Shree Warana Vibhag Shikshan Mandal's

Tatyasaheb Kore Institute of Engineering And Technology, Warananagar (An Autonomous Institute)
NBA Accredited Institute

Department of First Year B.Tech

F Y. B. Tech.
2024 - 2025

First Year B. Tech.
Curriculum Structure and Evaluation Scheme

Vision

To sustain a distinct identity for the institute by providing quality technical and management education, academic flexibility, innovation, and industry relevant skills with professional ethics.

Mission

- To persistently implement flexible curriculum for preparing technocratswith sound skills and professional ethics.

- To strengthen industry-institute interface for effective enhancement ofinternships, employability, and entrepreneurship.

- To facilitate an atmosphere that encourages faculty and students to engage in meaningful academic and research activities.

- To enhance educational opportunities for the rural and weaker sections ofthe society.

- To inculcate lifelong learning with human values and concern for thesociety and environment.

Quality Policy

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

www.tkietwarana.ac.in

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	AEC	Ability Enhancement Course
2	BSC	Basic Science Course
3	CC	Co-curricular Courses
4	ESC	Engineering Science Course
5	HSSM	Humanities Social Science and Management
6	IKS	Indian Knowledge System
7	MAC	Mandatory Audit Course
8	PCC	Programme Core Course
9	VSEC	Vocational and Skill Enhancement Course

Course/ Subject Code for theory and practical

2	4	UG	BSC/ ESC/ AEC/ CC/ HSSM/ IKS/ MAS/ PCC/ VSEC	FY	1	0	1	T / P / A
Course Introduced Year		Under Graduate	Course Category	First Year	Semester	Course Number		T- Term work P- POE A- Audit Course

----

First Year B. Tech.

Curriculum Structure and Evaluation Scheme

(Common to all Programs)

To be implemented as per NEP 2020 (Revised) from AY 2024 – 25

INSTRUCTIONS

- **There are two groups in each semester:**
  1) Physics Group and
  2) Chemistry Group

- **Allotment of groups to students**
  1) In Semester-I, 50% of first year B.Tech students will be admitted in Physics group and remaining 50% will be in Chemistry Group.
  2) In Semester-II, students admitted in Physics group in semester-I will be transferred to Chemistry Group. The students admitted in Chemistry Group in semester-I will be transferred to Physics Group.

- **Eligibility criteria for End Semester Examination**
  1) As per Rules and Regulations for Examinations and Evaluation System of U.G. and P.G. Programs (5.1.3) A student shall secure a minimum 40% marks in ISE (Theory), ISA (Term work) of a particular course and attendance as per Shivaji University, Kolhapur norms otherwise he/she shall not be eligible for ESE.

- **Audit Course:**
  1) **Democracy, Election and Good Governance** is non-credit, self-study audit course. A separate examination of 50 marks will be conducted at the end of the semester. Student must score minimum 40% marks in the examination.
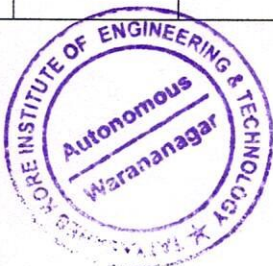
Tatyasaheb Kore Institute of Engineering & Technology

Warananagar, Tal- Panhala, Dist- Kolhapur -416 113. Maharashtra

An Autonomous Institute, Affiliated to Shivaji University, Kolhapur

First Year B. Tech. (Semester – I)
Physics Group
(Common to all Programs)
To be implemented as per NEP 2020 (Revised) from AY 2024 – 25
Curriculum Structure and Evaluation Scheme

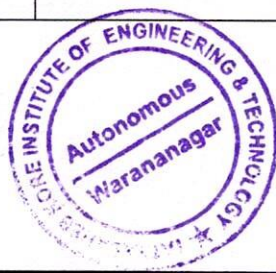| Sr. No.	Category	Course Category	Course Code	Course Title	Teaching and Credit Scheme					Examination and Evaluation Scheme		
					L	T	P	CH	C	Component	Marks	Minimum for Passing
1	Basic Science Course	BSC	24UGBSC- FY101	Engineering Physics	3	-	-	3	3	ISE	40	16
										ESE	60	24
2		BSC	24UGBSC-FY102	Engineering Mathematics-I	3	-	-	3	3	ISE	40	16
										ESE	60	24
3	Engineering Science Course	ESC	24UGESC-FY103	Basic Electrical and Electronics Engineering	2	-	-	2	2	ISE	40	16
										ESE	60	24
4		ESC	24UGESC-FY104	Basic Civil Engineering	2	-	-	2	2	ISE	40	16
										ESE	60	24
5		ESC	24UGESC-FY105	Computer Aided Engineering Drawing	2	-	-	2	2	ISE	40	16
										ESE	60	24
6	Humanities Social Science and Management	HSSM	24UGHSSM-FY106	Communication Skills	1	-	-	1	1	ISE	50	20
7	Basic Science Course	BSC	24UGBSC-FY101LP	Engineering Physics Lab	-	-	1	2	1	ISA	25	10
8		BSC	24UGBSC-FY102LT	Engineering Mathematics-I Tut	-	1	-	1	1	ISA	25	10
9	Engineering Science Course	ESC	24UGESC-FY103LP	Basic Electrical & Electronics Engineering Lab	-	-	1	2	1	ISA	25	10
10		ESC	24UGESC-FY104LP	Basic Civil Engineering Lab	-	-	1	2	1	ISA	25	10
11		ESC	24UGESC-FY105LP	Computer Aided Engineering Drawing Lab	-	-	1	2	1	ISA	25	10
11	Humanities Social Science and Management	HSSM	24UGHSSM-FY106LP	Communication Skills lab	-	-	1	2	1	ISA	25	10
12	Co-curricular Courses	CC	24UGCC- FY107T	Cyber Security Lab	-	-	1	2	1	ISA	50	20
13	Vocational and Skill Enhancement Course	VSEC	24UGVSEC-FY108T	Manufacturing Techniques Lab	-	-	1	2	1	ISA	50	20
14	Mandatory Audit Course	MAC	24UGMAC- FY109A	Mandatory Audit Course-I Democracy, Elections and Good Governance*	-	-	-	-	-	-	-	-
			Total		13	1	7	28	21	--	800	--

An Autonomous Institute, Affiliated to Shivaji University, Kolhapur

First Year B. Tech. (Semester – I)
Chemistry Group
(Common to all Programs)
To be implemented as per NEP 2020 (Revised) from AY 2024 – 25
Curriculum Structure and Evaluation Scheme

Sr. No.	Category	Course Category	Course Code	Course Title	Teaching and Credit Scheme (per week)					Examination and Evaluation Scheme		
					L	T	P	CH	C	Component	Marks	Minimum for Passing
1	Basic Science Course	BSC	24UGBSC- FY110	Engineering Chemistry	3	-	-	3	3	ISE	40	16 / 40
										ESE	60	24
2		BSC	24UGBSC-FY102	Engineering Mathematics-I	3	-	-	3	3	ISE	40	16 / 40
										ESE	60	24
3	Programme Core Course	PCC	24UGPCC-FY111	Computer Programming in C	2	-	-	2	2	ISE	40	16 / 40
										ESE	60	24
4	Engineering Science Course	ESC	24UGESC-FY112	Engineering Mechanics	2	-	-	2	2	ISE	40	16 / 40
										ESE	60	24
5		ESC	24UGESC-FY113	Basic Mechanical Engineering	2	-	-	2	2	ISE	40	16 / 40
										ESE	60	24
6	Humanities Social Science and Management	HSSM	24UGHSSM-FY114	Indian Knowledge System	1	-	-	1	1	ISA	50	20
7		HSSM	24UGHSSM-FY106	Communication Skills	1	-	-	1	1	ISE	50	20
8	Basic Science Course	BSC	24UGBSC- FY110LP	Engineering Chemistry Lab			1	2	1	ISA	25	10
9		BSC	24UGBSC-FY102LT	Engineering Mathematics- I Tutorial	-	1	-	1	1	ISA	25	10
10	Programme Core Course	PCC	24UGPCC-FY111LP	Computer Programming in C Lab	-	-	1	2	1	ISA	25	10
11	Engineering Science Course	ESC	24UGESC-FY112LP	Engineering Mechanics Lab	-	-	1	2	1	ISA	25	10
12		ESC	24UGESC-FY113LP	Basic Mechanical Engineering Lab	-	-	1	2	1	ISA	25	10
13	Humanities Social Science and Management	HSSM	24UGHSSM-FY106LP	Communication Skills Lab	-	-	1	2	1	ISA	25	10
14	Co-curricular Courses	CC	24UGCC- FY115T	Inquisitive Learning	-	-	1	2	1	ISA	50	20
15	Mandatory Audit Course	MAC	24UGMAC- FY109A	Mandatory Audit Course-I Democracy, Elections and Good Governance*	-	-	-	-	-	-	-	-
	Total				14	1	6	27	21	--	800	--

An Autonomous Institute, Affiliated to Shivaji University, Kolhapur

First Year B. Tech. (Semester – II)

Physics Group

(Common to all Programs)

To be implemented as per NEP 2020 (Revised) from AY 2024 – 25

Curriculum Structure and Examination Scheme

Sr.No	Category	Course Category	Course Code	Course Title	Teaching and Credit Scheme					Examination and Evaluation Scheme		
					L	T	P	CH	C	Component	Marks	Minimum for Passing
1	Basic Science Course	BSC	24UGBSC- FY101	Engineering Physics	3	-	-	3	3	ISE	40	16	40
										ESE	60	24	
2		BSC	24UGBSC- FY201	Engineering Mathematics-II	3	-	-	3	3	ISE	40	16	40
										ESE	60	24	
3	Engineering Science Course	ESC	24UGESC-FY103	Basic Electrical and Electronics Engineering	2	-	-	2	2	ISE	40	16	40
										ESE	60	24	
4		ESC	24UGESC-FY104	Basic Civil Engineering	2	-	-	2	2	ISE	40	16	40
										ESE	60	24	
5		ESC	24UGESC-FY105	Computer Aided Engineering Drawing	2	-	-	2	2	ISE	40	16	40
										ESE	60	24	
6	Humanities Social Science and Management	HSSM	24UGHSSM-FY202	Employability Enhancement Skills	1	-	-	1	1	ISE	50	20
7	Basic Science Course	BSC	24UGBSC- FY101LP	Engineering Physics Lab	-	-	1	2	1	ISA	25	10
8		BSC	24UGBSC-FY201LT	Engineering Mathematics-II Tut	-	1	-	1	1	ISA	25	10
9	Engineering Science Course	ESC	24UGESC-FY103LP	Basic Electrical & Electronics Engineering Lab	-	-	1	2	1	ISA	25	10
10		ESC	24UGESC-FY104LP	Basic Civil Engineering Lab	-	-	1	2	1	ISA	25	10
11		ESC	24UGESC-FY105LP	Computer Aided Engineering Drawing Lab	-	-	1	2	1	ISA	25	10
12	Humanities Social Science and Management	HSSM	24UGHSSM-FY202LP	Employability Enhancement Skills Lab	-	-	1	2	1	ISA	25	10
13	Co-curricular Courses	CC	24UGCC-FY107T	Cyber Security Lab	-	-	1	2	1	ISA	50	20
14	Vocational and Skill Enhancement Course	VSEC	24UGVSEC-FY108T	Manufacturing Techniques Lab	-	-	1	2	1	ISA	50	20
	Total				13	1	7	28	21	--	800	--

An Autonomous Institute, Affiliated to Shivaji University, Kolhapur

First Year B. Tech. (Semester – II)
Chemistry Group
(Common to all Programs)
To be implemented as per NEP 2020 (Revised) from AY 2024 – 25
Curriculum Structure and Evaluation Scheme

Sr. No.	Category	Course Category	Course Code	Course Title	Teaching and Credit Scheme (per week)					Examination and Evaluation Scheme			
					L	T	P	CH	C	Component	Mark	Minimum for Passing	
1	Basic Science Course	BSC	24UGBSC- FY110	Engineering Chemistry	3	-	-	3	3	ISE	40	16	40
										ESE	60	24	
2		BSC	24UGBSC- FY201	Engineering Mathematics-II	3	-	-	3	3	ISE	40	16	40
										ESE	60	24	
3	Programme Core Course	PCC	24UGPCC-FY111	Computer Programming in C	2	-	-	2	2	ISE	40	16	40
										ESE	60	24	
4	Engineering Science Course	ESC	24UGESC-FY112	Engineering Mechanics	2	-	-	2	2	ISE	40	16	40
										ESE	60	24	
5		ESC	24UGESC-FY113	Basic Mechanical Engineering	2	-	-	2	2	ISE	40	16	40
										ESE	60	24	
6	Humanities Social Science and Management	HSSM	24UGHSSM-FY114	Indian Knowledge System	1	-	-	1	1	ISA	50	20	
7		HSSM	24UGHSSM-FY202	Employability Enhancement Skills	1	-	-	1	1	ISE	50	20	
8	Basic Science Course	BSC	24UGBSC- FY110LP	Engineering Chemistry Lab			1	2	1	ISA	25	10	
9		BSC	24UGBSC- FY201LT	Engineering Mathematics- II Tutorial	-	1	-	1	1	ISA	25	10	
10	Programme Core Course	PCC	24UGPCC-FY111LP	Computer Programming in C Lab	-	-	1	2	1	ISA	25	10	
11	Engineering Science Course	ESC	24UGESC-FY112LP	Engineering Mechanics Lab	-	-	1	2	1	ISA	25	10	
12		ESC	24UGESC-FY113LP	Basic Mechanical Engineering Lab	-	-	1	2	1	ISA	25	10	
13	Humanities Social Science and Management	HSSM	24UGHSSM FY202LP	Employability Enhancement Skills Lab	-	-	1	2	1	ISA	25	10	
14	Co-curricular Courses	CC	24UGCC-FY115T	Inquisitive Learning	-	-	1	2	1	ISA	50	20	
	Total				14	1	6	27	21	--	800	--	

Academic Coordinator
First Year, B.Tech

Chairman
BoS F. Y. B. Tech
F. Y. B. Tech
Tatyasaheb Kore Institute of Engg.
Technology (Autonomous)
Warananagar, Dist. Kolhapur

Dean Academics

Chairman
Academic Council