



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.

2021-22

First Year B. Tech.

Syllabus Structure and Curriculum under Autonomy

Tatyasaheb Kore Institute of engineering and Technology,
Warananagar
(An Autonomous Institute)
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.

SWVSM'S

Tatyasaheb Kore Institute of Engineering and Technology, Warananagar
An Autonomous Institute

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

Course/ Subject Code

F	Y	1	0	1
Branch Code		Semester	Course Number	

Course Term work and POE Code

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

SWVSM'S

**Tatyasaheb Kore Institute of Engineering and Technology,
Warananagar**
(An Autonomous Institute)

First Year B. Tech.

Structure and Curriculum

(Common to all Programmes)

To be implemented from academic year 2021-22

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.

Tatyasaheb Kore Institute of Engineering and Technology, Warananagar

First Year B. Tech (Sem-I)

PHYSICS GROUP

(Common to all Programmes)

(To be implemented from 2021-22)

Teaching & Evaluation Scheme

Course Code	Category	Course Title	Teaching & Credit Scheme					Examination & Evaluation Scheme			
			L	T	P	CH	C	Component	Marks	Min for Passing	
FY101	BSC	Engineering Physics	3	--	--	3	3	ESE	60	24	40
								ISE	40	--	
FY103	BSC	Engineering Mathematics-I	3	--	--	3	3	ESE	60	24	40
								ISE	40	--	
FY105	ESC	Basic Electrical and Electronics Engineering	2	--	--	2	2	ESE	60	24	40
								ISE	40	--	
FY106	ESC	Basic Civil Engineering	2	--	--	2	2	ESE	60	24	40
								ISE	40	--	
FY107	ESC	Computer Aided Engineering Drawing	2	--	--	2	2	ESE	60	24	40
								ISE	40	--	
FY104	HSC	Professional Communication	1	--	--	1	1	ISE	50	20	20
FY101T	BSC	Engineering Physics Lab	--	--	2	2	1	ISA	25	10	10
FY103T	BSC	Engineering Mathematics-I Tutorial	--	1	--	1	1	ISA	25	10	10
FY105T	ESC	Basic Electrical and Electronics Engineering Lab	--	--	2	2	1	ISA	25	10	10
FY106T	ESC	Basic Civil Engineering Lab	--	--	2	2	1	ISA	25	10	10
FY107P	ESC	Computer Aided Engineering Drawing Lab	--	--	2	2	1	ISA	25	20	20
								POE	25		
FY104P	HSC	Professional Communication Lab	--	--	2	2	1	ISA	25	20	20
								POE	25		
FY108T	ESC	Workshop Practice Lab	--	--	2	2	1	ISA	50	20	20
FY113A	--	Mandatory Audit Course-I: Democracy, Elections and Good Governance *	--	--	--	-	--	--	--	--	--
			13	01	12	26	20	800		----	-----

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

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

First Year B. Tech (Sem-I)

CHEMISTRY GROUP

(Common to all Programmes)

(To be implemented from 2021-22)

Teaching & Evaluation Scheme

Course Code	Category	Course Title	Teaching & Credit Scheme					Examination & Evaluation Scheme			
			L	T	P	CH	C	Component	Marks	Min for Passing	
FY102	BSC	Engineering Chemistry	3	--	--	3	3	ESE	60	24	40
								ISE	40	--	
FY103	BSC	Engineering Mathematics-I	3	--	--	3	3	ESE	60	24	40
								ISE	40	--	
FY109	ESC	Computer Programming in C	2	--	--	2	2	ESE	60	24	40
								ISE	40	--	
FY110	ESC	Engineering Mechanics	2	--	--	2	2	ESE	60	24	40
								ISE	40	--	
FY111	ESC	Basic Mechanical Engineering	2	--	--	2	2	ESE	60	24	40
								ISE	40	--	
FY104	HSC	Professional Communication	1	--	--	1	1	ISE	50	20	20
FY102T	BSC	Engineering Chemistry Lab	--	--	2	2	1	ISA	25	10	10
FY103T	BSC	Engineering Mathematics-I Tutorial	--	1	--	1	1	ISA	25	10	10
FY110T	ESC	Engineering Mechanics Lab	--	--	2	2	1	ISA	25	10	10
FY111T	ESC	Basic Mechanical Engineering Lab	--	--	2	2	1	ISA	25	10	10
FY104P	HSC	Professional Communication Lab	--	--	2	2	1	ISA	25	20	20
								POE	25		
FY109P	ESC	Computer Programming in C Lab	--	--	2	2	1	ISA	25	20	20
								POE	25		
FY112T	ESC	Inquisitive Learning	-	--	2	2	1	ISA	50	20	20
FY113A	--	Mandatory Audit Course-I: Democracy, Elections and Good Governance *	--	--	--	-	--	--	--	--	--
			13	01	12	26	20		800	----	-----

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

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For the course Inquisitive Learning 25 marks for report preparation/model making and 25 marks for presentation should be considered under ISA of 50 marks.

First Year B. Tech (Sem-II)**CHEMISTRY GROUP**

(Common to all Programmes)

(To be implemented from 2021-22)

Teaching & Evaluation Scheme

Course Code	Category	Course Title	Teaching & Credit Scheme					Examination & Evaluation Scheme				
			L	T	P	CH	C	Component	Marks	Min for Passing		
FY102	BSC	Engineering Chemistry	3	--	--	3	3	ESE	60	24	40	
								ISE	40	--		
FY201	BSC	Engineering Mathematics-II	3	--	--	3	3	ESE	60	24	40	
								ISE	40	--		
FY109	ESC	Computer Programming in C	2	--	--	2	2	ESE	60	24	40	
								ISE	40	--		
FY110	ESC	Engineering Mechanics	2	--	--	2	2	ESE	60	24	40	
								ISE	40	--		
FY111	ESC	Basic Mechanical Engineering	2	--	--	2	2	ESE	60	24	40	
								ISE	40	--		
FY202	HSC	Soft Skills	1	--	--	1	1	ISE	50	20	20	
FY102T	BSC	Engineering Chemistry Lab	--	--	2	2	1	ISA	25	10	10	
FY201T	BSC	Engineering Mathematics-II Tutorial	--	1	--	1	1	ISA	25	10	10	
FY110T	ESC	Engineering Mechanics Lab	--	--	2	2	1	ISA	25	10	10	
FY111T	ESC	Basic Mechanical Engineering Lab	--	--	2	2	1	ISA	25	10	10	
FY202P	HSC	Soft Skills Lab	--	--	2	2	1	ISA	25	20	20	
								POE	25			
FY109P	ESC	Computer Programming in C Lab	--	--	2	2	1	ISA	25	20	20	
								POE	25			
FY112T	ESC	Inquisitive Learning	--	--	2	2	1	ISA	50	20	20	
FY203A	--	Mandatory Audit Course-II: Water Management*	--	--	--	-	--	--	--	--	--	
			13	01	12	26	20			800	----	-----

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First Year B. Tech (Sem-II)

PHYSICS GROUP

(Common to all Programmes)

(To be implemented from 2021-22)

Teaching & Evaluation Scheme

Course Code	Category	Course Title	Teaching & Credit Scheme					Examination & Evaluation Scheme			
			L	T	P	CH	C	Component	Marks	Min for Passing	
FY101	BSC	Engineering Physics	3	--	--	3	3	ESE	60	24	40
								ISE	40	--	
FY201	BSC	Engineering Mathematics-II	3	--	--	3	3	ESE	60	24	40
								ISE	40	--	
FY105	ESC	Basic Electrical and Electronics Engineering	2	--	--	2	2	ESE	60	24	40
								ISE	40	--	
FY106	ESC	Basic Civil Engineering	2	--	--	2	2	ESE	60	24	40
								ISE	40	--	
FY107	ESC	Computer Aided Engineering Drawing	2	--	--	2	2	ESE	60	24	40
								ISE	40	--	
FY202	HSC	Soft Skills	1	--	--	1	1	ISE	50	20	20
FY101T	BSC	Engineering Physics Lab	--	--	2	2	1	ISA	25	10	10
FY201T	BSC	Engineering Mathematics-II Tutorial	--	1	--	1	1	ISA	25	10	10
FY105T	ESC	Basic Electrical and Electronics Engineering Lab	--	--	2	2	1	ISA	25	10	10
FY106T	ESC	Basic Civil Engineering Lab	--	--	2	2	1	ISA	25	10	10
FY107P	ESC	Computer Aided Engineering Drawing Lab	--	--	2	2	1	ISA	25	20	20
								POE	25		
FY202P	HSC	Soft Skills Lab	--	--	2	2	1	ISA	25	20	20
								POE	25		
FY108T	ESC	Workshop Practice Lab	--	--	2	2	1	ISA	50	20	20
FY203A	--	Mandatory Audit Course-II: Water Management*	--	--	--	-	--	--	--	--	--
			13	01	12	26	20	800		----	-----

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

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