



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 technocrats with sound skills and professional ethics.
- To strengthen industry-institute interface for effective enhancement of internships, 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 of the society.
- To inculcate lifelong learning with human values and concern for the society and environment.

Quality Policy

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



**Abbreviations**

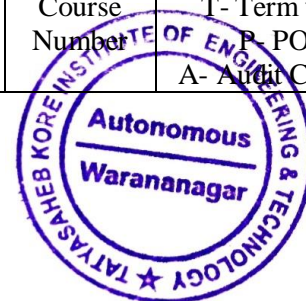
Sr. No.	Acronym	Definition
1	ISE	In-Semester Examination
2	ISE-I	In-Semester Examination-I
3	ISE-II	In-Semester Examination-II
4	ESE	End Semester Examination
5	ISA	In-Semester Assessment (Term Work)
6	L	Lecture
7	T	Tutorial
8	P	Practical
9	CH	Contact Hours
10	C	Credit

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.

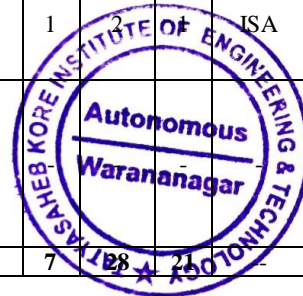


**An Autonomous Institute, Affiliated to Shivaji University, Kolhapur****First Year B. Tech. (Semester – I)****Physics Group**

(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	Comp onent	Marks	Minimum for Passing	
1	Basic Science Course	BSC	24UG BSC- FY101	Engineering Physics	3	-	-	3	3	ISE	40	16	40
										ESE	60	24	
2	Basic Science Course	BSC	24UG BSC-FY102	Engineering Mathematics-I	3	-	-	3	3	ISE	40	16	40
										ESE	60	24	
3	Engineering Science Course	ESC	24UG ESC-FY103	Basic Electrical and Electronics Engineering	2	-	-	2	2	ISE	40	16	40
4		ESC	24UG ESC-FY104	Basic Civil Engineering	2	-	-	2	2	ISE	40	16	
5		ESC	24UG ESC-FY105	Computer Aided Engineering Drawing	2	-	-	2	2	ISE	40	16	
										ESE	60	24	40
6	Humanities Social Science and Management	HSSM	24UG HSSM-FY106	Communication Skills	1	-	-	1	1	ISE	50	20	
7	Basic Science Course	BSC	24UG BSC-FY101T	Engineering Physics Lab	-	-	1	2	1	ISA	25	10	
8		BSC	24UG BSC-FY102T	Engineering Mathematics-I Tut	-	1	-	1	1	ISA	25	10	
9	Engineering Science Course	ESC	24UG ESC-FY103T	Basic Electrical & Electronics Engineering Lab	-	-	1	2	1	ISA	25	10	
10		ESC	24UG ESC-FY104T	Basic Civil Engineering Lab	-	-	1	2	1	ISA	25	10	
11		ESC	24UG ESC-FY105T	Computer Aided Engineering Drawing	-	-	1	2	1	ISA	25	10	
11	Humanities Social Science and Management	HSSM	24UG HSSM-FY106T	Communication Skills lab	-	-	1	2	1	ISA	25	10	
12	Co-curricular Courses	CC	24UG CC- FY107T	Cyber Security Lab	-	-	1	2	1	ISA	25	20	
										OE	25		
13	Vocational and Skill Enhancement Course	VSEC	24UG VSEC-FY108T	Manufacturing Techniques Lab	-	-	1	2	1	ISA	50	20	
14	Mandatory Audit Course	MAC	24UG MAC-FY109A	Mandatory Audit Course-I Democracy, Elections and Good Governance*	-	-	-	-	-	-	-	-	
Total					13	1	7	28	21	800	800	--	



Academic Coordinator
First Year, B.Tech

Chairman
BoS F. Y. B. Tech

Dean Academics

Chairman
Academic Council

**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**

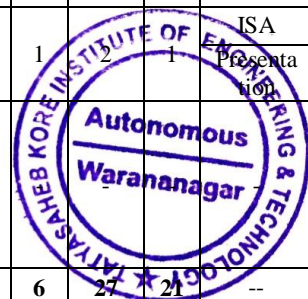
Sr. No.	Category	Course Category	Course Code	Course Title	Teaching and Credit Scheme (per week)					Examination and Evaluation Scheme			
					L	T	P	CH	C	Component	Marks	Minimum for Passing	
1	Basic Science Course	BSC	24UG BSC- FY110	Engineering Chemistry	3	-	-	3	3	ISE	40	16	40
										ESE	60	24	
2	Basic Science Course	BSC	24UG BSC-FY102	Engineering Mathematics-I	3	-	-	3	3	ISE	40	16	40
										ESE	60	24	
3	Programme Core Course	PCC	24UG PCC-FY111	Computer Programming in C	2	-	-	2	2	ISE	40	16	40
										ESE	60	24	
4	Engineering Science Course	ESC	24UG ESC-FY112	Engineering Mechanics	2	-	-	2	2	ISE	40	16	40
										ESE	60	24	
5	Engineering Science Course	ESC	24UG ESC-FY113	Basic Mechanical Engineering	2	-	-	2	2	ISE	40	16	40
										ESE	60	24	
6	Humanities Social Science and Management	HSSM	24UG HSSM-FY114	Indian Knowledge System	1	-	-	1	1	ISA	50	20	
7		HSSM	24UG HSSM-FY106	Communication Skills	1	-	-	1	1	ISE	50	20	
8	Basic Science Course	BSC	24UG BSC- FY110T	Engineering Chemistry Lab	-	-	-	1	2	1	ISA	25	10
9		BSC	24UG BSC-FY102T	Engineering Mathematics- I Tutorial	-	1	-	1	1	ISA	25	10	
10	Programme Core Course	PCC	24UG PCC-FY111T	Computer Programming in C Lab	-	-	1	2	1	ISA	25	10	
11	Engineering Science Course	ESC	24UG ESC-FY112T	Engineering Mechanics Lab	-	-	1	2	1	ISA	25	10	
12		ESC	24UG ESC-FY113T	Basic Mechanical Engineering Lab	-	-	1	2	1	ISA	25	10	
13	Humanities Social Science and Management	HSSM	24UG HSSM-FY106T	Communication Skills Lab	-	-	1	2	1	ISA	25	10	
14	Co-curricular Courses	CC	24UG CC- FY115T	Inquisitive Learning	-	-	1	1	1	ISA	25	20	
										25			
15	Mandatory Audit Course	MAC	24UG MAC-FY109A	Mandatory Audit Course-I Democracy, Elections and Good Governance*	-	-	-	-	-	-	-	-	
Total					14	1	6	27	21	--	800	--	


Academic Coordinator
First Year, B.Tech


Chairman
BoS F. Y. B. Tech


Dean Academics


Chairman
Academic Council

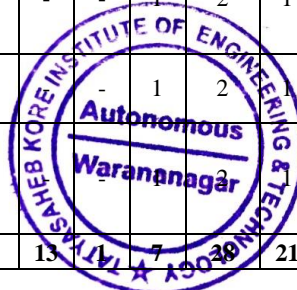


**An Autonomous Institute, Affiliated to Shivaji University, Kolhapur****First Year B. Tech. (Semester – II)****Physics Group**

(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	24UG BSC- FY101	Engineering Physics	3	-	-	3	3	ISE	40	16	40
2		BSC	24UG BSC- FY201	Engineering Mathematics-II	3	-	-	3	3	ESE	60	24	
3	Engineering Science Course	ESC	24UG ESC-FY103	Basic Electrical and Electronics Engineering	2	-	-	2	2	ISE	40	16	40
4		ESC	24UG ESC-FY104	Basic Civil Engineering	2	-	-	2	2	ESE	60	24	
5		ESC	24UG ESC-FY105	Computer Aided Engineering Drawing	2	-	-	2	2	ISE	40	16	40
									ESE	60	24		
6	Humanities Social Science and Management	HSSM	24UG HSSM-FY202	Employability Enhancement Skills	1	-	-	1	1	ISE	50	20	
7	Basic Science Course	BSC	24UG BSC- FY101T	Engineering Physics Lab	-	-	1	2	1	ISA	25	10	
8		BSC	24UG BSC- FY201T	Engineering Mathematics-II Tut	-	1	-	1	1	ISA	25	10	
9	Engineering Science Course	ESC	24UG ESC-FY103T	Basic Electrical & Electronics Engineering Lab	-	-	1	2	1	ISA	25	10	
10		ESC	24UG ESC-FY104T	Basic Civil Engineering Lab	-	-	1	2	1	ISA	25	10	
11		ESC	24UG ESC-FY105T	Computer Aided Engineering Drawing Lab	-	-	1	2	1	ISA	25	10	
12	Humanities Social Science and Management	HSSM	24UG HSSM-FY202T	Employability Enhancement Skills Lab	-	-	1	2	1	ISA	25	10	
13	Co-curricular Courses	CC	24UG CC-FY107T	Cyber Security Lab	-	-	1	2	-	ISA	25	25	20
									OE	25			
14	Vocational and Skill Enhancement Course	VSEC	24UGVSEC-FY108T	Manufacturing Techniques Lab	-	-	-	-	-	ISA	50	20	
Total					13	7	7	21	21	--	800	--	



Academic Coordinator
First Year, B.Tech

Chairman
BoS F. Y. B. Tech

Dean Academics

Chairman
Academic Council

**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	C _H	C	Component	Mark	Minimum for Passing	
1	Basic Science Course	BSC	24UG BSC- FY110	Engineering Chemistry	3	-	-	3	3	ISE	40	16	40
ESE										60	24		
2	Basic Science Course	BSC	24UG BSC- FY201	Engineering Mathematics-II	3	-	-	3	3	ISE	40	16	40
ESE										60	24		
3	Programme Core Course	PCC	24UG PCC-FY111	Computer Programming in C	2	-	-	2	2	ISE	40	16	40
ESE										60	24		
4	Engineering Science Course	ESC	24UG ESC-FY112	Engineering Mechanics	2	-	-	2	2	ISE	40	16	40
ESE										60	24		
5	Engineering Science Course	ESC	24UG ESC-FY113	Basic Mechanical Engineering	2	-	-	2	2	ISE	40	16	40
ESE										60	24		
6	Humanities Social Science and Management	HSSM	24UG HSSM-FY114	Indian Knowledge System	1	-	-	1	1	ISA	50	20	20
7										HSSM	24UG HSSM-FY202	Employability Enhancement Skills	
8	Basic Science Course	BSC	24UG BSC- FY110T	Engineering Chemistry Lab			1	2	1	ISA	25	10	10
9										BSC	24UG BSC- FY201T	Engineering Mathematics- II Tutorial	
10	Programme Core Course	PCC	24UG PCC-FY111T	Computer Programming in C Lab	-	-	1	2	1	ISA	25	10	10
11	Engineering Science Course	ESC	24UG ESC-FY112T	Engineering Mechanics Lab	-	-	1	2	1	ISA	25	10	10
12										ESC	24UG ESC-FY113T	Basic Mechanical Engineering Lab	
13	Humanities Social Science and Management Co-curricular Courses	HSSM	24UG HSSM FY202T	Employability Enhancement Skills Lab	-	-	1	2	1	ISA	25	10	20
14										24UG CC-FY115T	Inquisitive Learning	-	
Total					14	1	6	27	21	--	800	--	--


Academic Coordinator
First Year, B.Tech


Chairman
BoS F. Y. B. Tech


Dean Academics


Chairman
Academic Council