

## Department of Electronics and Telecommunication Engineering

### Tentative Course Structure of B.Tech: Electronics and Telecommunication Engineering

S. No.	SEMESTER I	SEMESTER II	SEMESTER III	SEMESTER IV	SEMESTER V	SEMESTER VI	SEMESTER VII	SEMESTER VIII
	I Year		II Year		III Year		IV Year	
1.	Instrumentation & Sensors	Data Communication	Probability and Random Processes	Digital Signal Processing	Mobile Communication and 5G Networks	Satellite and radar Communication	Departmental Elective <sup>#</sup> (DE-3)	Departmental Elective* (DE-5)
2.	Computer Programming	Electronic Circuits	Data Structures	Microprocessor and Interfacing	Embedded Systems	Artificial Intelligence & Machine Learning	Departmental Elective* (DE-4)	Open Category Course* (OC-3)
3.	Electronic Devices	Signals and Systems	Communication Systems	Principles of Telecommunication Engineering	Data Science	Departmental Elective* (DE-2)	Open Category Course *(OC-2)	Industry Internship/ Research Internship/ Innovation & Start-up
4.	Network Theory	Digital Circuits and Systems	Integrated Circuits	Electromagnetic Fields	Departmental Elective* (DE-1)	Open Category Course (OC-1)	Specialization Course <sup>#</sup> (SPC-3)	Professional Development
5.	Basic Electrical & Electronics Engineering	Linear Algebra and Differential Equation	Linear Control Theory	VLSI Design	Specialization Course (SPC-1)	Specialization Course (SPC-2)	Skill Enhancement Program/Research Internship/ On Job Training	---
6.	Computer Programming Lab	Digital Logic Design Lab	Communication Lab	Microprocessor and Interfacing Lab	Digital Signal Processing Lab	Embedded System Lab	Creative Problem Solving	---
7.	Electrical & Electronics Engineering Lab	Problem Solving through Python Programming	Integrated Circuits Lab	Digital Communication Lab	Data Science Lab	Artificial Intelligence & Machine Learning Lab	---	---
8.	Engineering Physics Lab	Engineering Chemistry Lab	---	VLSI Design Lab	---	---	---	---
9.	Semester Proficiency <sup>s</sup>	Semester Proficiency <sup>s</sup>	Semester Proficiency <sup>s</sup>	Semester Proficiency <sup>s</sup>	Semester Proficiency <sup>s</sup>	Semester Proficiency <sup>s</sup>	---	---
10.	Micro Project-I	Micro Project-II <sup>#</sup>	Macro Project-I <sup>#</sup>	Macro Project-II <sup>#</sup>	Cornerstone Project	Capstone Project	---	---
11.	---	---	Self-learning/Presentation <sup>sss</sup> (SWAYAM/NPTEL/MO OC)	---	---	---	---	---
12.	---	Language Lab	---	Professional Certification	---	---	---	---
13.	Novel Engaging Course (Activity Based Learning)	Novel Engaging Course (Activity Based Learning)	Novel Engaging Course (Activity Based Learning)	Novel Engaging Course (Activity Based Learning)	---	---	---	---
14.	---	Skill Internship Program (Soft Skill)	---	Skill Internship Program	---	---	---	---
15.	MAC: Universal Human Values & Professional Ethics (UHVPE)	MAC: Sustainability & Environmental Science	MAC: Cyber Security	MAC: Project Management, Economics & Financing	MAC: Supply Chain Management	MAC: Disaster Management	---	---
15.	Mandatory Workshop on Report Writing at Department Level	Mandatory Workshop on Indian Knowledge System at Department Level (Duration: Two Days)	Mandatory Workshop on Mastering Competitive Success at Department Level	Mandatory Workshop on Computer Vision at Department Level (Duration: Two Days)	---	---	---	---
16	Mandatory Workshop on Indian Constitution and Cultural Values at Department Level			Mandatory Workshop on Life Skills at Department Level (Duration: Two Days)	Mandatory Workshop on Blockchain at Department Level (Duration: Two Days)	Mandatory Workshop on Intellectual Property Rights at Department Level (Duration: Two Days)	---	---
Credits	20	22	22	24	20	20	14	18