

B. Tech. Electronics and Communication Engineering

Course Clusters

Core Electronics & Electrical

- Basic Electronics (ECL0101[T], ECL0101[P])
- Semiconductor Devices (ECL0303[T], ECL0303[P])
- Electronics Circuits & Linear ICs Applications (ECL0408[T], ECL0408[P])
- Principles of Electrical Engineering (EEL0201[T], EEL0201[P])
- Digital Electronics (ECL0306[T], ECL0306[P])
- Digital System Design (ECL0409[T], ECL0409[P])
- Advanced Microprocessors and Interfacing (ECL0515[T], ECL0515[P])
- VLSI Technology (ECL0733[T])
- VLSI Design (ECL0826[T], ECL0826[P])
- Industrial Electronics (Elective5 - E0829[T])

Communication Systems

- Analog Communication (ECL0411[T], ECL0411[P])
- Digital Communication (ECL0513[T], ECL0513[P])
- Antenna & Wave Propagation (ECL0617[T], ECL0617[P])
- Cellular & Mobile Communication (ECL0621[T])
- Microwave Engineering (ECL0723[T], ECL0723[P])
- Optical Fiber Communication (ECL0825[T], ECL0825[P])
- Data Communication (Elective1 - E0620[T])
- Wireless Networks (Elective5 - E0843[T])
- Wireless Sensor Networks & IoT (ECL0460[T], ECL0460[P])
- Wireless Ad hoc Networks (Elective3 - E0752[T])

Programming, Data & AI

- Programming Logics (CSP0201[P])
- Computer Programming Labs – Python, Java (CSP0303[P], CSP0405[P])
- Machine Learning (ECL0662[T], ECL0662[P])
- IoT Data Analytics (Elective3 - E0763[T])
- Deep Learning (Elective1 - E0666[T])
- Data Structures and Applications (CSL0457[T], CSL0457[P])
- Cloud Computing (Elective4 - E0764[T])
- Web Technologies (Elective2 - O0701B[T])
- Digital Image & Video Processing (Elective6 - E0839[T])

Embedded & IoT Systems

- Principles of Sensors & IoT (ECL0102[T], ECL0102[P])
- Fundamentals of Arduino Programming (ECL0261[T], ECL0261[P])
- Architecturing of Smart IoT Devices (ECL0304[T], ECL0304[P])
- Microcontroller & Embedded System (ECL0618[T], ECL0618[P])
- IoT Data Analytics (Elective3 - E0763[T])
- MEMS (Elective1 - E0665[T])

Mathematics & Signal Processing

- Calculus for Engineers (MAL0101[T], MAL0101[P])
- Statistics for Engineers (MAL0203[T], MAL0203[P])
- Engineering Mathematics (MAL0306[T])
- Digital Signal Processing (ECL0519[T], ECL0519[P])
- Soft Computing (Elective6 - E0840[T])

Project & Practical Training

- Electronics Workshop Practice (ECP0101[P])
- Evaluation of Industrial Training I, II, III (ECD0301[P], ECD0502[P], ECP0704[P])
- Mini Project (ECD0603[P])
- Major Project I, II (ECD0704[P], ECD0805[P])
- Software Labs (ECP0502[P], ECP0603[P])

Humanities, Management & Miscellaneous

- Communication Skills & Colloquium (HUL0101[T], HUL0101[P])
- Environmental Pollution & Global Issues (MCL0201[T])
- Making of Modern India (MCL0202[T])
- Engineering Mechanics (MEL0101[T], MEL0101[P])
- Engineering Graphics (MEL0202[T], MEL0202[P])
- Essentials of Information Technology (CSL0201[T], CSL0201[P])
- Indian Knowledge System (AUP0201[P], AUP0401[P], AUP0601[P], AUP0801[P])
- Intellectual Property Rights (Elective2 - O0701C[T])
- Electric Vehicle Technology (Elective2 - O0701A[T])
- Computer Vision (Elective1 - E0667[T])
- Nanoelectronics (Elective4 - E0736[T])