

Structure for

**Bachelor of Technology (B.Tech.)**

in

**Electronics and Telecommunication Engineering**

With effect from A.Y. 2024-2025

## B.TECH IN ELECTRONICS AND TELECOMMUNICATION ENGINEERING

### Semester-I

Course Code	Course Name
2413FEB1T1	Engineering Mathematics-I
2413FEB1T2	Engineering Chemistry
2413FEE1T1	Engineering Graphics
2413FEE1T2	Basic Electrical Engineering
2413FEB1L1	Engineering Chemistry Lab
2413FEE1L1	Engineering Graphics Lab
2413FE1L2	Basic Electrical Engineering Lab
2413FES1L1	Basic Workshop Practices – I
2413FEI1L1	Indian Cultural Studies
2413FEL1L1	Health and Wellness

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**Semester-II**

<b>Course Code</b>	<b>Course Name</b>
2413FEB2T1	Engineering Mathematics-II
2413FEB2T2	Engineering Physics
2413FEE2T1	Engineering Mechanics
2413FEC2T1	C Programming
2413FEA2T1	English for Engineers
2413FEB2L1	Engineering Physics Lab
2413FEE2L1	Engineering Mechanics Lab
2413FEC2L1	C Programming Lab
2413FES2L1	Basic Workshop Practices - II
2413FEL2L1	Sports and Yoga

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**Semester-III**

Course Category	Course Code	Course Name
Programme Core Course	2413ETC3T1	Electronic Devices and Circuit Theory
	2413ETC3T2	Principles of Linear Systems and Signals
	2413ETC3T3	Applied Mathematics -III
Multidisciplinary Minor - I	2413ETU3T1	Fundamentals of Data Structure
Open Elective - I	2413ETG3T1	Human Resource Management
	2413ETG3T2 (Technology)	Emerging Trends in Technology
	2413ETG3T3 (Behaviour Science)	Innovation and Creativity
	2413ETG3T4 (Economics)	Accounting for Everyone
Ability Enhancement Course	2413ETA3T1	Business English and Communication
Value Education Course	2413ETV3T1	Environmental Science
Vocational Skill Enhancement Course	2413ETS3L1	Skill Based Lab - I OOPM with Java
Programme Core Course Lab	2413ETC3L1	Electronic Devices and Circuit Theory Lab
	2413ETC3L2	Principles of Linear Systems and Signals Lab

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**Semester-IV**

Course Category	Course Code	Course Name
Programme Core Course	2413ETC4T1	Analog Communication
	2413ETC4T2	Digital Electronics and Microcontrollers
	2413ETC4T3	Applied Mathematics IV
Multidisciplinary Minor - II	2413ETU4T1	Database Systems
Open Elective – II	2413ETG4T1 (Management)	Project Management
	2413ETG4T2 (Technology)	E-commerce and Digital Marketing
	2413ETG4T3 (Behaviour Science)	Design Thinking
	2413ETG4T4 (Economics)	Microeconomics
Humanities Social Science and Management	2413ETH4T1	Financial Management
Vocational Skill Enhancement Course	2413ETS4L1	Skill Based Lab – II Python
Common Engg. Project / Field Project	2413ETP4L1	Mini Project-I
Programme Core Course Lab	2413ETC4L1	Analog Communication Lab
	2413ETC4L2	Digital Electronics and Microcontrollers Lab
Audit Course	2413ETQ4T1	Constitution of India

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**Semester-V**

Course Category	Course Code	Course Name
Programme Core Course	2413ETC5T1	Digital Communication
	2413ETC5T2	Electromagnetic Engineering and Wave Propagation
	2413ETC5T3	Discrete Time Signal Processing
Program Elective Course - I	2413ETD5T1	Optical Communication
	2413ETD5T2	Ad-hoc Wireless Network
	2413ETD5T3	Neural Network & Fuzzy Logic
	2413ETD5T4	Embedded System Design
Multidisciplinary Minor - III	2413ETU5T1	Data Analytics
Open Elective - III	2413ETG5T1 (Management)	Products, Services & IT Service Management
	2413ETG5T2 (Technology)	Cyber and Data Law
	2413ETG5T3 (Behaviour Science)	Comprehensive Skill Development for Employability
	2413ETG5T4 (Economics)	Business Administration
Humanities Social Science and Management	2413ETH5T1	Entrepreneurship Development and Management
Programme Core Course Lab	2413ETC5L1	Digital Communication Lab
	2413ETC5L2	Electromagnetic Engineering and Wave Propagation Lab
	2413ETC5L3	Discrete Time Signal Processing Lab
Program Elective Course - I Lab	2413ETD5L1	Optical Communication Lab
	2413ETD5L2	Ad-hoc Wireless Network Lab
	2413ETD5L3	Neural Network & Fuzzy Logic Lab
	2413ETD5L4	Embedded System Design Lab

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**Semester-VI**

Course Category	Course Code	Course Name
Programme Core Course	2413ETC6T1	Wireless Mobile Communication
	2413ETC6T2	Computer Communication Network
Program Elective Course - II	2413ETD6T1	Internet of Things
	2413ETD6T2	Real Time Operating Systems
	2413ETD6T3	Machine Learning
	2413ETD6T4	Microwave Engineering
Program Elective Course - III	2413ETD6T5	Network Management in Telecommunication
	2413ETD6T6	Basic VLSI Design
	2413ETD6T7	Big Data Analytics
	2413ETD6T8	Broadband Network
Multidisciplinary Minor - IV	2413ETU6T1	Essentials of AI
Vocational and Skill Enhancement Course	2413ETS6L1	Skill Based Lab-III MATLAB
CEP/FP (Common Engineering Project/Field Project)	2413ETP6L1	Mini Project- II
Programme Core Course Lab	2413ETC6L1	Wireless Mobile Communication Lab
	2413ETC6L2	Computer Communication Network Lab
Program Elective Course – II Lab	2413ETD6L1	Internet of Things Lab
	2413ETD6L2	Real Time Operating Systems Lab
	2413ETD6L3	Machine Learning Lab
	2413ETD6L4	Microwave Engineering Lab
Program Elective Course – III Lab	2413ETD6L5	Network Management in Telecommunication Lab
	2413ETD6L6	Basic VLSI Design Lab
	2413ETD6L7	Big Data Analytics Lab
	2413ETD6L8	Broadband Network Lab

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**Semester-VII**

Course Category	Course Code	Course Name
Programme Core Course	2413ETC7T1	5G Communication Technologies
	2413ETC7T2	Image Processing and Machine Vision
Program Elective Course - IV	2413ETD7T1	Introduction to UAV
	2413ETD7T2	CMOS VLSI Design
	2413ETD7T3	Introduction to Cyber Physical Systems
	2413ETD7T4	Antenna Design
Program Elective Course - V	2413ETD7T5	Robotics
	2413ETD7T6	High Performance Computing
	2413ETD7T7	Data Compression and Encryption
	2413ETD7T8	RF Design
Research Methodology	2413ETR7T1	Research Methodology
	2413ETR7T2	Intellectual Property Rights
Programme Core Course Lab	2413ETC7L1	5G Communication Technologies Lab
	2413ETC7L2	Image Processing and Machine Vision Lab
Program Elective Course - IV Lab	2413ETD7L1	Introduction to UAV Lab
	2413ETD7L2	CMOS VLSI Design Lab
	2413ETD7L3	Introduction to Cyber Physical Systems Lab
	2413ETD7L4	Antenna Design Lab
Program Elective Course - V Lab	2413ETD7L5	Robotics Lab
	2413ETD7L6	High Performance Computing Lab
	2413ETD7L7	Data Compression and Encryption Lab
	2413ETD7L8	RF Design Lab
Project	2413ETP7L1	Project

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**Semester-VIII**

<b>Course Category</b>	<b>Course Code</b>	<b>Course Name</b>
Multidisciplinary Minor - V	2413ETU8T1	NPTEL Course
Multidisciplinary Minor - VI	2413ETU8T2	NPTEL Course
Internship /OJT	2413ETN8L1	Internship