SIPNA COLLEGE OF ENGINEERING & TECHNOLOGY, AMRAVATI

An Autonomous Institute Affiliated to

Sant Gadge Baba Amravati University, Amravati, Maharashtra (India)

(Approved by AICTE, New Delhi and Recognized by DTE, Maharashtra)

(Accredited With 'A+' Grade by NAAC)

Bachelor of Technology (B. Tech.)

Programme Scheme of Examination (SoE)

Department of Civil Engineering

B. Tech. Civil Engineering with Multidisciplinary Minor

(Semester Pattern)

Effective from Academic Year 2025-26

Prepared by: Board of Studies - Civil Engineering

Approved by: Academic Council - Sipna COET, Amravati

			05/07/2025	**1.1**
Chairman Board of Studies	**Dean Academics**	**Chairman Academic Council**	**Date of Release**	**Version**

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SoE No.
24BTCE-1.1

Definition of Course Code

1st & 2nd letter (Degree Program)	3rd & 4th letter applicable to which students	5th & 6th letter (Course category)	7th & 8th letter (Sr. no. of Subject)	9th & 10th letters Teaching Dept.	11th letter (Semester)	12th letter (Theory or Practical)
BT: B. Tech. MT: M. Tech. MB: MBA	AL: All branches CS: Computer Science and Engineering IT: Information Technology ME: Mechanical Engineering ET: Electronics and Telecommunication Engineering CE: Civil Engineering AD: Artificial Intelligence (AI) and Data Science For MDM 'AL' excluding Teaching Department students'	BS: Basic Science ES: Engineering Science VE: Value Education VS: Vocational and Skill Enhancement AE: Ability Enhancement IK: Indian Knowledge System CC: Cocurricular Course MD: Multidisciplinary Minor OE: Open Elective PC: Program Core PE: Program Elective FP: Field Project H: Humanities N: Entrepreneurship E: Economics M: Management II: Industry Internship RI: Research Internship EI: Entrepreneurship Internship RM: Research Methodology PS: Project and Seminar RP: Research Project and seminar MH: Minors & Honors	Sr. no. of course in the particular Course category from 1st to 8th semester.	SH: Science and Humanities CS: Computer Science and Engineering IT: Information Technology ME: Mechanical Engineering ET: Electronics and Telecommunication Engineering CE: Civil Engineering AD: Artificial Intelligence (AI) and Data Science	1: First Semester 2: Second Semester 3: Third Semester 4: Fourth Semester 5: Fifth Semester 6: Sixth Semester 7: Seventh Semester 8: Eighth Semester	T: Theory P: Practical

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Dated:-....25/07/2025....

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**SoE No.
24BTCE-1.1**

Category-wise Courses Master List

Course Category: Basic Science Course (BSC)		
Sr. No.	**Course Name**	**Course Code**
1	Engineering Mathematics -I	BTALBS01SH1T
2	Engineering Chemistry	BTALBS02SH1T
3	Engineering Chemistry Lab	BTALBS03SH1P
4	Engineering Mathematics -II	BTALBS04SH2T
5	Engineering Physics	BTCEBS05SH2T
6	Engineering Physics Lab	BTCEBS06SH2P
7	Engineering Mathematics -III	BTCEBS07SH3T

Course Category: Engineering Science Course (ESC)		
Sr. No.	**Course Name**	**Course Code**
1	Engineering Graphics	BTALES01ME1T
2	Engineering Graphics Lab	BTALES02ME1P
3	Engineering Mechanics	BTCEES03CE1T
4	Engineering Mechanics Lab	BTCEES04CE1P
5	Basic Electrical Engineering	BTALES05ET2T
6	Basic Electrical Engineering Lab	BTALES06ET2P
7	Programming for Problem Solving	BTCEES07IT2T
8	Programming for Problem Solving Lab	BTCEES08IT2P
9	Workshop Practice Lab	BTALES09ME2P

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Course Category: Vocational and Skill Enhancement Courses (VSEC)		
Sr. No.	**Course Name**	**Course Code**
1	Fundamentals of AutoCAD	BTCEVS01CE1P
2	Design Thinking	BTCEVS02CE1T
3	Building Construction Practices	BTCEVS03CE2P
4	Computational Structural Analysis	BTCEVS04CE4P
5	QGIS for Civil Engineering	BTCEVS05CE6P

Course Category: Humanities, Social Science and Management Courses [HSSMC]		
Sr. No.	**Course Name**	**Course Code**
1	Professional Communication	BTALAE01SH1P
2	Values and Ethics	BTALVE01SH1T
3	Environmental Studies	BTALVE02SH1T
4	Indian Knowledge System	BTALIK01SH2T
5	Principles of Management	BTCEHM01CE3T
6	Entrepreneurship in Civil Engineering	BTCEHM02CE4T
7	Modern Indian Language	BTALAE02SH6T

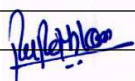| Course Category: Experiential Learning Courses (ELC)		
Sr. No.	**Course Name**	**Course Code**
1	Field project	BTCEFP01CE5P
2	Project and Seminar/ Research Project and Seminar	BTCEPS01CE7P / BTCERP01CE7P
3	Research Methodology	BTCERM01CE8T
4	Industry Internship/ Research Internship/ Entrepreneurship	BTCEII01CE8P / BTCERI01CE8P/ BTCEEI01CE8P

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24BTCE-1.1

Course Category: Programme Core Courses (PCC)
Sr. No.	**Course Name**	**Course Code**
1	Building Construction	BTCEPC01CE2T
2	Strength of Materials	BTCEPC02CE3T
3	Strength of Materials Lab	BTCEPC03CE3P
4	Concrete Technology	BTCEPC04CE3T
5	Concrete Technology Lab	BTCEPC05CE3P
6	Surveying & Geomatics	BTCEPC06CE3T
7	Surveying & Geomatics Lab	BTCEPC07CE3P
8	Geotechnical Engineering	BTCEPC08CE4T
9	Geotechnical Engineering Lab	BTCEPC09CE4P
10	Highway Engineering	BTCEPC10CE4T
11	Highway Engineering Lab	BTCEPC11CE4P
12	Structural Analysis	BTCEPC12CE4T
13	Construction Engineering & Management	BTCEPC13CE4T
14	Design of Concrete Structures	BTCEPC14CE5T
15	Structural Design Lab	BTCEPC15CE5P
16	Building Planning & CAD	BTCEPC16CE5T
17	Building Planning & CAD Lab	BTCEPC17CE5P
18	Fluid Mechanics	BTCEPC18CE5T
19	Fluid Mechanics Lab	BTCEPC19CE5P
20	Environmental Engineering-I	BTCEPC20CE6T
21	Environmental Engineering-I Lab	BTCEPC21CE6P
22	Water Resource Engineering	BTCEPC22CE6T
23	Water Resource Engineering Lab	BTCEPC23CE6P
24	Engineering Economics, Estimation & Costing	BTCEPC24CE7T
25	Engineering Economics, Estimation & Costing Lab	BTCEPC25CE7P
26	Environmental Engineering-II	BTCEPC26CE7T
27	Environmental Engineering-II Lab	BTCEPC27CE7P

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	Course Category: Programme Elective Courses (PEC)	
Sr. No.	**Course Name**	**Course Code**
1	Advanced Structural Analysis	BTCEPE01CE5T
2	Advanced Concrete Technology	BTCEPE02CE5T
3	Solid Waste Management	BTCEPE03CE5T
4	Highway Construction & Management	BTCEPE04CE5T
5	Hydraulic Engineering	BTCEPE05CE6T
6	Hydraulic Engineering Lab	BTCEPE06CE6P
7	Foundation Engineering	BTCEPE07CE6T
8	Foundation Engineering Lab	BTCEPE08CE6P
9	Prestressed Concrete	BTCEPE09CE6T
10	Prestressed Concrete Lab	BTCEPE10CE6P
11	Remote Sensing & GPS Surveying	BTCEPE11CE6T
12	Remote Sensing & GPS Surveying Lab	BTCEPE12CE6P
13	Ground Improvement Techniques	BTCEPE13CE6T
14	Ground Improvement Techniques Lab	BTCEPE14CE6P
15	Structural Analysis by Matrix Methods	BTCEPE15CE6T
16	Structural Analysis by Matrix Methods Lab	BTCEPE16CE6P
17	Geographic Information System (GIS) & Photogrammetry	BTCEPE17CE6T
18	Geographic Information System (GIS) & Photogrammetry Lab	BTCEPE18CE6P
19	Industrial Wastewater Treatment	BTCEPE19CE6T
20	Industrial Wastewater Treatment Lab	BTCEPE20CE6P
21	Introduction to Finite Element Analysis	BTCEPE21CE7T
22	Introduction to Finite Element Analysis Lab	BTCEPE22CE7P
23	Environmental Impact Assessment	BTCEPE23CE7T
24	Environmental Impact Assessment Lab	BTCEPE24CE7P
25	Contract Management	BTCEPE25CE7T
26	Contract Management Lab	BTCEPE26CE7P
27	Railway and Bridge Engineering	BTCEPE27CE7T

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**SoE No.
24BTCE-1.1**

28	Railway and Bridge Engineering Lab	BTCEPE28CE7P
29	Industrial Structures	BTCEPE29CE7T
30	Air and Noise Pollution Engineering	BTCEPE30CE7T
31	Geotechnical Designs	BTCEPE31CE7T
32	Airport & Tunnel Engineering	BTCEPE32CE7T

For the detailed list of Multidisciplinary Minor (MDM) courses.. click here.

For the detailed list of Open Elective (OE) courses... click here.

For the detailed list of Co-curricular (CC) courses... click here.

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Scheme Semester- I

Scheme for First Year B. Tech. In Civil Engineering (Semester -I)

Sr No	Course Name	Course Code	Course Plan per Week (Hrs.)				Credits	Theory Evaluation				Practical Evaluation		Total	ESE Time (Hrs.)
			L	P	T	Hrs.		MSE-I	MSE-II	TA	ESE	INT	EXT		
							Basic Science Courses (BSC)								
1	Engineering Mathematics -I	BTALBS01SH1T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
2	Engineering Chemistry	BTALBS02SH1T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
3	Engineering Chemistry Lab	BTALBS03SH1P	0	2	0	2	1	-	-	-	-	30	20	50	-
							Engineering Science Courses (ESC)								
4	Engineering Graphics	BTALES01ME1T	3	0	0	3	3	15	15	10	60	-	-	100	3.0
5	Engineering Graphics Lab	BTALES02ME1P	0	2	0	2	1	-	-	-	-	30	20	50	-
6	Engineering Mechanics	BTCEES03CE1T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
7	Engineering Mechanics Lab	BTCEES04CE1P	0	2	0	2	1	-	-	-	-	30	20	50	-
							Vocational and Skill Enhancement Courses (VSEC)								
8	Fundamentals of AutoCAD	BTCEVS01CE1P	0	2	0	2	1	-	-	-	-	50	-	50	-
9	Design Thinking	BTCEVS02CE1T	1	0	0	1	1	-	-	50	-	-	-	50	-
							Ability Enhancement Courses (AEC)								
10	Professional Communication	BTALAE01SH1P	0	2	0	2	1	-	-	-	-	30	20	50	-
							Value Education Courses (VEC)								
11	Values and Ethics	BTALVE01SH1T	2	0	0	2	2	15	15	10	60	-	-	100	2.5
12	Environmental Studies	BTALVE02SH1T	1	0	0	1	1	-	-	50	-	-	-	50	-
							Cocurricular Courses (CC)								
13	Co-curricular Courses (CC1)	-	-	2	-	2	1	-	-	-	-	50	-	50	-
	TOTAL		16	12	0	28	22	75	75	150	300	220	80	900	

L: Lecture P: Practical T: Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External

Note: Suitable number of hours per week are allotted for continuous evaluation process of above subjects (Total contact hours per week = 42 Hrs.)

For the details of CC Courses, Refer the link given on page no. 6

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SoE No.
24BTCE-1.1

Scheme Semester- II

			Course Plan per Week (Hrs.)				Credits	Theory Evaluation				Practical Evaluation		Total	ESE Time (Hrs.)
Sr No	Course Name	Course Code	L	P	T	Hrs.	Credits	MSE- I	MSE-II	TA	ESE	INT	EXT	Total	ESE Time (Hrs.)
Scheme for First Year B. Tech. In Civil Engineering (Semester -II)															
	Basic Science Courses (BSC)														
1	Engineering Mathematics -II	BTALBS04SH2T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
2	Engineering Physics	BTCEBS05SH2T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
3	Engineering Physics Lab	BTCEBS06SH2P	0	2	0	2	1	-	-	-	-	30	20	50	-
	Engineering Science Courses (ESC)														
4	Basic Electrical Engineering	BTALES05ET2T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
5	Basic Electrical Engineering Lab	BTALES06ET2P	0	2	0	2	1	-	-	-	-	30	20	50	-
6	Programming for Problem Solving	BTCEES07IT2T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
7	Programming for Problem Solving Lab	BTCEES08IT2P	0	2	0	2	1	-	-	-	-	30	20	50	-
8	Workshop Practice Lab	BTALES09ME2P	0	2	0	2	1	-	-	-	-	30	20	50	-
	Vocational and Skill Enhancement Courses (VSEC)														
9	Building Construction Practices	BTCEVS03CE2P	0	2	0	2	1	-	-	-	-	50	-	50	-
	Program Core Courses (PCC)														
10	Building Construction	BTCEPC01CE2T	2	0	0	2	2	15	15	10	60	-	-	100	2.5
	Indian Knowledge System (IKS)														
11	Indian Knowledge System	BTALIK01SH2T	2	0	0	2	2	-	-	50	-	-	-	50	-
	Cocurricular Courses (CC)														
12	Co-curricular Courses (CC2)	-	-	2	-	2	1	-	-	-	-	50	-	50	
	TOTAL		16	12	0	28	22	75	75	100	300	220	80	850	

L: Lecture P: Practical T: Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External

Note: Suitable number of hours per week are allotted for continuous evaluation process of all subjects (Total contact hours per week = 42 Hrs.)

For the details of CC Courses, Refer the link given on page no. 6

Scheme for Multiple Entry and Exit

Exit option1(L1- 4.5): Award of One Year UG Certificate in Major with 44 credits and an additional 8 credits.		
Exit Courses		
1 Eight Credit Online courses from Swayam/ NPTEL /ANY Other agency approved by BoS which provides certification/ Evaluation.	Online certification Course	8 Credits

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SoE No.
24BTCE-1.1

Scheme Semester- III

Sr No	Course Name	Course Code	Course Plan per Week (Hrs)				Credits	Theory Evaluation				Practical Evaluation		Total	ESE Time (Hrs)
			L	P	T	Hrs		MSE I	MSE II	TA	ESE	INT	EXT		
Scheme for Second Year B. Tech. In Civil Engineering (Semester-III)															
Basic Science Courses (BSC)															
1	Engineering Mathematics -III	BTCEBS07SH3T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
Program Core Courses (PCC)															
2	Strength of Materials	BTCEPC02CE3T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
3	Strength of Materials Lab	BTCEPC03CE3P	0	2	0	2	1	-	-	-	-	30	20	50	-
4	Concrete Technology	BTCEPC04CE3T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
5	Concrete Technology Lab	BTCEPC05CE3P	0	2	0	2	1	-	-	-	-	30	20	50	-
6	Surveying & Geomatics	BTCEPC06CE3T	3	0	0	3	3	15	15	10	60	-	-	100	2.5
7	Surveying & Geomatics Lab	BTCEPC07CE3P	0	2	0	2	1	-	-	-	-	30	20	50	-
Multidisciplinary Minor Courses (MDM)															
8	Multi-Disciplinary Minor-I	--	3	0	0	3	3	15	15	10	60	-	-	100	2.5
Open Elective Courses (OEC)															
9	Open Elective- I	--	2	0	0	2	2	15	15	10	60	-	-	100	2.5
HSSMC (Entrepreneurship/ Economics/ Management Course)															
10	Principles of Management	BTCEHM01CE3T	2	0	0	2	2	15	15	10	60			100	2.5
TOTAL			19	06	0	25	22	105	105	70	420	90	60	850	

L: Lecture P: Practical T: Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External

Note: Suitable number of hours per week are allotted for continuous evaluation process of above subjects (Total contact hours per week = 42 Hrs.)

For the details of OE/MDM Courses, Refer the link given on page no…….

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SoE No. 24BTCE-1.1

Scheme Semester- IV

Sr No	Course Name	Course Code	Course Plan per Week (Hrs.)				Credits	Theory Evaluation				Practical Evaluation		Total	ESE Time (Hrs.)
			L	P	T	Hrs.		MSE-I	MSE-II	TA	ESE	INT	EXT		
Program Core Courses (PCC)														
1	Geotechnical Engineering	BTCEPC08CE4T	3	0	0	3	3	15	15	10	60			100	2.5
2	Geotechnical Engineering Lab	BTCEPC09CE4P	0	2	0	2	1					30	20	50	-
3	Highway Engineering	BTCEPC10CE4T	3	0	0	3	3	15	15	10	60			100	2.5
4	Highway Engineering Lab	BTCEPC11CE4P	0	2	0	2	1					30	20	50	-
5	Structural Analysis	BTCEPC12CE4T	3	0	0	3	3	15	15	10	60			100	2.5
6	Construction Engineering & Management	BTCEPC13CE4T	2	0	0	2	2	15	15	10	60			100	2.5
	Multidisciplinary Minor Courses (MDM)														
7	Multi-Disciplinary Minor-II	--	3	0	0	3	3	15	15	10	60			100	2.5
	Vocational and Skill Enhancement Courses (VSEC)														
8	Computational Structural Analysis	BTCEVS04CE4P	1	2	0	3	2					50		50	-
	Open Elective Courses (OEC)														
9	Open Elective- II	--	2	0	0	2	2	15	15	10	60			100	2.5
	HSSMC (Entrepreneurship/ Economics/ Management Course)														
10	Entrepreneurship in Civil Engineering	BTCEHN02CE4T	2	0	0	2	2	15	15	10	60			100	2.5
	TOTAL		19	06	0	25	22	105	105	70	420	110	40	850	

Scheme for Second Year B. Tech. In Civil Engineering (Semester -IV)

L: Lecture P: Practical T: Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External

Note: Suitable number of hours per week are allotted for continuous evaluation process of all subjects (Total contact hours per week = 42 Hrs.)

For the details of OE/MDM Courses, Refer the link given on page no. 6

Scheme for Multiple Entry and Exit

	Exit option 2 (L2- 5.0): Award of Two Years UG Diploma in Major with 88 credits and an additional 8 credits		
	Exit Courses		
1	Eight Credit Online courses from Swayam/ NPTEL /ANY Other agency approved by BoS which provides certification/ Evaluation.	**Online/offline certification Course**	**8 Credits**

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Scheme Semester- V

Scheme for Third Year B. Tech. In Civil Engineering (Semester -V)														
Sr No	Course Name	Course Code	Course Plan per Week (Hrs.)				Credits	Theory Evaluation				Practical Evaluation		Total	ESE Time (Hrs.)
			L	P	T	Hrs.		MSE- I	MSE-II	TA	ESE	INT	EXT		
Program Core Courses (PCC)/ Program Elective Courses (PEC)															
1	Design of Concrete Structures	BTCEPC14CE5T	3	0	0	3	3	15	15	10	60			100	3.0
2	Structural Design Lab	BTCEPC15CE5P	0	2	0	2	1					30	20	50	-
3	Building Planning & CAD	BTCEPC16CE5T	3	0	0	3	3	15	15	10	60			100	2.5
4	Building Planning & CAD Lab	BTCEPC17CE5P	0	2	0	2	1					30	20	50	-
5	Fluid Mechanics	BTCEPC18CE5T	3	0	0	3	3	15	15	10	60			100	2.5
6	Fluid Mechanics Lab	BTCEPC19CE5P	0	2	0	2	1					30	20	50	-
7	Program Elective Course-I	---	3	0	1	4	4	15	15	10	60			100	2.5
8	Field project	BTCEFP01CE5P	0	2	0	2	1					50		50	-
Multidisciplinary Minor Courses (MDM)															
9	Multi-Disciplinary Minor-III	--	3	0	0	3	3	15	15	10	60			100	2.5
Open Elective Courses (OEC)															
10	Open Elective- III	--	2	0	0	2	2	15	15	10	60			100	2.5
	TOTAL		17	08	01	26	22	90	90	60	360	140	60	800	

L: Lecture P: Practical T: Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External

Note: Suitable number of hours per week are allotted for continuous evaluation process of above subjects (Total contact hours per week = 42 Hrs.)

List of Program Elective Course-I (Semester-V) (Choose any one Course)

Sr. No.	Course Name	Course Code
1	Advanced Structural Analysis	BTCEPE01CE5T
2	Advanced Concrete Technology	BTCEPE02CE5T
3	Solid Waste Management	BTCEPE03CE5T
4	Highway Construction & Management	BTCEPE04CE5T

For the details of OE/MDM Courses, Refer the link given on page no.6

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SoE No.
24BTCE-1.1

Scheme Semester- VI

Scheme for Third Year B. Tech. In Civil Engineering (Semester -VI)

Sr No	Course Name	Course Code	Course Plan per Week (Hrs.)				Credits	Theory Evaluation				Practical Evaluation		Total	ESE Time (Hrs.)
			L	P	T	Hrs.		MSE-I	MSE-II	TA	ESE	INT	EXT		
Program Core Courses (PCC)/ Program Elective Courses (PEC)															
1	Environmental Engineering-I	BTCEPC20CE6T	3	0	0	3	3	15	15	10	60			100	2.5
2	Environmental Engineering-I Lab	BTCEPC21CE6P	0	2	0	2	1					30	20	50	-
3	Water Resource Engineering	BTCEPC22CE6T	3	0	0	3	3	15	15	10	60			100	3.0
4	Water Resource Engineering Lab	BTCEPC23CE6P	0	2	0	2	1					30	20	50	-
5	Program Elective Course-II	---	3	0	0	3	3	15	15	10	60			100	2.5
6	Program Elective Course-II Lab	---	0	2	0	2	1					30	20	50	-
7	Program Elective Course- III	---	3	0	0	3	3	15	15	10	60			100	2.5
8	Program Elective Course- III Lab	---	0	2	0	2	1					30	20	50	-
Ability Enhancement Courses (AEC)															
9	Modern Indian Language	BTALAE02SH6T	1	0	0	1	1			50				50	-
Multidisciplinary Minor Courses (MDM)															
10	Multi-Disciplinary Minor-IV	---	3	0	0	3	3	15	15	10	60			100	2.5
Vocational and Skill Enhancement Courses (VSEC)															
11	QGIS for Civil Engineering	BTCEVS05CE6P	1	2	0	3	2					50		50	-
	TOTAL		17	10	0	27	22	75	75	100	300	170	80	800	

L: Lecture P: Practical T: Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External

Note: Suitable number of hours per week are allotted for continuous evaluation process of above subjects (Total contact hours per week = 42 Hrs.) *For the details of MDM Courses, Refer the link given on page no.6*

List of Program Elective Course-II (Semester-VI) (Choose any one Course and its associated lab, if any)

S. N.	Course Name	Course Code	S. N.	Course Name	Course Code
1	Hydraulic Engineering	BTCEPE05CE6T	5	Prestressed Concrete	BTCEPE09CE6T
2	Hydraulic Engineering Lab	BTCEPE06CE6P	6	Prestressed Concrete Lab	BTCEPE10CE6P
3	Foundation Engineering	BTCEPE07CE6T	7	Remote Sensing & GPS Surveying	BTCEPE11CE6T
4	Foundation Engineering Lab	BTCEPE08CE6P	8	Remote Sensing & GPS Surveying Lab	BTCEPE12CE6P

List of Program Elective Course-III (Semester-VI) (Choose any one Course and its associated lab, if any)

S. N.	Course Name	Course Code	S. N.	Course Name	Course Code
1	Ground Improvement Techniques	BTCEPE13CE6T	5	Geographic Information System (GIS) & Photogrammetry	BTCEPE17CE6T
2	Ground Improvement Techniques Lab	BTCEPE14CE6P	6	Geographic Information System (GIS) & Photogrammetry Lab	BTCEPE18CE6P
3	Structural Analysis by Matrix Methods	BTCEPE15CE6T	7	Industrial Wastewater Treatment	BTCEPE19CE6T
4	Structural Analysis by Matrix Methods Lab	BTCEPE16CE6P	8	Industrial Wastewater Treatment Lab	BTCEPE20CE6P

Scheme for Multiple Entry and Exit

Exit option 3 (L3- 5.5): Award of Three Years Bachelor's Degree (B. Voc. or B.Sc.) in Major with 132 credits and an additional 8 credits
Exit Courses

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Dated:-...25/07/2025...

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SoE No.
24BTCE-1.1

1	Eight Credit Online courses from Swayam/ NPTEL /ANY Other agency approved by BoS which provides certification/ Evaluation.	Online/offline certification Course	8 Credits

Scheme Semester- VII

Scheme for Fourth Year B. Tech. In Civil Engineering (Semester -VII)

Sr No	Course Name	Code	Course Plan per Week (Hrs.)				Credits	Theory Evaluation				Practical Evaluation		Total	ESE Time (Hrs.)
			L	P	T	Hrs.		MSE-I	MSE-II	TA	ESE	INT	EXT		
Program Core Courses (PCC)/ Program Elective Courses (PEC)															
1	Engineering Economics, Estimation & Costing	BTCEPC24CE7T	3	0	0	3	3	15	15	10	60			100	2.5
2	Engineering Economics, Estimation & Costing Lab	BTCEPC25CE7P	0	2	0	2	1					30	20	50	-
3	Environmental Engineering-II	BTCEPC26CE7T	3	0	0	3	3	15	15	10	60			100	2.5
4	Environmental Engineering-II Lab	BTCEPC27CE7P	0	2	0	2	1					30	20	50	-
5	Design of Steel Structures	BTCEPC28CE7T	3	0	0	3	3	15	15	10	60			100	2.5
6	Program Elective Course-IV	--	3	0	0	3	3	15	15	10	60			100	2.5
7	Program Elective Course-IV Lab	--	0	2	0	2	1					30	20	50	-
8	Program Elective Course-V	--	3	0	0	3	3	15	15	10	60			100	2.5
9	Project and Seminar OR Research Project and Seminar	BTCEPS01CE7P OR BTCERP01CE7P	0	8	0	8	4					30	20	50	-
	TOTAL		15	14	0	29	22	75	75	50	300	120	80	700	

L: Lecture P: Practical T: Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External

Note: Suitable number of hours per week are allotted for continuous evaluation process of all subjects (Total contact hours per week = 42 Hrs.)

List of Program Elective Course-IV (Semester-VII) (Choose any one Course and its associated lab, if any)

S. N.	Course Name	Course Code	S. N.	Course Name	Course Code
1	Introduction to Finite Element Analysis	BTCEPE21CE7T	5	Contract Management	BTCEPE25CE7T
2	Introduction to Finite Element Analysis Lab	BTCEPE22CE7P	6	Contract Management Lab	BTCEPE26CE7P
3	Environmental Impact Assessment	BTCEPE23CE7T	7	Railway and Bridge Engineering	BTCEPE27CE7T
4	Environmental Impact Assessment	BTCEPE24CE7P	8	Railway and Bridge Engineering Lab	BTCEPE28CE7P

List of Program Elective Course-V (Semester-VII) (Choose any one Course)

Sr. No.	Course Name	Course Code
1	Industrial Structures	BTCEPE29CE7T
2	Air and Noise Pollution Engineering	BTCEPE30CE7T
3	Geotechnical Designs	BTCEPE31CE7T
4	Airport & Tunnel Engineering	BTCEPE32CE7T

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Dated:-....25.07.2025....

Programme Scheme of Examination (SoE) Version 1.1

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Scheme Semester- VIII

Scheme for Fourth Year B. Tech. In Civil Engineering (Semester -VIII)															
Sr No	Course Name	Code	Course Plan per Week (Hrs.)				Credits	Theory Evaluation				Practical Evaluation		Total	ESE Time (Hrs.)
			L	P	T	Hrs.		MSE-I	MSE-II	TA	ESE	INT	EXT		
Program Core Courses (PCC)															
1	Industry Internship OR Research Internship OR Entrepreneurship	BTCEII01CE8P OR BTCERI01CE8P OR BTCEEI01CE8P	0	24	0	24	12	-	-	-	-	20	80	100	-
2	Research Methodology	BTCERM01CE8T	3	0	1	4	4	15	15	10	60	-	-	100	2.5
Multidisciplinary Minor Courses (MDM)															
3	Multi-Disciplinary Minor-V	---	0	2	0	4	2	-	-	-	-	50	-	50	-
	TOTAL		3	26	1	32	18	15	15	10	60	70	80	250	

L: Lecture P: Practical T: Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External

Note: Suitable number of hours per week are allotted for continuous evaluation process of above subjects (Total contact hours per week = 42 Hrs.)
For the details of MDM Courses, Refer the link given on page no.6

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Academic Council Meeting
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