



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.
2023-24

First Year B. Tech.

Syllabus Structure and Curriculum under Autonomy



Shree Warana Vibhag Shikshan Mandal's

Tatyasaheb Kore Institute of Engineering & Technology



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

NBA Accredited Institute, Accredited with 'A' Grade by NAAC

Department of First Year B.Tech

❖ 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.



Shree Warana Vibhag Shikshan Mandal's

Tatyasaheb Kore Institute of Engineering & Technology



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

NBA Accredited Institute, Accredited with 'A' Grade by NAAC

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
11	IA	Internal Assessment

Course/ Subject Categories

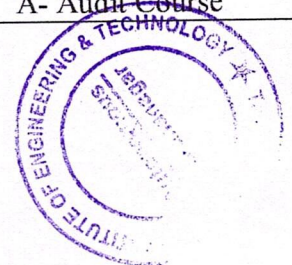
Sr. No.	Acronym	Definition
1	AEC	Ability Enhancement Course
2	BSC	Basic Science Course
3	CC	Co-curricular Courses
4	ESC	Engineering Science Course
5	HSSM	Humanities Social Science and Management
6	IKS	Indian Knowledge System
7	MAC	Mandatory Audit Course
8	PCC	Programme Core Course
9	VSEC	Vocational and Skill Enhancement Course

Course/ Subject Code

2	3	F	Y	1	0	1
Course Introduced Year		Branch Code		Semester	Course Number	

Course Term work and POE Code

2	3	F	Y	1	0	1	T / P / A
Course Introduced Year		Branch Code		Semester	Course Number		T- Term work P- POE A- Audit Course





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Tatyasaheb Kore Institute of Engineering & Technology



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NBA Accredited Institute, Accredited with 'A' Grade by NAAC

First Year B. Tech.

Structure and Curriculum

(Common to all Programmes)

To be implemented from academic year 2023-24

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.



**NBA Accredited Institute, Accredited with 'A' Grade by NAAC****First Year B. Tech. (Semester – I)****Physics Group**

(Common to all Programs)

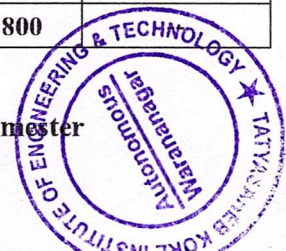
(To be implemented as per NEP 2020 from AY 2023 – 24)

Teaching and Examination Scheme

Category	Course Code	Course Title	Teaching and Credit Scheme					Examination and Evaluation Scheme			
			L	T	P	CH	C	Component	Marks	Minimum for Passing	
BSC	23FY101	Engineering Physics	3	-	-	3	3	IA	10	16	40
								ISE	30		
								ESE	60	24	
BSC	23FY102	Engineering Mathematics-I	3	-	-	3	3	IA	10	16	40
								ISE	30		
								ESE	60	24	
ESC	23FY103	Basic Electrical and Electronics Engineering	2	-	-	2	2	IA	10	16	40
								ISE	30		
								ESE	60	24	
ESC	23FY104	Basic Civil Engineering	2	-	-	2	2	IA	10	16	40
								ISE	30		
								ESE	60	24	
CC	23FY105	Cyber Security	2	-	-	2	2	IA	10	16	40
								ISE	30		
								ESE	60	24	
HSSM	23FY106	Communication Skills	1	-	-	1	1	IA	10	20	
								ISE	40		
BSC	23FY101T	Engineering Physics Lab	-	-	1	2	1	ISA	25	10	
BSC	23FY102T	Engineering Mathematics-I Tut	-	1	-	1	1	ISA	25	10	
ESC	23FY103T	Basic Electrical & Electronics Engineering Lab	-	-	1	2	1	ISA	25	10	
ESC	23FY104T	Basic Civil Engineering Lab	-	-	1	2	1	ISA	25	10	
CC	23FY105T	Cyber Security Lab	-	-	1	2	1	ISA	25	10	
HSSM	23FY106T	Communication Skills	-	-	1	2	1	ISA	25	10	
ESC	23FY107T	Engineering Drawing	-	-	1	2	1	ISA	25	10	
								OE	25	10	
VSEC	23FY108T	Manufacturing Techniques Lab	-	-	1	2	1	ISA	50	20	
MAC	23FY109A	Mandatory Audit Course-I Democracy, Elections and Good Governance*	-	-	-	-	-	-	-	-	
Total			13	1	7	28	21	--	800		

A student must fulfill requirement of IA, ISE and ISA for appearing ESE.

* A separate examination will be conducted for the mentioned Audit Course at the end of the semester





NBA Accredited Institute, Accredited with 'A' Grade by NAAC

First Year B. Tech. (Semester – I)**Chemistry Group**

(Common to all Programs)

(To be implemented as per NEP 2020 from AY 2023 – 24)

Teaching and Examination Scheme

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	
BSC	23FY110	Engineering Chemistry	3	-	-	3	3	IA	10	16	40
								ISE	30		
								ESE	60	24	
BSC	23FY102	Engineering Mathematics-I	3	-	-	3	3	IA	10	16	40
								ISE	30		
								ESE	60	24	
PCC	23FY111	Computer Programming in C	2	-	-	2	2	IA	10	16	40
								ISE	30		
								ESE	60	24	
ESC	23FY112	Engineering Mechanics	2	-	-	2	2	IA	10	16	40
								ISE	30		
								ESE	60	24	
ESC	23FY113	Basic Mechanical Engineering	2	-	-	2	2	IA	10	16	40
								ISE	30		
								ESE	60	24	
HSSM	23FY114	Indian Knowledge System	1	-	-	1	1	IA	10	20	
								ISE	40		
HSSM	23FY115	Employability Enhancement Skills	1	-	-	1	1	IA	10	20	
								ISE	40		
BSC	23FY110T	Engineering Chemistry Lab				1	2	1	ISA	25	10
BSC	23FY102T	Engineering Mathematics- I Tutorial		1			1	1	ISA	25	10
PCC	23FY111T	Computer Programming in C Lab			1		2	1	ISA	25	10
ESC	23FY112T	Engineering Mechanics Lab			1		2	1	ISA	25	10
ESC	23FY113T	Basic Mechanical Engineering Lab			1		2	1	ISA	25	10
HSSM	23FY115T	Employability Enhancement Skills Lab			1		2	1	ISA	25	10
CC	23FY116T	Inquisitive Learning			1		2	1	ISA	25	20
									Presentation	25	
MAC	23FY109A	Mandatory Audit Course-I Democracy, Elections and Good Governance*									
Total			14	1	6	27	21			800	--

A student must fulfill requirement of IA, ISE and ISA for appearing ESE.

* A separate examination will be conducted for the mentioned Audit Course at the end of the semester. Inquisitive Learning 25 marks for report preparation/model making and 25 marks for presentations should be considered under ISA of 50 marks.



**NBA Accredited Institute, Accredited with 'A' Grade by NAAC****First Year B. Tech. (Semester – II)****Physics Group**

(Common to all Programs)

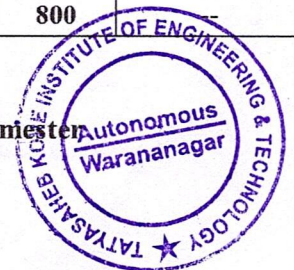
(To be implemented as per NEP 2020 from AY 2023 – 24)

Teaching and Examination Scheme

Category	Course Code	Course Title	Teaching and Credit Scheme					Examination and Evaluation Scheme			
			L	T	P	CH	C	Component	Marks	Minimum for Passing	
BSC	23FY101	Engineering Physics	3	-	-	3	3	IA	10	16	40
								ISE	30		
								ESE	60	24	
BSC	23FY201	Engineering Mathematics-II	3	-	-	3	3	IA	10	16	40
								ISE	30		
								ESE	60	24	
ESC	23FY103	Basic Electrical and Electronics Engineering	2	-	-	2	2	IA	10	16	40
								ISE	30		
								ESE	60	24	
ESC	23FY104	Basic Civil Engineering	2	-	-	2	2	IA	10	16	40
								ISE	30		
								ESE	60	24	
CC	23FY105	Cyber Security	2	-	-	2	2	IA	10	16	40
								ISE	30		
								ESE	60	24	
HSSM	23FY106	Communication Skills	1	-	-	1	1	IA	10	20	
								ISE	40		
BSC	23FY101T	Engineering Physics Lab	-	-	1	2	1	ISA	25	10	
BSC	23FY201T	Engineering Mathematics-II Tut	-	1	-	1	1	ISA	25	10	
ESC	23FY103T	Basic Electrical & Electronics Engineering Lab	-	-	1	2	1	ISA	25	10	
ESC	23FY104T	Basic Civil Engineering Lab	-	-	1	2	1	ISA	25	10	
CC	23FY105T	Cyber Security Lab	-	-	1	2	1	ISA	25	10	
HSSM	23FY106T	Communication Skills	-	-	1	2	1	ISA	25	10	
ESC	23FY107T	Engineering Drawing	-	-	1	2	1	ISA	25	10	
								OE	25	10	
VSEC	23FY108T	Manufacturing Techniques Lab	-	-	1	2	1	ISA	50	20	
MAC	23FY202A	Mandatory Audit Course-II Water Management*	-	-	-	-	-	-	-	-	-
Total			13	1	7	28	21	--	800		

** A student must fulfill requirement of IA, ISE and ISA for appearing ESE .

* A separate examination will be conducted for the mentioned Audit Course at the end of the semester





NBA Accredited Institute, Accredited with 'A' Grade by NAAC

First Year B. Tech. (Semester – II)

Chemistry Group

(Common to all Programs)

(To be implemented as per NEP 2020 from AY 2023 – 24)

Teaching and Examination Scheme

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	
BSC	23FY110	Engineering Chemistry	3	-	-	3	3	IA	10	16	40
								ISE	30	24	
								ESE	60	24	
BSC	23FY201	Engineering Mathematics-II	3	-	-	3	3	IA	10	16	40
								ISE	30	24	
								ESE	60	24	
PCC	23FY111	Computer Programming in C	2	-	-	2	2	IA	10	16	40
								ISE	30	24	
								ESE	60	24	
ESC	23FY112	Engineering Mechanics	2	-	-	2	2	IA	10	16	40
								ISE	30	24	
								ESE	60	24	
ESC	23FY113	Basic Mechanical Engineering	2	-	-	2	2	IA	10	16	40
								ISE	30	24	
								ESE	60	24	
HSSM	23FY114	Indian Knowledge System	1	-	-	1	1	IA	10	20	20
								ISE	40	20	
HSSM	23FY115	Employability Enhancement Skills	1	-	-	1	1	IA	10	20	20
								ISE	40	20	
BSC	23FY110T	Engineering Chemistry Lab				1	2	1	ISA	25	10
BSC	23FY201T	Engineering Mathematics-II Tutorial	-	1	-	1	1	1	ISA	25	10
PCC	23FY111T	Computer Programming in C Lab	-	-	1	2	1	1	ISA	25	10
ESC	23FY112T	Engineering Mechanics Lab	-	-	1	2	1	1	ISA	25	10
ESC	23FY113T	Basic Mechanical Engineering Lab	-	-	1	2	1	1	ISA	25	10
HSSM	23FY115T	Employability Enhancement Skills Lab	-	-	1	2	1	1	ISA	25	10
CC	23FY116T	Inquisitive Learning	-	-	1	2	1	1	ISA	25	20
								Presentation	25		
MAC	23FY202A	Mandatory Audit Course-II Water Management*	-	-	-	-	-	-	-	-	-
Total			14	1	6	27	21	--	800	--	

A student must fulfill requirement of IA, ISE and ISA for appearing ESE.

* A separate examination will be conducted for the mandatory Audit Course at the end of the semester

Inquisitive Learning: 25 marks for report preparation/model making and 25 marks for presentation.

F.Y. B.Tech Chief Coordinator

Chairman

BOS F. Y. B. Tech

Autonomous

Warananagar

Dean Academics

Chairman

Academic Council