



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

Academic Year 2026-27

Semester- ODD

Structure of Course

Class	Final Year Civil semester VII
Course Code and Course Title	BTCVC701, Design of RC & PSC Structures
Prerequisite/s	Mechanics of Solid, Design of RC Structures
Teaching Scheme: Lecture/Tutorial/Practical	03/01/00
Credits	3
Evaluation Scheme: CA / MSE / ESE	20/20/60

Course Outcomes:

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:		Blooms Level
BTCVC701_1	Analyze the behavior of the beam sections subjected to torsion.	L3
BTCVC701_2	Design of axially and eccentrically loaded column and construct the interaction diagram for them.	L4
BTCVC701_3	Illustrate various concepts, systems and losses in pre-stressed concrete.	L3
BTCVC701_4	Analyze and design the rectangular and symmetrical I-section pre-stressed beam / girders.	L3

Mapping of CO's with PO's and PSO's:

Course Outcomes	Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	PS O1	PSO 2	PSO 3
BTCVC701_1	2	2	2	2							2	2	2	2
BTCVC701_2	3	2	2	2			2	2	2		2	2	2	2
BTCVC701_3	2	2						2	2		2		2	
BTCVC701_4	3	2	2	2							2	2	2	2
Total	10	8	6	6			2	4	4		8	6	8	6
Average	2.5	2	2	2			2	2	2		2	2	2	2
BTCVC701	3	2	2	2			2	2	2		2	2	2	2

Prepared by

Course Coordinator

Verified by

Academic Coordinator

Approved by

HOD, Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by:

M1: To impart quality technical education through interactive teaching learning method.

M2: To promote research and development activity by encouraging creativity and exposure to real world problem.

M3: To mentor students for innovating thinking with relevance to entrepreneurship

M4: To develop social awareness in graduates to serve society.



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

CO Attainment Targets:

CO	701_1	701_2	701_3	701_4
Previous Attainment	3.00	3.00	3.00	3.00
Target for CAY (2026-27)	3.00	3.00	3.00	3.00

Target Levels of Attainments

Level	2026-27	2025-26	2024-25
1	≥ 60	≥ 50	≥ 50
2	≥ 70	≥ 60	≥ 60
3	≥ 80	≥ 70	≥ 70

Teaching Learning Activity Mapping with SDG's

Mode	Assessment Tool	Type of Learning	CO Mapped	Self-learning Hours	SDG's Mapped
Continuous Assessment	Site Visit	Participative Learning	CO1, CO2, CO3, CO4, CO5	08	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action
	Model Making	Experiential Learning	CO3, CO4	12	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action
	Assignment	Active Learning	CO1, CO2, CO3, CO4, CO5	10	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD-Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by:

- M1: To impart quality technical education through interactive teaching learning method.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship.
- M4: To develop social awareness in graduates to serve society.



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

Academic Year 2026-27

Semester- ODD

Structure of Course

Class	Final Year B.Tech. Sem. – I
Course Code and Course Title	BTCVC702 Infrastructure Engineering
Prerequisite/s	-
Teaching Scheme: Lecture/Tutorial/Practical	02/00/00
Credits	2
Evaluation Scheme: CA /MSE/ ESE	50/00/25

Course Outcomes:

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:		Blooms Level
BTCVC702_1	Discuss about the basics and design of various components of railway engineering, mass rapid transit system.	L2
BTCVC702_2	Explain the types and functions of tracks, junctions and railway stations.	L3
BTCVC 702_3	Describe the aircraft characteristics, planning and components of airport engineering.	L2
BTCVC 702_4	Explain the types and components of docks and harbors.	L3
BTCVC 702_5	Review the tunnel engineering.	L2

Mapping of COs with PO's and PSO's:

Course Outcomes	Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	PSO1	PSO2	PSO3
BTCVC702_1	2	2	2		2	2							2	
BTCVC702_2	2	2	2		2	2							2	
BTCVC 702_3	2	2	2		2	2								2
BTCVC 702_4	2	2	2		2	2						2		
BTCVC 702_5	2	2	2		2	2							2	
Total	10	10	10		10	10						2	6	2
Average	2	2	2		2	2						2	2	2
BTCVC 702	2	2	2		2	2						2	2	2



 Prepared by Course Coordinator	 Verified by Academic Coordinator	 Approved by HOD Civil
Mission of the Department We, at Department of Civil Engineering, are committed to achieve our vision by- M1: To impart quality technical education through interactive teaching learning method. M2: To promote research and development activity by encouraging creativity and exposure to real world problem. M3: To mentor students for innovating thinking with relevance to entrepreneurship M4: To develop social awareness in graduates to serve society.		

Vision of the Department

To become center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Civil Engineering

Satara



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

CO Attainment Targets:

CO	BTCVC 702_1	BTCVC 702_2	BTCVC 702_3	BTCVC 702_4	BTCVC 702_5
Previous Attainment	3	3	3	3	3
Target for CAY (2026-27)	3	3	3	3	3

Target Levels of Attainments

Level	2026-27	2025-26	2024-25
1	≥ 60	≥ 60	≥ 50
2	≥ 70	≥ 70	≥ 60
3	≥ 80	≥ 80	≥ 70

Teaching Learning Activity Mapping with SDG's

Mode	Assessment Tool	Type of Learning	Syllabus Units	CO Mapped	Self-learning Hours	SDG's Mapped
Continuous Assessment	Assignment	Conceptual & Theoretical Learning	1,2,3,4&5	CO1, CO2, CO3, CO4, CO5	10	SDG 4 – Quality Education. SDG 9 – Industry, Innovation & Infrastructure SDG 11 – Sustainable Cities & Communities
	Case studies	Experiential Learning	3	CO1, CO2, CO3, CO4,	8	SDG 4 – Quality Education. SDG 9 – Industry, Innovation & Infrastructure SDG 11 – Sustainable Cities & Communities
	Poster Presentation	Collaborative & Peer Learning	4,5	CO 4,5	8	SDG 4 – Quality Education. SDG 9 – Industry, Innovation & Infrastructure SDG 11 – Sustainable Cities & Communities



(Signature)

(Signature)

Prepared by Course Coordinator	Verified by Academic Coordinator	Approved by HOD Civil
<u>Vision of the Department</u> To become center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.		
<u>Mission of the Department</u> We, at Department of Civil Engineering, are committed to achieve our vision by- M1: To impart quality technical education through interactive teaching learning method. M2: To promote research and development activity by encouraging creativity and exposure to real world problem. M3: To mentor students for innovating thinking with relevance to entrepreneurship M4: To develop social awareness in graduates to serve society.		



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

Academic Year 2026-27

Semester- ODD

Structure of Course

Class	B. Tech. Sem. –VI
Course Code and Course Title	BTCVC703 Construction Techniques
Prerequisite/s	Engineering Geology, Geotechnical Engineering, Concrete Technology
Teaching Scheme: Lecture/Tutorial/Practical	03/00/00
Credits	03
Evaluation Scheme: CA / MSE / ESE	20/20/60

Course Outcomes:

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:		Blooms Level
BTCVC703 _1	Discuss the planning of new project with site accessibility and services required for successful execution of Construction Projects.	L3
BTCVC703 _2	Choose the various civil construction equipment's for different construction activities.	L3
BTCVC703 _3	Explain with layout of RMC plant, production, capacity and operation process for a Ready-Mix Concrete (RMC) plant.	L3
BTCVC703 _4	Apply the principles of prefabricated steel construction planning, and erection equipment including various types of cranes and dredging equipment, in real-world construction projects.	L3
BTCVC703 _5	Identify various aspect of road construction, construction of diaphragm walls, railway track construction etc.	L3

Mapping of CO's with PO's and PSO's:

Course Outcomes	Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	PS O1	PSO 2	PSO 3
BTCVC703 _1	2					2	2	2	2	2	2		3	2
BTCVC703 _2	3	2	2	2		2		2	2	2	2		3	2
BTCVC703 _3	3	2	2	2		2		2	2	2	2		3	2
BTCVC703 _4	2	2				2		2	2	2	2		3	2
BTCVC703 _5	2					2		2	2		2		3	2
Total	15	8	8	2	10	10		10	10	8	10		15	10
Average	3	2	2	2	2	2		2	2	2	2		3	2
BTEEOE705B	3	2	2	2	2	2		2	2	2	2		3	2

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by-

- M1: To impart quality technical education through interactive teaching learning method.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship.
- M4: To develop social awareness in graduates to serve society.



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

CO Attainment Targets:

CO	705 1	705 2	705 3	705 4	705 5
Previous Attainment	3.00	3.00	2.68	2.04	3.00
Target for CAY (2026-27)	3.00	3.00	3.00	3.00	3.00

Target Levels of Attainments

Level	2026-27	2025-26	2024-25
1	≥ 60	≥ 50	≥ 40
2	≥ 70	≥ 60	≥ 50
3	≥ 80	≥ 70	≥ 60

Teaching Learning Activity Mapping with SDG's

Mode	Assessment Tool	Type of Learning	CO Mapped	Self-learning Hours	SDG's Mapped
Continuous Assessment	Site Visit	Participative Learning	CO1, CO2	08	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action
	Presentation	Experiential Learning	CO3, CO4, CO5	12	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action
	Assignment	Active Learning	CO1, CO2, CO3, CO4, CO5	10	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by-

- M1: To impart quality technical education through interactive learning.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship.
- M4: To develop social awareness in graduates to serve society.

YSPM'S Yashoda Technical Campus, Satara



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

Academic Year 2026-27

Semester- ODD

Structure of Course

Class	B. Tech. Sem. –VI
Course Code and Course Title	BTCVC704 Professional Practices
Prerequisite/s	Structural Audit, Estimation and Costing
Teaching Scheme: Lecture/Tutorial/Practical	03/01/00
Credits	04
Evaluation Scheme: CA / MSE / ESE	20/20/60

Course Outcomes:

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:		Blooms Level
BTCVC704_1	Analyze the rates for various items of work and prepare abstract estimates under different conditions for various structures.	L4
BTCVC704_2	Determine and calculate the units for various quantities of item of work and bill preparations and to study about the specification writing.	L3
BTCVC704_3	Determine various types of contracts, accounts in PWD, methods for initiating the works in PWD.	L3
BTCVC704_4	Determine and prepare tenders and tender documents as per prevalent standards.	L3
BTCVC704_5	Explain and compare the valuation of land and buildings, various methods and factors affecting valuation.	L4

Mapping of CO's with PO's and PSO's:

Course Outcomes	Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	PSO1	PSO2	PSO3
BTCVC704_1	3	3	-	-	3	-	-	-	-	3	-	3	3	-
BTCVC704_2	3	2	2	-	3	-	-	-	-	2	2	3	3	-
BTCVC704_3	3	3	-	-	-	2	3	-	-	3	-	3	3	2
BTCVC704_4	-	3	3	-	3	-	2	3	3	3	-	3	3	2
BTCVC704_5	-	3	-	-	-	3	-	-	-	3	3	3	3	3
Total	9	14	5	-	9	5	5	3	3	14	5	15	15	7
Average	3.0	2.8	2.5	-	3.0	2.5	2.5	3.0	3.0	2.8	2.5	3.0	3.0	2.3
BTCVC704	3	3	2	-	3	2	2	3	3	3	2	3	3	2

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil
H. O. D.

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by:

M1: To impart quality technical education through interactive teaching and learning.

M2: To promote research and development activity by encouraging creativity and innovation.

M3: To mentor students for innovating thinking with relevance to entrepreneurship.

M4: To develop social awareness in graduates to serve society.

YSPM'S Yashoda Technical Campus, Satara



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

CO Attainment Targets:

CO	704_1	704_2	704_3	704_4	704_5
Previous Attainment	2.6	2.2	2.8	2.9	2.9
Target for CAY (2026-27)	3.0	3.0	3.0	3.0	3.0

Target Levels of Attainments

Level	2026-27	2025-26	2024-25
1	≥ 70	≥ 60	≥ 50
2	≥ 80	≥ 70	≥ 60
3	≥ 90	≥ 80	≥ 70

Teaching Learning Activity Mapping with SDG's

Mode	Assessment Tool	Type of Learning	CO Mapped	Self-learning Hours	SDG's Mapped
Continuous Assessment	PPT Presentation	Participative Learning	CO3, CO4	08	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action
	Case studies	Active Learning	CO5	10	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action
	Assignment	Active Learning	CO1, CO2, CO3, CO4, CO5	10	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by:

- M1: To impart quality technical education through interactive teaching learning method.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship
- M4: To develop social awareness in graduates to serve society



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

Academic Year 2026-27

Semester- ODD

Structure of Course

Class	B. Tech. Sem. -VI
Course Code and Course Title	BTCVPE705H Legal Aspects in Civil Engineering Contracts
Prerequisite/s	Structural Audit, Estimation and Costing
Teaching Scheme: Lecture/Tutorial/Practical	03/00/00
Credits	03
Evaluation Scheme: CA / MSE / ESE	20/20/60

Course Outcomes:

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:		Blooms Level
BTCVPE705H_1	Apply the provisions of Indian Contract Act and Arbitration Act in solving contract administration issues.	L3
BTCVPE705H_2	Analyze the legal implications of Bailment and apply FIDIC conditions in construction contracts.	L4
BTCVPE705H_3	Apply relevant labor laws to assess compliance in construction projects.	L3
BTCVPE705H_4	Analyze safety engineering practices with respect to applicable statutory provisions.	L4
BTCVPE705H_5	Evaluate contract disputes using Indian Contract Act and Arbitration Act provisions.	L4

Mapping of CO's with PO's and PSO's:

Course Outcomes	Programme Outcomes											PSO1	PSO2	PSO3
	1	2	3	4	5	6	7	8	9	10	11			
BTCVPE705H_1	-	3	-	-	-	-	-	3	-	2	2	2	-	2
BTCVPE705H_2	-	3	-	-	-	-	-	2	-	2	3	3	-	2
BTCVPE705H_3	-	-	-	-	-	2	-	3	-	2	2	-	-	3
BTCVPE705H_4	-	2	-	-	-	3	-	3	-	-	2	2	-	3
BTCVPE705H_5	-	3	-	-	-	-	-	3	-	2	2	2	-	3
Total	-	11	-	-	-	5	-	14	-	8	11	9	-	13
Average	-	2.75	-	-	-	2.50	-	2.8	-	2.0	2	2.25	-	2.6
BTCVPE705H	-	3	-	-	-	2	-	3	-	3	2	2	-	3

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by:-
 M1: To impart quality technical education through interactive teaching and learning.
 M2: To promote research and development activity by students and faculty to solve real world problem.
 M3: To mentor students for innovating thinking with relevance to entrepreneurship
 M4: To develop social awareness in graduates to serve society.



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

CO Attainment Targets:

CO	705_1	705_2	705_3	705_4	705_5
Previous Attainment	2.8	2.5	2.8	2.9	3.0
Target for CAY (2026-27)	3.0	3.0	3.0	3.0	3.0

Target Levels of Attainments

Level	2026-27	2025-26	2024-25
1	≥ 70	≥ 60	≥ 50
2	≥ 80	≥ 70	≥ 60
3	≥ 90	≥ 80	≥ 70

Teaching Learning Activity Mapping with SDG's

Mode	Assessment Tool	Type of Learning	CO Mapped	Self-learning Hours	SDG's Mapped
Continuous Assessment	PPT Presentation	Participative Learning	CO3, CO4	08	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure, SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action
	Case studies	Active Learning	CO5	10	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure, SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action
	Assignment	Active Learning	CO1, CO2, CO3, CO4, CO5	10	SDG 4: Quality Education, SDG 9: Industry, Innovation and Infrastructure, SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve the following by:
 M1: To impart quality technical education through interactive teaching learning method.
 M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
 M3: To mentor students for innovating thinking with relevance to entrepreneurship.
 M4: To develop social awareness in graduates to serve society.



(Signature)

H.O.D.
Civil Engineering

YSPM's Yashoda Technical Campus, Satara



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

Academic Year 2026-27

Semester- ODD

Structure of Course

Class	B. Tech. Sem. – VII
Course Code and Course Title	BTHM707A Essence of Indian Traditional Knowledge
Prerequisite/s	Indian Knowledge System
Teaching Scheme: Lecture/Tutorial/Practical	02/00/00
Credits	AU
Evaluation Scheme: CA / MSE / ESE	00/00/00

Course Outcomes:

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:		Blooms Level
BTHM707A_1	Explain the evolution of the ancient Indian education system, knowledge traditions, methods of knowledge transmission and preservation, and major Indian artistic traditions.	L2
BTHM707A_2	Describe the major features of Indian linguistic traditions and explain the principles of Yoga and holistic health care in the Indian knowledge tradition.	L2
BTHM707A_3	Explain the major philosophical traditions of ancient India and relate their principles to contemporary life and societal practices.	L2
BTHM707A_4	Analyze the contributions of ancient India to science, technology, architecture, construction materials, construction techniques, habitation, and town planning through relevant case studies.	L4
BTHM707A_5	Analyze the evolution of traditional and ancient practices in water supply, sanitation, irrigation, agriculture, transportation, and communication through appropriate case studies.	L4

Mapping of CO's with PO's and PSO's:

Course Outcomes	Programme Outcomes											PSO		
	1	2	3	4	5	6	7	8	9	10	11	PSO 1	PSO 2	PSO 3
BTHM707A_1						2	2	1	2		2			1
BTHM707A_2						2	2	1	2		2			1
BTHM707A_3						2	3	2	2		3		1	2
BTHM707A_4	1	2	1	2	2	3	2	1	2	1	2	1	2	3
BTHM707A_5	1	2	2	2	2	3	2	1	2	1	3	2	3	3
Total	2	4	3	4	4	12	11	6	10	2	12	3	6	10
Average	1	2	1.5	2	2	2.4	2.2	1.2	2	1	2.4	1.5	2	2
BTEEOE705B	1	2	2	2	2	2.5	2.5	1.5	2	1	2.5	1.5	2	2

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by-

- M1: To impart quality technical education through interactive teaching-learning process.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship.
- M4: To develop social awareness in graduates to serve society.

YSPM'S Yashoda Technical Campus, Satara



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

CO Attainment Targets:

CO	VE308 1	VE308 2	VE308 3	VE308 4	VE308 5
Previous Attainment	3	3	3	3	3
Target for CAY (2026-27)	3.00	3.00	3.00	3.00	3.00

Target Levels of Attainments

Level	2026-27	2025-26	2024-25
1	≥ 60	≥ 50	≥ 40
2	≥ 70	≥ 60	≥ 50
3	≥ 80	≥ 70	≥ 60

Teaching Learning Activity Mapping with SDG's

Mode	Assessment Tool	Type of Learning	CO Mapped	Self-learning Hours	SDG's Mapped
Continuous Assessment	Field Visit	Experiential Learning	CO1, CO2, CO3, CO4, CO5	08	SDG 3: Good Health and Well-being SDG 4: Quality Education, SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 16: Peace, Justice and strong Institutions
	Presentation	Participative Learning	CO1, CO2, CO3, CO4, CO5	15	SDG 3: Good Health and Well-being SDG 4: Quality Education, SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 16: Peace, Justice and strong Institutions
	Poster Making	Experiential Learning	CO1, CO2, CO3, CO4, CO5	12	SDG 3: Good Health and Well-being SDG 4: Quality Education, SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 16: Peace, Justice and strong Institutions

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by-

- M1: To impart quality technical education through interactive teaching learning methods.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship
- M4: To develop social awareness in graduates to serve society.



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

Academic Year 2026-27

Semester- ODD

Structure of Course

Class	Final Year Civil semester VII
Course Code and Course Title	BTCVC708, Design & Drawing of Prestressed Concrete
Prerequisite/s	Mechanics of Solid, Design of RC & PSC Structures
Teaching Scheme: Lecture/Tutorial/Practical	00/00/02
Credits	1
Evaluation Scheme: CA / MSE / ESE	30/20

Course Outcomes:

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:		Blooms Level
BTCVL708_1	Compare different types of losses in prestressed concrete.	L3
BTCVL708_2	Explain various concepts, systems in pre-stressing concrete.	L3
BTCVL708_3	Compute the behavior of the beam sections subjected to torsion.	L3
BTCVL708_4	Sketch drawings of slab and girders as per IS norms.	L4
BTCVL708_5	Communicate technical information by means of report and presentation.	L3

Mapping of CO's with PO's and PSO's:

Course Outcomes	Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	PSO1	PSO2	PSO3
BTCVL708_1	2	2							2		2		2	2
BTCVL708_2	2	2							2		2			2
BTCVL708_3	2	2	2								2	2	2	
BTCVL708_4	2	2	2				2	2	2		2	2	2	2
BTCVL708_5								2	3		2	2	2	2
Total	8	8	4				4	4	9		10	6	8	8
Average	2	2	2				2	2	2.25		2	2	2	2
BTCVC708	2	2	2				2	2	2		2	2	2	2

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil
Civil Engineering

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve the following:

- M1: To impart quality technical education through interactive teaching learning method.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship
- M4: To develop social awareness in graduates to serve society.



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

CO Attainment Targets:

CO	708_1	708_2	708_3	708_4	708_5
Previous Attainment	3.00	3.00	3.00	3.00	3.00
Target for CAY (2026-27)	3.00	3.00	3.00	3.00	3.00

Target Levels of Attainments

Level	2026-27	2025-26	2024-25
1	≥ 60	≥ 50	≥ 50
2	≥ 70	≥ 60	≥ 60
3	≥ 80	≥ 70	≥ 70

Teaching Learning Activity Mapping with SDG's

Mode	Assessment Tool	Type of Learning	CO Mapped	Self-learning Hours	SDG's Mapped
Continuous Assessment	Practical Performance & Observation	Experiential / Hands-on Learning	CO1, CO2, CO3, CO4, CO5	8	SDG 4: Quality Education; SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action



[Signature]

[Signature]

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD - Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by

- M1: To impart quality technical education through interactive teaching learning method.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship.
- M4: To develop social awareness in graduates to serve society



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

Academic Year 2026-27

Semester- ODD

Structure of Course

Class	B. Tech. Sem. –VI
Course Code and Course Title	BTCVC709 Professional Practices Lab
Prerequisite/s	Structural Audit, Estimation and Costing
Teaching Scheme: Lecture/Tutorial/Practical	00/00/02
Credits	01
Evaluation Scheme: CA / MSE / ESE	30/00/20

Course Outcomes:

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:		Blooms Level
BTCVC709_1	Analysis of rate for construction items, Understand and prepare detailed estimates for various civil engineering structures	L4
BTCVC709_2	Develop skills to prepare valuation reports, gain knowledge of the factors influencing property valuation.	L3
BTCVC709_3	Develop and Draft specifications for civil engineering items and emphasize the importance of clarity and comprehensiveness in specifications for project implementation	L5
BTCVC709_4	Enhance problem-solving skills through the completion of real-world engineering tasks and projects	L3
BTCVC709_5	Evaluate and compare the valuation of land and buildings, various methods and factors affecting valuation.	L5

Mapping of CO's with PO's and PSO's:

Course Outcomes	Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	PSO1	PSO2	PSO3
BTCVC709_1	3	3	–	–	2	–	–	–	–	2	3	3	3	–
BTCVC709_2	3	2	–	–	–	–	–	–	–	3	–	3	2	–
BTCVC709_3	3	–	–	–	2	–	–	–	–	3	–	3	2	2
BTCVC709_4	–	3	2	–	2	–	–	–	2	2	2	2	3	2
BTCVC709_5	3	3	–	–	–	–	–	–	–	2	–	3	3	2
Total	12	11	2	–	6	–	–	–	2	12	5	14	13	6
Average	3	2.75	2.0	–	2.0	–	–	–	2.0	2.4	2.5	2.8	2.6	2.0
BTCVC709	3	3	2	–	2	–	–	–	2	2	2	3	3	2

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD- Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by:-

- M1: To impart quality technical education through interaction and development oriented.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship
- M4: To develop social awareness in graduates to serve society.



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

CO Attainment Targets:

CO	709 1	709 2	709 3	709 4	709 5
Previous Attainment	2.6	2.2	2.8	2.9	2.9
Target for CAY (2026-27)	3.0	3.0	3.0	3.0	3.0

Target Levels of Attainments

Level	2026-27	2025-26	2024-25
1	≥ 70	≥ 60	≥ 50
2	≥ 80	≥ 70	≥ 60
3	≥ 90	≥ 80	≥ 70

Teaching Learning Activity Mapping with SDG's

Mode	Assessment Tool	Type of Learning	CO Mapped	Self-learning Hours	SDG's Mapped
Continuous Assessment	Practical Performance & Observation	Experiential / Hands-on Learning	CO1, CO2, CO3, CO4, CO5 & CO6	8	SDG 4: Quality Education; SDG 9: Industry, Innovation and Infrastructure

Vaibhava K. Shyap
Prepared by
Course Coordinator

[Signature]
Verified by
Academic Coordinator



[Signature]
Approved by
HOD- Civil

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve our vision by:
M1: To impart quality technical education through interactive teaching learning method.
M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
M3: To mentor students for innovating thinking with relevance to entrepreneurship.
M4: To develop social awareness in graduates to serve society.



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
 An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

Academic Year 2026-27

Semester- ODD

Structure of Course

Class	Final Year Civil semester VII
Course Code and Course Title	BTCVP711, Project Stage I
Prerequisite/s	Basic Civil Engineering, Mini Project, Seminar
Teaching Scheme: Lecture/Tutorial/Practical	00/00/02
Credits	3
Evaluation Scheme: CA / MSE / ESE	50/50

Course Outcomes:

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:		Blooms Level
BTCVP711_1	Identify thrust area in civil engineering and finalize problem statement.	L2
BTCVP711_2	Review the literature to search for technical information from various resources on selected problem.	L3
BTCVP711_3	Work as an individual or in a team in development of technical projects.	L2
BTCVP711_4	Apply project management skills.	L3
BTCVP711_5	Communicate technical information by means of report and presentation.	L2

Mapping of CO's with PO's and PSO's:

Course Outcomes	Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	PSO1	PSO2	PSO3
BTCVP711_1	3	3	2	2	2	3	2					3	3	
BTCVP711_2	3	3	2	2								2	2	2
BTCVP711_3	3	3	3		2							3	3	2
BTCVP711_4								3	3	3	3	3	3	
BTCVP711_5					2	3		3	3	3	3	3	2	
Total	9	9	7	4	6	6	2	6	6	6	6	14	13	4
Average	3	3	2.33	2	2	3	2	3	3	3	3	2.8	2.6	2
BTCVP711	3	3	2	2	2	3	2	2	3	3	3	3	3	2

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD, Civil Engineering
Yashoda Technical Campus, Satara

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

- We, at Department of Civil Engineering, Yashoda Technical Campus, Satara, achieve our vision by-
- M1: To impart quality technical education through interactive teaching learning method.
 - M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
 - M3: To mentor students for innovating thinking with relevance to entrepreneurship
 - M4: To develop social awareness in graduates to serve society.



Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
An Autonomous Institute
FACULTY OF ENGINEERING
Department of Civil Engineering

CO Attainment Targets:

CO	711_1	711_2	711_3	711_4	711_5
Previous Attainment	3.00	3.00	3.00	3.00	3.00
Target for CAY (2026-27)	3.00	3.00	3.00	3.00	3.00

Target Levels of Attainments

Level	2026-27	2025-26	2024-25
1	≥ 70	≥ 60	≥ 50
2	≥ 80	≥ 70	≥ 60
3	≥ 90	≥ 80	≥ 70

Teaching Learning Activity Mapping with SDG's

Mode	Assessment Tool	Type of Learning	CO Mapped	Self-learning Hours	SDG's Mapped
Continuous Assessment	Practical Performance & Observation	Experiential / Hands-on Learning	CO1, CO2, CO3, CO4, CO5	12	SDG 4: Quality Education; SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action



[Signature]

[Signature]

Prepared by
Course Coordinator

Verified by
Academic Coordinator

Approved by
HOD, Civil Engineering

Vision of the Department

To become centre of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society

Mission of the Department

We, at Department of Civil Engineering, are committed to achieve the vision by

- M1: To impart quality technical education through interactive teaching learning method.
- M2: To promote research and development activity by encouraging creativity and exposure to real world problem.
- M3: To mentor students for innovating thinking with relevance to entrepreneurship
- M4: To develop social awareness in graduates to serve society