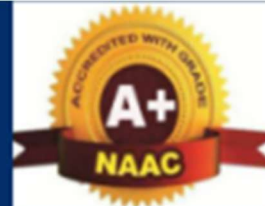




K J's EDUCATIONAL INSTITUTES

## Trinity College of Engineering and Research, Pune



An Autonomous Institute Affiliated to Savitribai Phule Pune University  
Approved by AICTE & Government of Maharashtra

### First Year- Bachelor of Technology (F.Y.B.Tech)

*The journey of a  
thousand miles  
begins with one step*



Curriculum &  
Syllabi  
[W.e.f.A.Y.2025-26]



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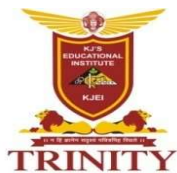
### VISION AND MISSION



To be a premier knowledge center  
for socio-economic development



To provide education that  
combines rigorous academics  
with joy of discovery through  
sustained efforts and dynamic  
strategies in building innovative,  
participatory, problem based  
learning practices and research  
that leads to capacity building of  
students



**K J's EDUCATIONAL INSTITUTES**

**Trinity College of Engineering & Research,  
Pune, Maharashtra, India**

**Accredited NAAC Grade 'A+'**



**Approved by AICTE, Government of Maharashtra &  
Affiliated to Savitribai Phule Pune University, Pune,  
Maharashtra, India**

**National Education Policy (NEP)-2020  
Compliant Curriculum**

**F. Y. B. Tech. (2025 Pattern)**

**(With effect from Academic Year 2025-26)**

**NEP 2020 Compliant Curriculum Structure**  
**F. Y. B. Tech. (2025 Pattern)**

Course Code	Course Type	Course Name	Teaching Scheme (Hrs./week)			Examination Scheme and Marks					Credits			
			Theory	Tutorial	Practical	CIE	ESE	Term work	Practical	Oral	Theory	Tutorial	Practical	Total
Semester I														
BSCF101	Basic Science Course	Linear Algebra and Differential calculus	3	1	-	50	50	-	-	-	3	1	-	4
BSCF103/ BSCF105	Basic Science Course	Applied Physics / Applied Chemistry	3	-	-	50	50	-	-	-	3	-	-	3
BSCF104/ BSCF106		Applied Physics Lab / Applied Chemistry Lab	-	-	2	25	25	-	-	-	-	-	1	1
ESCF111	Engineering Science Course	Basics of Programming Language	3	-	-	50	50	-	-	-	3	-	-	3
ESCF112		Basics of Programming Language Lab	-	-	2	25	25	-	-	-	-	-	1	1
ESCF113/ ESCF115	Engineering Science Course	Sustainable Engineering / Basics of Electrical and Electronics Technology	3	-	-	50	50	-	-	-	3	-	-	3
ESCF114/ ESCF116		Sustainable Engineering Lab / Basics of Electrical and Electronics Technology Lab	-	-	2	25	25	-	-	-	-	-	1	1
ESCF117	Engineering Science Course	Engineering Graphics Lab	1	-	2	25	25	-	-	-	1	-	1	2
VSECF141/ VSECF142	Vocational and Skill Enhancement Course	Workshop Practices / Design Thinking and Idea Lab	-	-	2	25	25	-	-	-	-	-	1	1
HSSMF143	Ability Enhancement Course	Professional Communication Skills	1	-	2	25	25	-	-	-	1	-	1	2
LLCF145	Liberal Learning Course	Liberal Learning -I	-	-	2	50	-	-	-	-	-	-	1	1
Total			14	01	14	400	350	-	-	-	14	01	07	22

**NEP 2020 Compliant Curriculum Structure**  
**F. Y. B. Tech. (2025 Pattern)**

Course Code	Course Type	Course Name	Teaching Scheme (Hrs./week)			Examination Scheme and Marks					Credits			
			Theory	Tutorial	Practical	CIE	ESE	Term work	Practical	Oral	Theory	Tutorial	Practical	Total
Semester II														
BSCF102	Basic Science Course	Integral calculus	3	1	-	50	50	-	-	-	3	1	-	4
BSCF105/ BSCF103	Basic Science Course	Applied Chemistry / Applied Physics	3	-	-	50	50	-	-	-	3	-	-	3
BSCF106/ BSCF104		Applied Chemistry Lab / Applied Physics Lab	-	-	2	25	25	-	-	-	-	-	1	1
ESCF121	Engineering Science Course	Artificial Intelligence and Programming	3	-	-	50	50	-	-	-	3	-	-	3
ESCF122		Artificial Intelligence and Programming Lab	-	-	2	25	25	-	-	-	-	-	1	1
ESCF115/ ESCF113	Engineering Science Course	Basics of Electrical and Electronics Technology/ Sustainable Engineering	3	-	-	50	50	-	-	-	3	-	-	3
ESCF116/ ESCF114		Basics of Electrical and Electronics Technology Lab/ Sustainable Engineering Lab	-	-	2	25	25	-	-	-	-	-	1	1
PCCF131/ PCCF132/ PCCF133/ PCCF134/	Program Core Course	Sensors and Electronic Systems / Open Source Operating System Programming / Fundamentals of Building Planning / Computer Aided Drafting (CAD)	1	-	2	25	25	-	-	-	1	-	1	2
VSECF142/ VSECF141	Vocational and Skill Enhancement Course	Design Thinking and Idea Lab / Workshop Practices	-	-	2	25	25	-	-	-	-	-	1	1
HSSMF144	Indian Knowledge System	Indian Knowledge System	-	2	-	50	-	-	-	-	-	2	-	2
LLCF146	Liberal Learning Course	Liberal Learning -II	-	-	2	50	-	-	-	-	-	-	1	1
Total			13	03	12	425	325	-	-	-	13	03	06	22