lab.)	PC-BTC353	0	2	0	1	0	0	0	0	0%	25#	25
11	Materials Testing & Evaluation (Lab.)	PC-BTC354	0	2	0	1	0	0	0	0	0%	25#	25
12	Building Drawing with CAD (Lab.)	ES-BTC355	0	2	0	1	0	0	0	0	0%	25#	25
13	Engineering Geology (Lab.)	BS-BTC356	0	2	0	1	0	0	0	0	0%	25#	25
<b>Online Courses (Note 5)</b>													

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14	Online Course	OL-BTCxxx	0	0	0	0	0	0	0	0	0	0	0
Value Added Courses (Note 7)													
15	Energy science & Engineering	VA-BTC371	1	0	1	0	10	10	100	2	60%	25	125
16	Life Science	VA-BTC372	1	0	1	0	10	10	100	2	60%	25	125
17	Introduction to Civil Engineering	VA-BTC373	2	0	0	0	20	20	100	2	60%	0	100
Value Added Non-Technical Courses (Note10)													
18	Refer Table-VNT	VN-BTxxx	Refer Table-VNT										
	<b>TOTAL</b>		<b>16</b>	<b>12</b>	<b>1</b>	<b>23</b>							

**Non-technical value Added Courses-VNT**

VN-BT001: Ubuntu

VN-BT002: Performing Arts and Script Writing

VN-BT003: Financial Literacy

VN-BT004: Self Defence Training program

VN-BT005: Yoga health technology for self-management

VN-BT006: Integrated self-management

VN-BT007: Photography

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**Notes:**

1. Refer (i) Academic rules and regulations (ii) Examination rules and regulations for further details.
2. Laboratory course is considered as a separate head of passing
3. # Assessment criteria for laboratory/Tutorial work. i.e. weightage for assessment shall be as follows: i) Attendance in Laboratory/Tutorial = 20%, (ii) Journal= 40%, (iii) Practical Examination (and/or) Mini project (and/or) Quiz (Preferably MCQs based on GATE syllabus) (and/or) Seminar (and/or) Oral (and/or) Industry visit report= 40%.
4. A) For courses having **2 hours per week lecture / 5 modules:**

Sr. No.	Examination	Module
1	T – I	Module 1 & Part of Module 2
2	T – II	Part of Module 2 & Module 3
3	Final Examination	Module 1 to 5

- B) For courses having **3 hours per week lecture / 7 modules:**

Sr. No.	Examination	Module
1	T – I	Module 1 ,2
2	T – II	Module 3, 4
3	Final Examination	Module 1 to 7

5. 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.
6. The Mandatory courses are with Pass (P) and No Pass (NP) grades.
7. Department will offer the Value Added courses in a semester subject to availability of resources and enrolment of minimum 20 students opting for the course. Upon successful completion of the Value Added course, the grade of the course will appear in the grade card of the student

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8. The contents of core courses are aligned with the latest GATE syllabus. The mapping between GATE syllabus topics and core courses is given in Table GATE-MAP. The term work for these courses shall include evaluations alongt he pattern of GATE examinations, for example, park of the term work shall consist of MCQ similar to GATE examinations. GATE-MAP table is given at the end of final year B.Tech-Civil Engg. Credit System .
9. The course contents, wherever appropriate, should include assessment based on Project Based Learning and a report of visit to an industry related to the course.
10. Students can optionally opt for Non-Technical Value Added courses offered by Center for Continuing Education (CCE-SPCE). These courses are with zero credit and upon successful completion, the course titles will appear on student's grade card.

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Scheme for S.Y.B.Tech. In Civil Engineering, (Semester - IV)

Academic Year 2020-21

Sr. No.	Course Name	Code	Course Plan per Week (Hrs)			Credits	In semester Evaluation (Points)		End Semester Evaluation (Points)		End semester weightage (%)	Term work / Practical (Note 3)	Total Points
			L	P	T		T-I	T-II	Points	Time (Hrs)			
<b>Core Courses</b>													
1	Probability and Statistics	BS-BTC401	2	0	0	2	20	20	100	3	60%	0	100
2	Structural Mechanics	PC-BTC402	3	0	1	4	20	20	100	3	60%	25#	125
3	Concrete Technology	PC-BTC403	2	0	0	2	20	20	100	3	60%	0	100
4	Surveying & Geomatics	PC-BTC404	3	0	0	3	20	20	100	3	60%	0	100
5	Hydraulic Engineering	PC-BTC405	2	0	0	2	20	20	100	3	60%	0	100
6	Transportation Engineering	PC-BTC406	2	0	1	3	20	20	100	3	60%	25#	125
7	Environmental Engineering-I	PC-BTC407	3	0	0	3	20	20	100	3	60%	0	100
<b>Laboratory Courses (Note 2&amp; 3)</b>													
8	Concrete Technology (Lab)	PC-BTC451	0	2	0	1	0	0	0	0	0	25#	25
9	Surveying & Geomatics (Lab.)	PC-BTC452	0	2	0	1	0	0	0	0	0	25#	25
10	Hydraulic Engineering (Lab.)	PC-BTC453	0	2	0	1	0	0	0	0	0	25#	25
<b>Online Courses (Note 5)</b>													
11	Online Course	OL-BTCxxx	0	0	0	0	0	0	0	0	0	0	0
<b>Value Added Courses (Note 7)</b>													
12	Disaster Preparedness & Planning	VA-BTC471	1	0	1	0	10	10	100	3	60%	25#	125
13	Civil Engineering -Societal & Global Impact	VA-BTC472	2	0	0	0	20	20	100	3	60%	0	100

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14	Development Engineering	VA-BTC473	2	2	0	0	20	20	100	3	60%	25#	125
<b>Value Added Non-Technical Courses (Note 10)</b>													
15	Refer Table-VNT	VN-BTxxx	Refer Table-VNT										
	<b>TOTAL</b>		<b>18</b>	<b>6</b>	<b>2</b>	<b>22</b>							

**Non-technical value Added Courses -VNT**

VN-BT001: Ubuntu

VN-BT002: Performing Arts and Script Writing

VN-BT003: Financial Literacy

VN-BT004: Self Defence Training program

VN-BT005: Yoga health technology for self-management

VN-BT006: Integrated self-management

VN-BT007: Photography

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