

Semester –III (Second Year)
Proposed Scheme w.e.f. July – 2021

Course Category	Course Code	Course Title	Weakly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTBS301	Engineering Mathematics – III	3	1	-	20	20	60	100	4
	BTCOC302	Discrete Mathematics	3	1	-	20	20	60	100	4
	BTCOC303	Data Structures	3	1	-	20	20	60	100	4
†	BTCOC304	Computer Architecture & Organization	3	1	†	20	20	60	100	4
	BTCOC305	Elective –I (a) Object - oriented Programming in C++ (b) Object Oriented Programming in Java	3	1	-	20	20	60	100	4
	BTCOL306	Data Structures Lab & Object Oriented Programming Lab	-	-	4	60	-	40	100	2
	BTCOS307	Seminar – I	-	-	4	60	-	40	100	2
	BTES211P	Field Training / Internship / Industrial Training –I Evaluation	-	-	-	-	-	-	-	Audit
TOTAL			15	5	8	220	100	380	700	24

Semester –IV (Second Year)
Proposed Scheme w.e.f. January – 2022

Course Category	Course Code	Course Title	Weakly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOC401	Design & Analysis of Algorithms	3	1	-	20	20	60	100	4
	BTCOC402	Operating Systems	3	1	-	20	20	60	100	4
	BTHM403	Basic Human Rights	3	-	-	20	20	60	100	3
	BTBSC404	Probability and Statistics	3	-	-	20	20	60	100	3
	BTES405	Digital Logic Design & Microprocessors	3	1	-	20	20	60	100	4
	BTCOL406	Operating Systems & Python Programming Lab	1*	-	4	60	-	40	100	3
	BTCOS407	Seminar – II	-	-	4	60	-	40	100	2
	BTCOF408	Field Training / Internship / Industrial Training –II Evaluation	-	-	-	-	-	-	-	Audit to be evaluated in V Sem.
TOTAL			16	3	8	220	100	380	700	23

*Note: Lecture should be conducted only for Python Programming


PRINCIPAL

Sanjeevan Group Of Institutions
(Degree Engg.), Somwarpeth, Panhala,
Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)




Head of Department
Computer Science and Engineering (Degree)
Sanjeevan Group of Institutions,
Somwar Peth - Panhala, Dist-Kolhapur, 416201

Semester –V (Third Year)
Proposed Scheme w.e.f. July – 2022

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOC501	Database Systems	3	1	-	20	20	20	100	4
	BTCOC502	Theory of Computation	3	1	-	20	20	20	100	4
	BTCOC503	Software Engineering	3	1	-	20	20	20	100	4
	BTCOE504	Elective – II (A) Human computer Interaction (B) Numerical Methods	3	-	-	20	20	20	100	3
	BTHM505	Elective – III (A) Economics and Management (B) Business Communication	3	-	-	20	20	20	100	3
	BTCOL506	Database Systems & Software Engineering Lab	-	-	4	60	-	40	100	2
	BTCOM507	Mini-project – I	-	-	4	60	-	40	100	2
	BTCOF408	Field Training / Internship / Industrial Training-II (Evaluation)	-	-	-	-	-	-	-	Audit
TOTAL			15	3	8	220	100	380	700	22

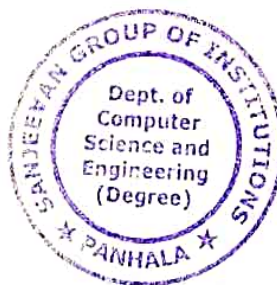
Semester –VI (Third Year)
Proposed Scheme w.e.f. January – 2023

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOC601	Compiler Design	3	1	-	20	20	60	100	4
	BTCOC602	Computer Networks	3	1	-	20	20	60	100	4
	BTCOC603	Machine Learning	3	1	-	20	20	60	100	4
	BTCOE604	Elective – IV (A) Geographic Information System (B) Internet of Things (C) Embedded Systems	3	-	-	20	20	60	100	3
	BTHM605	Elective – V (A) Development Engineering (B) Employability and Skill Development (C) Consumer Behaviour	3	-	-	20	20	60	100	3
	BTCOL606	Competitive Programming & Machine Learning Lab	1*	-	4	60	-	40	100	3
	BTCOM607	Mini-project – II	-	-	4	60	-	40	100	2
	BTCOF608	Field Training / Internship / Industrial Training-III	-	-	-	-	-	-	-	Audit to be Evaluated in VII Sem.
TOTAL			16	3	8	220	100	380	700	23

*Note: Lecture should be conducted only for Competitive Programming


PRINCIPAL

Sanjeevan Group Of Institutions
(Degree Engg.), Somwarpeth, Panhala,
Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)




Head of Department
Computer Science and Engineering (Degree)
Sanjeevan Group of Institutions,
Somwar Peth - Panhala, Dist-Kolhapur, 416201

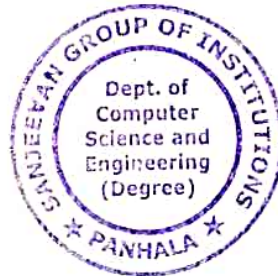
Semester –VII (Final Year)
Proposed Scheme w.e.f. July – 2023

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOC701	Artificial Intelligence	3	-	-	20	20	60	100	3
	BTCOC702	Cloud Computing	3	-	-	20	20	60	100	3
	BTCOE703	Elective – VI (A) Bioinformatics (B) Distributed System (C) Big Data Analytics	3	-	-	20	20	60	100	3
	BTCOE704	Open Elective – VII (A) Cryptography and Network Security (B) Business Intelligence (C) Block chain Technology	3	-	-	20	20	60	100	3
	BTCOE705	Open Elective – VIII (A) Virtual Reality (B) Deep Learning (C) Design Thinking	3	-	-	20	20	60	100	3
	BTHM706	Foreign Language Studies*	-	-	4	-	-	-	-	Audit
	BTCOL707	Artificial Intelligence & Cloud Computing Lab	-	-	4	60	-	40	100	2
	BTCOS708	Project Phase – I	-	-	-	60	-	40	100	2
	BTCOF608	Field Training / Internship / Industrial Training –III (Evaluation)	-	-	-	-	-	-	-	Audit
TOTAL			15	-	8	220	100	380	700	19

*Any Foreign language can be opted by the students as per their need /demand conducted in online or offline mode by the institute.


PRINCIPAL

Sanjeevan Group Of Institutions
 (Degree Engg.), Somwarpeth, Panhala,
 Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)



Semester –VIII (Final Year)
Proposed Scheme w.e.f. January – 2024

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOF801	Project phase – II (In-house) / Internship and Project in Industry	-	-	24	60	-	40	100	12
TOTAL			-	-	24	60	-	40	100	12


Head of Department
 Computer Science and Engineering (Degree)
 Sanjeevan Group of Institutions,
 Somwar Peth - Panhala, Dist-Kolhapur, 416201

Dr. Babasaheb Ambedkar Technological University, Lonere

Teaching & Evaluation Scheme for Second Year B. Tech. Civil Engg.

Semester- III										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
BSC 5	BTBS301	Mathematics – III	3	1	-	20	20	60	100	4
ESC 8	BTCVES302	Mechanics of Solids	3	1	-	20	20	60	100	4
PCC 1	BTCVC303	Building Construction & Drawing	2	1	-	20	20	60	100	3
PCC 2	BTCVC304	Hydraulics -I	3	1	-	20	20	60	100	4
PCC 3	BTCVC305	Surveying	2	1	-	20	20	60	100	3
HSSMC2	BTHM306	Soft Skill Development	2	-	-	50	-	-	50	Audit
LC 1	BTCVL 307	Solid Mechanics Laboratory	-	-	2	20	-	30	50	1
LC 2	BTCVL 308	Hydraulics-I Laboratory	-	-	2	20	-	30	50	1
LC 3	BTCVL 309	Surveying Laboratory	-	-	2	20	-	30	50	1
Internship	BTES210P	Internship –I Evaluation (From Sem II)	-	-	-	-	-	50	50	Audit
Total			15	05	06	210	100	440	750	21

Semester- IV										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
PCC 4	BTCVC401	Building Planning and Drawing	2	-	-	20	20	60	100	2
PCC 5	BTCVC402	Environmental Engineering	2	-	-	20	20	60	100	2
PCC 6	BTCVC403	Structural Mechanics - I	2	1	-	20	20	60	100	3
PCC 7	BTCVC404	Water Resources Engineering	3	-	-	20	20	60	100	3
PCC 8	BTCVC405	Hydraulics - II	2	1	-	20	20	60	100	3
PCC 9	BTCVC406	Engineering Geology	2	1	-	20	20	60	100	3
LC 4	BTCVL407	Building Planning and CAD Lab.	-	-	2	20	-	30	50	1
LC 5	BTCVL408	Environmental Engg. Lab.	-	-	2	20	-	30	50	1
LC 6	BTCVL409	HE-II Lab.	-	-	2	20	-	30	50	1
Internship	BTCVP410	Field Training / Internship/Industrial Training (minimum of 4 weeks training in Summer Vacation after Semester IV and appear at examination in Semester V)	-	-	-	-	-	-	-	To be evaluated in V Sem.
Total			13	03	06	180	120	450	750	19

BTCVL309 Surveying Laboratory

Practical: 2 hours / week

Practical Work consists of performances among the list below and detailed reporting in form of field book, journal and drawing sheets.

Perform each of the following practical work

- 1) Use of Dumpy Level, Auto Level and Tilting Level.
- 2) Sensitivity of Bubble Tube using Dumpy Level.
- 3) Evaluation of constant of Planimeter, and use of Digital Planimeter for measurement of areas.
- 4) Study of Theodolite.
- 5) Methods of Plane Table Survey
- 6) Study and use of Total Station

Among following any two shall be performed

- 1) Reciprocal Levelling.
- 2) Illustration of Permanent adjustment of Dumpy Level
- 3) Measurement of Horizontal Angle by Various Methods
- 4) Measurement of Magnetic Bearing and Vertical Angle by Theodolite
- 5) Two Point and Three Point Problems

Among following two shall be performed

- 1) Road survey, 2) Radial Contouring, 3) Block Contouring, 4) Theodolite Traversing

Course Outcomes: On completion of the course, the students will be able to:

CO1: Use the theodolite along with chain/tape, compass on the field.

CO2: Apply geometric and trigonometric principles of basic surveying calculations.

CO3: Plan a survey, taking accurate measurements, field booking, and adjustment of errors.

CO4: Apply field procedures in basic types of surveys, as part of a surveying team.

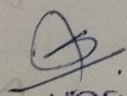
CO5: Employ drawing techniques in the development of a topographic map.

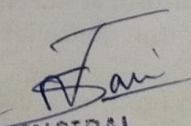
□□□□□□□□□□

BTES210P Internship Evaluation I (from semester II)

Student shall undergo field training / industrial training / internship during summer vacation after Semester II. This training is at elementary level expecting exposure to field practices. A brief report shall be submitted. Evaluation shall be based on report and power point presentation.

☑☑☑☑☑☑☑☑☑☑


HOD
Civil Engineering
Sanjeevan Engineering & Technology Institute
Somwar Peth, Panhala, Dist. Kolhapur. (416 201)


PRINCIPAL
Sanjeevan Group Of Institutions
(Degree Engg.), Somwarpeth, Panhala,
Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)

A report based on the visit to water treatment plant shall be submitted.

Course Outcomes: On completion of the course, the students will be able to:

- CO1: Quantify the pollutant concentration in water, wastewater and ambient air.
- CO2: Recommend the degree of treatment required for the water and wastewater.
- CO3: Analyze the survival conditions for the microorganism and its growth rate.

☑☑☑☑☑☑☑☑☑☑

BTCVL 409 Hydraulic Engineering Laboratory - II

Practical: 2 hours / week

Practical Work consists of at least three performances from groups listed below and detailed reporting in form of journal. Practical examination shall be based on above.

Group (A)

- 1) Calibration of V notch / Rectangular notch.
- 2) Calibration of Ogee Weir.
- 3) Study of hydraulic jump
 - a) Verification of sequent depths,
 - b) Determination of loss in jump.
 - c) Study of parameters with respect to Fraud Number: i) Y_2/Y_1 ; ii) Length; iii) Energy loss
- 4) Study of flow below gates – Discharge v/s head relation, Equation of flow, Determination of contraction in fluid in downstream of gate.
- 5) Velocity distribution in open channel in transverse direction of flow.

Group (B)

- 1) Impact of jet.
- 2) Study of Turbines (Demonstration).
- 3) Tests on Centrifugal Pump.
- 4) Study of Charts for Selection of Pumps

Use of computer programs such as MS Excel is desirable for post-processing of results.

Course Outcomes: On completion of the course, the students will be able to:

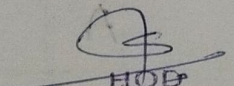
- CO1: Understand various properties of fluids and measurement techniques.
- CO2: Carry out calibrations of various flow measuring devices.
- CO3: Understand mechanism of hydraulic jump, various jets and pumps.

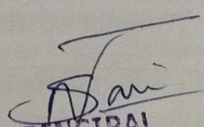
☑☑☑☑☑☑☑☑☑☑

BTCVP410 Field Training/Internship/Industrial Training

Students are expected to undergo industrial training for at least four weeks at factory / construction site / design offices or in combination of these. Training session shall be guided and certified by qualified engineer / architect / contractor in civil engineering. A neat detailed report on activities carried out during training is expected. Students should undergo training in Summer Vacation after Semester IV and appear at examination in Semester V.

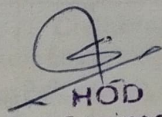
☑☑☑☑☑☑☑☑☑☑

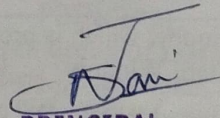

HOD
Civil Engineering
Sanjeevan Engineering & Technology Institute
Somwar Peth, Panhala, Dist. Kolhapur. (416 201)


PRINCIPAL
Sanjeevan Group Of Institutions
(Degree Engg.), Somwarpeth, Panhala,
Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)

Dr. Babasaheb Ambedkar Technological University, Lonere
Teaching & Evaluation Scheme for Third Year B Tech Civil Engg.

Semester- V										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
PCC 10	BTCVC501	Design of Steel Structures	2	1	-	20	20	60	100	3
PCC 11	BTCVC502	Geotechnical Engineering	3	1	-	20	20	60	100	4
PCC 12	BTCVC503	Structural Mechanics –II	2	1	-	20	20	60	100	3
PCC 13	BTCVC504	Concrete Technology	2	-	-	20	20	60	100	2
HSSMC3	BTHM505	Project Management	3	-	-	20	20	60	100	3
PEC 1	BTCVPE506 So	A. Advanced Environmental Engg. B. Applied Geology C. Hydraulic Engineering Design D. Advanced Water Resources E. Geomatics F. Town and Urban Planning G. Material, Testing and Evaluation H. Construction Economics & Finance	3	-	-	20	20	60	100	3
ESC10	BTCVES507	Software applications in Civil Engineering	2	-	-	50	-	-	50	Audit
LC 7	BTCVL508	SDD of Steel Structures Lab.	-	-	2	20	-	30	50	1
LC 8	BTCVL509	Geotechnical Engineering Lab.	-	-	2	20	-	30	50	1
LC 9	BTCVL510	Concrete Technology Lab.	-	-	2	20	-	30	50	1
Internship	BTCVP410	Internship – 2 Evaluation	-	-	-	-	-	-	-	Audit
Total			17	3	6	230	120	450	800	21


HOD
Civil Engineering
 Sanjeevan Engineering & Technology Institute
 Somwar Peth, Panhala, Dist. Kolhapur. (416 201)


PRINCIPAL
 Sanjeevan Group Of Institutions
 (Degree Engg.), Somwarpeth, Panhala,
 Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)

BTCVL 510 Concrete Technology Laboratory

Practical: 2 Hours / Week

Term work shall consist of performing minimum five experimental sets from the list below.

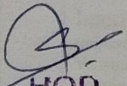
- 1) Testing of Cement: Consistency, Fineness, Setting Time, Specific Gravity,
- 2) Soundness and Strength Test for Cement
- 3) Testing of Aggregates: Specific Gravity, Sieve Analysis, Bulking of Fine Aggregate, Flakiness Index, Elongation Index and Percentage Elongation
- 4) Placement Tests on Concrete: Workability Tests: Slump, Compaction,
- 5) Strength Tests on Concrete: Compression, Flexure, Split & Tensile Test,
- 5) Effects of Admixture: Accelerator, Retarder, Super Plasticizer,
- 6) Exercise and verification of Concrete Mix Design,
- 7) Non-destructive Testing for Concrete.

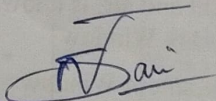
☑☑☑☑☑☑☑☑☑☑

Evaluation of (BTCVP410) Field Training/Internship/Industrial Training

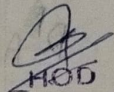
Evaluation of industrial training undergone by students in Summer Vacation after Semester IV. A neat detailed report on activities carried out during training has to be submitted, along with a presentation to evaluate the training work.

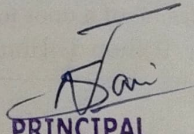
☑☑☑☑☑☑☑☑☑☑


HOD
Civil Engineering
Sanjeevan Engineering & Technology Institute
Somwar Peth, Panhala, Dist. Kolhapur. (416 201)


PRINCIPAL
Sanjeevan Group Of Institutions
(Degree Engg.), Somwarpeth, Panhala,
Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)

Semester- VI										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
PCC 14	BTCVC601	Design of RC Structures	3	1	-	20	20	60	100	4
PCC 15	BTCVC602	Foundation Engineering	3	1	-	20	20	60	100	4
PCC 16	BTCVC603	Transportation Engineering	3	-	-	20	20	60	100	3
PEC 2	BTCVPE604	A. Industrial Waste Treatment B. Managerial Techniques C. Open Channel Flow D. Water Power Engineering E. Ground Improvement Techniques F. Structural Audit G. Intelligent Transportation Systems H. Plastic Analysis of Structures I. Numerical Methods in Civil Engg. J. Engineering Management	3	-	-	20	20	60	100	3
OEC 1	BTCVOE605	A. Environmental Impact Assessment B. Basic Human Rights C. Business Communication and Presentation Skills D. Composite Materials E. Experimental Stress Analysis F. Python Programming G. Operation Research H. Applications of Remote Sensing and Geographic Information Systems I. Civionics: Instrumentation & Sensor Technologies for Civil Engineering J. Planning for Sustainable Development K. Development Engineering	3	-	-	20	20	60	100	3
HSSMC4	BTHM606	Indian Constitution	2	-	-	50	-	-	50	Audit
LC 10	BTCVL607	SDD of RC Structures Lab.	-	-	2	20	-	30	50	1
LC 11	BTCVL608	Transportation Engineering Lab	-	-	2	20	-	30	50	1
Project	BTCVM609	Mini Project	-	-	2	20	-	30	50	1
Internship		Mandatory (BTCVP610) Field Training/ Internship/Industrial Training (minimum of 4 weeks training in Summer Vacation after Semester VI and appear at examination in Semester VII.)	-	-	-	-	-	-	-	Credits to be evaluated in VII Sem
Total			17	2	6	210	100	390	700	20


HOD
 Civil Engineering
 Sanjeevan Engineering & Technology Institute
 Somwar Peth, Panhala, Dist. Kolhapur. (416 201)


PRINCIPAL
 Sanjeevan Group Of Institutions
 (Degree Engg.), Somwarpeth, Panhala,
 Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)

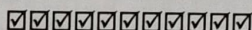
References:

- Institute of Town Planners, India, Ministry of Urban Affairs & Employment, Government of India, New Delhi, UDPFI Guidelines, 1996.
- Miles R. Simon, 1970, 'Metropolitan Problems' Methuen Publications, Canada.
- B.I.S., 1980, 'National Building Code of India', ISI, New Delhi.
- ANSI/ASHRAE/USGBC/IES Standard 189.1, Standard for the Design of High-Performance Green Buildings Except Low -Rise Residential Buildings
- ASHRAE Standard 90. 1, Energy Standard for Buildings Except Low-Rise Residential Buildings

Course Outcomes: The required course for emphasis in development engineering will help students

CO 1 : To develop multi scaled perspective about decisions in the built environment,

CO 2 : To expose the students to the analysis and evaluation of real world problems aiming to bring desired change in the society.



BTHM606

Indian Constitution

Teaching Scheme: 2 Lecture / week

The constitution of India:

1. Preamble
2. Fundamental Rights
3. Directive principles of state policy
4. Fundamental Duties
5. Some other provisions

Universal declaration of Human Rights and Provisions of India, Constitution and Law, National Human Rights Commission and State Human Rights Commission.

Module.1 Introduction

(5 Lectures)

Constitution' meaning of the term,, Indian Constitution: Sources and constitutional history, Features: Citizenship, Preamble, Fundamental Rights and Duties, Directive, Principles of State Policy

Module.2 Union Government and its Administration

(5 Lectures)

Structure of the Indian Union: Federalism, Centre- State, relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, Lok Sabha, Rajya Sabha

Module.3 State Government and its Administration

(4 Lectures)

Governor: Role and Position, CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

Module.4 Local Administration

(5 Lectures)

District's Administration head: Role and Importance, Municipalities: Introduction, Mayor and role of Elected Representative, CEO of Municipal Corporation, Pachayati raj: Introduction, PRI: Zila Pachayat, Elected officials and their roles, CEO Zila Pachayat: Position and role, Block level: Organizational Hierarchy (Different departments), Village level: Role of Elected and Appointed officials, Importance of grass root democracy

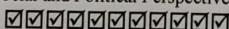
Module.5 Election Commission

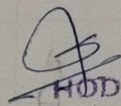
(5 Lectures)

Election Commission: Role and Functioning, Chief Election Commissioner and Election Commissioners, State Election Commission: Role and Functioning, Institute and Bodies for the welfare of SC/ST/OBC and women

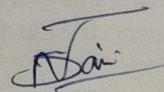
TEXT/REFERENCE BOOKS:

- Sastry, T. S. N., (2005). India and Human rights: Reflections, Concept Publishing Company India (P Ltd.),
- Nirmal, C.J., (1999). Human Rights in India: Historical, Social and Political Perspectives (Law in India), Oxford India.




HOD
Civil Engineering

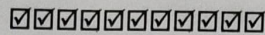
Sanjeevan Engineering & Technology Institute
Somwar Peth, Panhala, Dist. Kolhapur. (416 201)


PRINCIPAL

Sanjeevan Group Of Institutions
(Degree Engg.), Somwarpeth, Panhala,
Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)

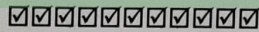
BTCVM609 Mini Project

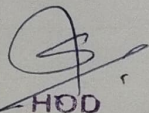
Student shall choose a topic of his interest in consultation with faculty in the department. The topic for mini project may be related to Civil Engineering area and/or interdisciplinary area. Student shall attempt to collect necessary information and present a summary indicating comprehension of the topic and acquired depth of knowledge. It is desirable to obtain industry or community sponsorship. Simplified tools or devices may be presented in form of working model and a brief report stating development. A power point presentation shall also be submitted.



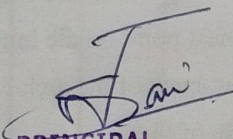
BTCVP 610 Field Training /Internship /Industrial Training

Students are expected to undergo industrial training for at least four weeks at factory / construction site / design offices or in combination of these. Training session shall be guided and certified by qualified engineer / architect / contractor in civil engineering. A neat detailed report on activities carried out during training is expected. Students should undergo training for minimum 4 weeks which can be completed partially in V Semester and VI Semester or in at one time after VI Semester. Evaluation will be done in VII Semester.




HOD
Civil Engineering

Sanjeevan Engineering & Technology Institute
Somwar Peth, Panhala, Dist. Kolhapur. (416 201)


PRINCIPAL

Sanjeevan Group Of Institutions
(Degree Engg.), Somwarpeth, Panhala,
Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)

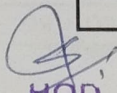
Dr. Babasaheb Ambedkar Technological University

B.Tech. Civil Engineering

Course Structure for Semester VII (Fourth Year) w.e.f. 2023-2024

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTCVC701	Core	Design of Reinforced & Prestressed Concrete Structures	3	1	--	20	20	60	100	4
BTCVC702	Core	Infrastructure Engineering	3	--	--	20	20	60	100	3
BTCVC703	Core	Construction Techniques	3	--	--	20	20	60	100	3
BTCVC704	Core	Professional Practices	3	1	--	20	20	60	100	4
BTCVE705A	Elective IV	Engineering Economics	3	--	--	20	20	60	100	3
BTCVE705B		Finite Element Method								
BTCVE705C		Limit State Design of Steel Structures								
BTCVE705D		Rock Mechanics								
BTCVE705E		Applications of Drone Technology								
BTCVE705F		Advanced RC Design								
BTCVE705G		Applied Hydrology & Flood Control								
BTCVE705H		Legal Aspects in Civil Engineering Contracts								
BTCVE705I		Bridge Engineering								
BTCVOE706A	Open Elective V	Advanced Structural Analysis	3	--	--	-	--	--	--	Audit
BTCVOE706B		Air Pollution Control								
BTCVOE706C		Applications of AI and ML in Civil Engineering								
BTCVOE706D		Introduction to Earthquake Engineering								
BTCVOE706E		Internet of Things								
BTCVOE706F		Tunneling and Underground Excavations								
BTCVOE706G		Bamboo Construction Technology								
BTHM707A		Essence of Indian Traditional Knowledge	2	--	--	--	--	--	--	Audit
BTHM707B		Foreign language ^{***}								
BTCVL708		Design & Drawing of Prestressed Concrete	--	--	2	30	--	20	50	1

	Lab.	Structures								
BTCVL709		Professional Practices	--	--	2	30	--	20	50	1
BTCVP610	Training	Field Training / Internship/Industrial Evaluation	--	--	--	--	--	50	50	1
BTCVS710	BTS	Seminar	--	--	2	--	--	50	50	1
BTCVP711	BTP	Project Stage-I**	--	--	4	--	50	50	100	3
Total			20	2	10	160	150	490	800	24


HOD
 Civil Engineering
 Sanjeevan Engineering & Technology Institute
 Somwar Peth, Panhala, Dist. Kolhapur. (416 201)

B.Tech. Civil Engineering
 Course Structure for Semester VIII [Fourth Year] w.e.f. 2023-2024

PRINCIPAL
 Sanjeevan Group Of Institutions
 (Degree Engg.), Somwarpeth, Panhala,
 Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			CA	MSE	ESE	Total	Credits
			L	T	P					
BTCVSS801A	(Self-Study Course) #	Characterization of Construction Materials	02**	--	--	20	20	60	100	3
BTCVSS801B		Geo synthetics and Reinforced Soil Structures								
BTCVSS801C		Higher Surveying								
BTCVSS801D		Maintenance and Repair Of Concrete Structures								
BTCVSS801E		Structural Dynamics								
BTCVSS801F		Engineering Systems & Development								
BTCVSS801G		Sustainable River Basin Management								
BTCVSS801H		Modern Construction Materials								
BTCVSS801J		Advanced Town & Urban Planning								
BTCVSS802A	(Self-Study Course) #	Energy Efficiency Acoustics and Day lighting in Building	02**	--	--	20	20	60	100	3
BTCVSS802B		Environmental Remediation of Contaminated Sites								
BTCVSS802C		Remote Sensing Essentials								
BTCVSS802D		Mechanical Characterization of Bituminous Materials								
BTCVSS802E		Soil Structure Interaction								
BTCVSS802F		Design of Water Supply Systems								
BTCVP803	Project Stage-II	Project Stage II or Internship	--	--	24	100	--	100	200	12
Total			04	--	24	140	40	220	400	18


HOD
 Civil Engineering
 Sanjeevan Engineering & Technology Institute
 Somwar Peth, Panhala, Dist. Kolhapur. (416 201)

PRINCIPAL
 Sanjeevan Group Of Institutions
 (Degree Engg.), Somwarpeth, Panhala,
 Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)

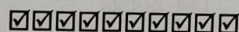
BTCVL709

Professional Practices Lab

Practical: 2 Hours / Week

Term work include detailed study and working of following set of assignments

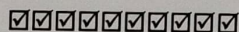
- 1) Detailed estimate for a two storied RCC or load bearing wall building
 - 2) Preparing detailed estimate for any four of the following:
 - a) A small culvert
 - b) A stretch of a road about 1 Km. long including earthwork
 - c) A reach of canal about 1 Km. long
 - d) A percolation tank
 - e) A factory shed of steel frame
 - f) Water supply scheme
 - g) Drainage scheme
 - h) Water Treatment plants.
 - 3) Valuation report including valuation certificate for any one of the following:
 - a) A building for residential purpose or commercial purpose
 - b) A hotel
 - c) A theatre
 - d) Any one construction machine.
 - 4) Drafting of Detailed specification for any five civil engineering items. This shall include at least one item each from Roads, Irrigation works, Water Supply, Sanitation and buildings
- Assignment (1) and (2) shall include Rate Analysis of at least two items.



BTCVP 610

Field Training /Internship /Industrial Training (Evaluation)

Students are expected to undergo industrial training for at least four weeks at factory / construction site / design offices or in combination of these. Training session shall be guided and certified by qualified engineer / architect / contractor in civil engineering. A neat detailed report on activities carried out during training is expected. Students should undergo training for minimum 4 weeks which can be completed partially in V Semester and VI Semester or in at one time after VI Semester. Evaluation will be done in VII Semester.

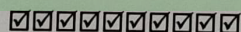


BTCVS710

Seminar III

Teaching Scheme: 2 hours per week

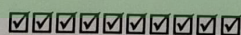
Student shall visit to ongoing construction sites in field to witness and collect information from works of execution of roads. It is desirable to collect basic information on components of roads, construction machinery, etc. Intention of the work is to introduce the student to the sequential order of execution of road works, preparation of road alignment and various surveys

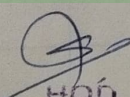
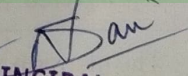


BTCVM711

Project Stage I

Term work shall consist of detailed report for chosen topic and output of final working proposed. Report shall summarise the literature survey, spell out the scope of work, methodology and results. Viva-voce Examination shall be based on work carried out by the student.



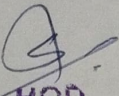
 HOD Civil Engineering		 PRINCIPAL Sanjeevan Group Of Institutions (Degree Engg.), Somwarpoth, Panhala, Tal. Panhala, Dist. Kolhapur, 416 201 (M.S.)								
Sanjeevan Engineering & Technology Institute Somwar Peth, Panhala, Dist. Kolhapur, (416 201)		Semester VIII								
Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	

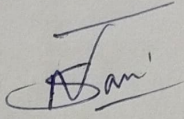
BTCVP803

Project Stage II or internship

Term work shall consist of detailed report for chosen topic and output of final working proposed. Report shall summarise the literature survey, spell out the scope of work, methodology and results. Viva-voce Examination shall be based on work carried out by the student in Industry based project or In-house project or Internship.

☑☑☑☑☑☑☑☑☑


HOD
Civil Engineering
Sanjeevan Engineering & Technology Institute
Somwar Peth, Panhala, Dist. Kolhapur. (416 201)


PRINCIPAL
Sanjeevan Group Of Institutions
(Degree Engg.), Somwarpeth, Panhala,
Tal. Panhala, Dist. Kolhapur - 416 201 (M.S.)