



**An Autonomous Institute**

Shree Warana Vibhag Shikshan Mandal's

**Tatyasaheb Kore Institute of  
Engineering And Technology,  
Warananagar**

NBA Accredited Institute

# Department of Civil Engineering

**T. Y. B. Tech. Civil Engineering  
2022-23**

**B. Tech. In Civil Engineering**

Syllabus Structure and Curriculum under Autonomy

## Abbreviations

Sr. No.	Acronym	Definition
1	ISE	In-Semester Examination
2	ISE-I	In-Semester Examination-I
3	ISE-II	In-Semester Examination-II
4	ESE	End Semester Examination
5	ISA	In-Semester Assessment (Term Work)
6	L	Lecture
7	T	Tutorial
8	P	Practical
9	CH	Contact Hours
10	C	Credit

## Course/ Subject Categories

Sr. No.	Acronym	Definition
1	BSC	Basic Science Course
2	HSC	Humanity Science Course
3	ESC	Engineering Science Course
4	PCC	Professional Core Course
5	OEC	Open Elective Course
6	MC	Mandatory Course
7	PEC	Professional Elective Course
8	PW	Project Work (Mini and Major Project)
9	II	Industrial Internship

## CO, PO & PSO Mapping Correlation:

Low	Medium (Moderate)	High (Substantial)
1	2	3

## Course/ Subject Code

C	E	5	0	1
Branch Code		Semester	Course Number	

## Course Term work and POE Code

C	E	5	0	1	T / P / A
Branch Code		Semester	Course Number		T- Tutorial P- POE A- Audit Course



## Vision

To become an academy of excellence in technical education and human resource development.

## Mission

- To develop engineering graduates of high repute with professional ethics.
- To excel in academics and research through innovative techniques.
- To facilitate the employability, entrepreneurship along with social responsibility.
- To collaborate with industries and institutes of national recognition.
- To inculcate lifelong learning and respect for the environment.

## Quality Policy

To promote excellence in academic and training activities by inspiring students for becoming competent professionals to cater industrial and social needs.

## Department of Civil Engineering

### Program Educational Objectives (PEO's)

After completion of program, Graduates will be able to

1	To Impart quality technical education and graduate the students for employment in civil engineering and related professions.
2	To provide students with solid foundation in mathematical and analytical subjects so as to solve civil engineering problems and also to pursue higher studies.
3	To develop the ability among the students to organize the data, synthesize data and technical concepts which will help them to solve problems relevant to the general practice of various civil engineering disciplines
4	To inculcate with the student the expertise of using computer tools to solve problems, for presentations works, acquaint them with professional level software for planning, analysis and design purpose
5	To provide an experience in surveying work, site investigations, familiarity with the real issues of civil engineering including ethics, economy, management and emerging technologies
6	To provide an opportunity for the students to work in team by organizing various curricular and professional activities resulting in the improvement of technical and soft skills.

## Department of Civil Engineering

### Program Outcomes (PO's)

After completion of program, Graduates will be able to

PO1	<b>Demonstrate</b> knowledge in mathematics, basic sciences & civil engineering
PO2	<b>Identify</b> , formulate and solve civil engineering problems.
PO3	<b>Prepare</b> structural design such that fulfills design specification, durability, economy & safety.
PO4	<b>Design</b> and conduct experiment, analyze data & also interpret result to provide conclusion.
PO5	<b>Use</b> appropriate engineering techniques & software tools to analyze civil engineering problems.
PO6	<b>Apply</b> civil engineering knowledge for construction site in all respect like planning, execution and supervision.
PO7	<b>Sensitive</b> towards ethical, societal & environmental issue along with professional work.
PO8	<b>Exhibit</b> understanding of professional & ethical responsibility.
PO9	<b>Ability</b> to function as a leader of multidisciplinary team.
PO10	<b>Communicate</b> effectively in both verbal & written form.
PO11	<b>Develop</b> engineering research ability & project management skill.
PO12	<b>Possess</b> confidence for self education & ability for lifelong learning.

### Program Specific Outcomes (PSO's)

After completion of program, Graduates will be able to

1	Plan and Design, Maintain and execute smart infrastructural projects.
2	Assess and analyze environmental impact of civil engineering projects and take corrective action for sustainable development.
3	Use leadership and communication abilities to optimally integrate the 4Ms Viz.- Men, Money, Material and Machine



# **Third Year B. Tech.**

## **In CIVIL Engineering**

**Syllabus Structure Under Autonomous Status of  
TKIET, Warananagar**

**2022-23**



## Semester-V

(To be implemented from 2022 - 23)

## Credit Scheme

Course Code	Category	Course Title	Teaching Scheme					Examination & Evaluation Scheme			
			L	T	P	C	CH	Components	Marks	Min for Passing	
CE501	PCC	Soil Mechanics	3	-	-	3	3	ESE	60	24	40
								ISE	40	16	
CE502	PCC	Water Resource Engineering	3	-	-	3	3	ESE	60	24	40
								ISE	40	16	
CE503	PCC	Theory of Structures	4	-	-	4	4	ESE	60	24	40
								ISE	40	16	
CE504	PCC	Environmental Engineering	3	-	-	3	3	ESE	60	24	40
								ISE	40	16	
CE505	OEC	Open Elective-I	2	-	-	2	2	ESE	60	24	40
								ISE	40	16	
CE501P	PCC	Soil Mechanics	-	-	2	1	2	ISA	25	10	10
								POE	50	20	20
CE502P	PCC	Water Resource Engineering	-	-	2	1	2	ISA	25	10	10
								POE	25	10	10
CE503P	PCC	Theory of Structures	-	-	2	1	2	ISA	50	20	20
CE504P	PCC	Environmental Engineering	-	-	2	1	2	ISA	25	10	10
								POE	50	20	20
CE505P	OCC	Open Elective-I	-	-	2	1	2	ISA	50	20	20
CE 506A	MC	Audit Course – III (Seminars)	-	-	2	-	2	-	-	-	-
			15	-	12	20	27	-	800	320	-



## Semester-VI

(To be implemented from 2022 - 23)

## Credit Scheme

Course Code	Category	Course Title	Teaching Scheme					Examination & Evaluation Scheme			
			L	T	P	C	CH	Compon ents	Marks	Min for Passing	
CE601	PCC	Design of Steel Structure	3	-	-	3	3	ESE	60	24	40
								ISE	40	16	
CE602	PCC	Reinforced Concrete Structures	3	-	-	3	3	ESE	60	24	40
								ISE	40	16	
CE603	PCC	Legal Aspects & Construction Practices	3	-	-	3	3	ESE	60	24	40
								ISE	40	16	
CE604	PEC	Professional Elective-I	3	-	-	3	3	ESE	60	24	40
								ISE	40	16	
CE605	OEC	Open Elective-II	3	-	-	3	3	ESE	60	24	40
								ISE	40	16	
CE601P	PCC	Design of Steel Structure	-	-	2	1	2	ISA	50	20	20
CE602P	PCC	Reinforced Concrete Structures	-	-	2	1	2	ISA	25	10	10
								POE	50	20	20
CE605P	OEC	Open Elective-II	-	-	2	1	2	ISA	50	20	20
CE606P	MC	Building Modelling & Design	-	-	2	1	2	ISA	50	20	20
								POE	25	10	10
CE604T	PEC	Professional Elective-I	-	1	-	1	1	ISA	50	20	20
CE 607A	MC	Audit Course – IV (Sports & Cultural)	-	-	-	-	-	-	-	-	-
			15	1	08	20	24	-	800	320	-

