Bharatiya Vidya Bhavan's

SARDAR PATEL COLLEGE OF ENGINEERING

(Government Aided Autonomous Institute under Mumbai University)

Andheri (W), Mumbai - 400058

First Year B.Tech. in Civil Engineering with Minor in [****]

Academic Evaluation Scheme/Credit System

Year: 2023-2024

Regulation 23 (R23)

Scheme for F.Y.B.Tech. In Civil Engineering with Minor I [****], (Semester - I) R23 **Academic Year 2023-24**
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**	**Total Points**
			L	**P**	**T**		**T1**	**T2**	**IE**	**Points**	**Time (Hrs)**			
1	Differential Calculus & Complex Numbers	BS-BTC101	2	-	1	3	15	15	20	100	3	50%	25	125
2	Engineering Chemistry	BS-BTC102	2	-	-	2	15	15	20	100	3	50%	0	100
3	Basic Electrical and Electronics Engineering	ES-BTC101	2	-	-	2	15	15	20	100	3	50%	0	100
4	Engineering Mechanics – I	ES-BTC102	2	-	-	2	15	15	20	100	3	50%	0	100
5	Biology for Engineers	BS-BTC103	1	-	-	1	15	15	20	50	2	100%	0	100
Laboratory Courses
6	Engineering Chemistry lab	BS-BTC151	-	2	-	1	-	-	-	-		0%	25	25
7	Engineering Mechanics lab	ES-BTC151	-	2	-	1	-	-	-	-	--	0%	25	25
8	Basic Electrical and Electronics Engineering Lab	ES-BTC152	-	2	-	1	-	-	-	-	-	0%	25	25
Vocational and Skill Enhancement
9	Design thinking and Innovation	SE-BTC101	3	-	-	3	15	15	20	50		100%	0	100
10	Programming for Problem Solving	SE-BTC102	-	4	-	2	15	15	20	50		100%	0	100
11	Workshop Practice	VS-BTC101	-	2	-	1	-	-	-	-	-	-	25	25
Value Education Courses
12	Ethics, Values and Life skills	VE-BTC101	2	-	-	2	15	15	20	50	-	100%	0	100
Cocurricular Activities
13	Co-curricularcourse (Yoga)	CC-BTC101		2		1		$$$$	100
	TOTAL		**14**	**14**	**1**	**22**								1025

L: Lecture   P: Practical   T Tutorial   T1: in semester test 1   T2: In semester test 2   IE: Internal Evaluation

Scheme for F.Y.B.Tech. In Civil Engineering with Minor in [****], (Semester - II) R23 Academic Year 2023-24														
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**	**Total Points**
			L	**P**	**T**		**T1**	**T2**	**IE**	**Points**	**Time (Hrs)**			
Theory Courses														
1	Integral, Calculus and Differential Equation	BS-BTC201	2	-	1	3	15	15	20	100	3	50%	25	125
2	Engineering Physics	BS-BTC202	2	-	-	2	15	15	20	100	3	50%	-	100
3	Engineering Graphics	ES-BTC201	2	-	-	2	15	15	20	100	3	50%	-	100
4	Engineering Mechanics – II	ES-BTC202	2	-	-	2	15	15	20	100	3	50%	-	100
5	Building Material and Construction	PC-BTC201	2	-	1	3	15	15	20	100	3	50%	25	125
Laboratory Courses														
6	Engineering Physics Lab	BS-BTC251	-	2	-	1	-	-	-	-	-	-	25	25
7	Engineering Graphics lab	BS-BTC252	-	2	-	1	-	-	-	-	-	--	25	25
8	Material Testing	PC-BTC253	-	2	-	1	-	-	-	-	-	-	25	25
Vocational and Skill Enhancement														
9	Civil Workshop	VS-BTC201	-	2	-	1	--	-	-	-	--		25	25
Ability Enhancement Courses														
10	Communication Skills	AE-BTC201	2	-	1	3	15	15	20	100	3	50%	25	125
Indian Knowledge System														
11	Indian traditional Knowledge	IK-BTC201	2	-	-	2	15	15	50	50	3	100%	-	100
Cocurricular Activity														
12	Co curricular course/activity	CC-BTC201				1	$$$$								100
	TOTAL		**14**	**08**	**3**	**22**									**975**

L: Lecture   P: Practical   T Tutorial   T1: in semester test 1   T2: In semester test 2   IE: Internal Evaluation

Evaluation for R23

1. T1, T2: The courses under the category "Theory courses" and "Ability Enhancement Courses". the evaluation is based on Test of 15 points each for one hour duration. Tentatively the first two modules of the course content will be covered in T1 and third and fourth modules of the course content will be covered in T2. Any change in the same will be informed by the course instructor.

   The courses under the category "Skill Enhancement", "Value Education" and Indian Knowledge system", the evaluation is based on activity (Presentation, Test, Mini project, Field project, Practical Examination) of 15 points each.

2. IE: Internal Evaluation will be carried out by course instructor for 20 points. It is the continuous evaluation through out the semester. The evaluation will be based on minimum three of the following activities decided by course instructor. The maximum points that can be assigned to one activity will be 07. The course instructor needs to inform the students and head of the department about the activities those will be considered for IE and the points assigned to them in first week of semester. The course instructor will submit the internal evaluation points (out of 20 with activity wise break up) to examination section before the beginning of End Semester examination.

   List of Activities: 1. Class Involvement 2. Assignments 3. Problem Solving 4. Mini project 5. Quizzes 6. Presentation 7. Oral

3. End semester evaluation: The courses under the category "Theory courses" and "Ability Enhancement Courses". the evaluation is based on End semester examination of 100/50 points. **The end semester examination will cover all the modules of the course content.**

   The courses under the category "Skill Enhancement", "Value Education" and "Indian knowledge system", the evaluation is based on activity (Presentation, Test, Mini project, Field project, Practical Examination) of 50 points

4. Term Work: The evaluation is based on [05 points: Tutorial/Laboratory Attendance, 10 points: Assignments/ Laboratory work, 10 points: Quizes/ Presentation/ Practical Examination/ Mini project/Oral]

5. $$$$ The evaluation for Co curricular course/ activity shall be defined by course instructor or activity evaluator. The evaluation for 100 points will be carried out through out the semester and the grade Pass/ No pass will be awarded which will not be considered for CPI calculation.

Note: Refer Academic and Examination rules and regulations for further details.

UG certificate:

The student who wish to Exit after first year and willing to get " UG Certificate" needs to earn additional 8 credits through

1. **Skill Enhancement course 1 [SE-BTC202] : 3 credits
2. **Skill Enhancement course 2 [SE-BTC203] : 3 credits
3. Internship/ Mini Project [PR-BTC201] :   2 credits

** The courses should be completed through SWAYAM/ NPTEL defined by the department

[****]   Multidisciplinary Minor

The institute will offer Multidisciplinary Minor from the following list based on the resources available. Each Minor is designed for 14 credits.. The students need to select the Minor in the beginning of semester IV.

- Minor in AI ML

- Minor in Management

- Minor in Computer Technology

- Minor in Telecommunication Engineering

- Minor in Data Science

- Minor in Electric Vehicle

- Minor in IOT

- Minor in Sustainable Engineering and Management

- Minor in Infrastructure management

- Minor in Geo informatics Technology

- Minor in another discipline [flexibility to complete from other institute.