



योग: कर्मसु कौशलम्

Darshan
UNIVERSITY

B.Tech
ELECTRONICS & COMMUNICATION



A
technical
Under-graduate

program that focuses on

Industry-oriented education
for **emerging technological**
Fields of **Electronics & Communication**



B.Tech Electronics and Communication (EC)

Electronics and Communication(EC) Engineering is one of the most dynamic and rapidly evolving branches of engineering that focuses on the design, development, and application of electronic devices, circuits, and communication systems. It integrates concepts of electronics with communication technologies to enable efficient transmission of information across various platforms such as wireless networks, satellite systems, and digital communication channels. The program emphasizes strong theoretical fundamentals along with practical and hands-on experience in areas like embedded systems, signal processing, VLSI design, and telecommunications. With the rapid growth of technologies such as 5G, Internet of Things (IoT), and smart devices, EC plays a crucial role in shaping modern society and driving technological innovation.

The program is ideal for students who aspire to build their careers in sectors such as semiconductor & electronics manufacturing, embedded systems, telecommunications, robotics, automation, defense, space research, and consumer electronics.

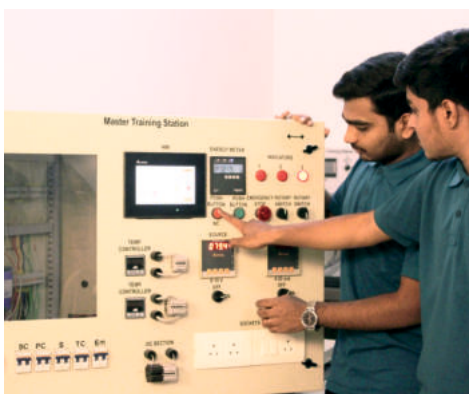


B.Tech in EC @ Darshan University

- Balanced approach with strong theoretical learning along with practical exposure
- Builds solid foundation in core electronics and modern technologies
- Industry-aligned curriculum keeping pace with latest technological trends
- Learning environment that promotes innovation and hands-on practice
- Opportunities to work on real-time projects and industry-driven activities
- Strong focus on skill development through internships and industry interaction
- Prepares students for successful careers in both core electronics and interdisciplinary domains



Laboratories



Semester-1

- Maths-I
- Physics
- Basics of Electrical Engineering
- Engineering Drawing
- English Communication
- Environmental Studies
- Induction Program

Semester-2

- Maths-II
- Basics of Programming
- Basic Electronics
- Digital Logic
- Office Automation Tools
- Indian Constitution

Semester-3

- Advanced Engineering Mathematics
- Computer Organization & Architecture
- Electromagnetics and Interference
- Microprocessor and Controller
- Fundamentals of Accounting
- Indian Knowledge System

Semester-4

- Analog and Linear Electronics
- Control System
- Signals and Systems
- Electronics System and PCB Design
- Data Science
- Professional Communication - I

Semester-5

- VLSI Design
- Semiconductor Device Modelling
- IoT & Smart Systems
- Professional Elective-I
 - Introduction to Artificial Intelligence
 - Industrial Process and Control
 - Microwave & Optical Communication
- Open Elective -I
 - Cyber Security
 - 5G Technology - An Overview
 - Product Design
- Career Orientation
- Professional Communication - II

Semester-6

- CMOS Analog IC Design
- Digital Logic Synthesis using HDL
- VLSI Technology
- Professional Elective - II
 - Semiconductor Memory Design
 - Industrial Internet of Things
 - Wireless Communications and Antenna Systems
- Professional Elective - III
 - Design Verification of VLSI Circuits
 - Embedded System Design
 - Computer Communication and Network Security
- Open Elective - II
 - Economics and Management
 - Entrepreneurship
 - Renewable Energy Engineering

Semester-7

- ASIC Design
- RF Integrated Circuits and Systems
- CAD for IC Design
- Professional Elective - IV
 - Advanced Semiconductor Devices
 - Statistical Analysis & Optimization for VLSI
 - Satellite Communication & Broadcasting
- Professional Elective - V
 - System & Network on Chip
 - Machine Learning Algorithms Introduction
 - Radar and Navigation Aids
- Life Management & Human Values
- Minor Project

Semester-8



















- Internship/Major Project

“ Education is one thing
no one can take away from you.”

— Swami Vivekananda



Skill Development Activities

Sem. - 3	Sem. - 4	Sem. - 5	Sem. - 6	Sem. - 7	Sem. - 8
 Circuit Simulation	 PCB Designing	 Digital Signal Processing	 IoT	 HDL Simulation	 Mock Interview
 Electronic Measurements	 Communication Protocols	 MATLAB	 Sensors & Actuators	 FPGA	 Aptitude & Reasoning
 Soldering	 Arduino	 Converters	 Robotics	 PLC/SCADA	 Group Discussion



Skill Enhancement Activities @ DU

Expert Talks	Industrial Visits	Workshops
Hands-On Sessions	Project Exhibition	Technical Events



Major Equipment & Software

- Rigol 50 MHz Dual CH, Color, Digital Mixed Signal Oscilloscope
- Hameg HMS3010 3 GHz Spectrum Analyzer
- Hameg 100 MHz Digital Mixed Signal Oscilloscope
- Xilinx Digilent, Nexys 2, Atlys FPGA Board
- AVR/PIC/ARM/ATMEL based Development Boards
- SDK DSP Kit for TMS30C6731
- DVP – SE Series PLC
- Extension Cards for Analog I/O – DVP06xa-S
- 7" DOP-B Series HMI with 64k real color display with touch screen
- VFD, Servo & Stepper Motor Drives
- MATLAB
- Code Composer Studio
- Trainer Kit for Communication Systems



RECESSION PROOF

Darshan UNIVERSITY

योग: कर्मसु कोशलम्

University Campus

- 📍 Rajkot-Morbi Highway, Rajkot – 363650
- ☎ 9727747310 / 11
- 🌐 www.darshan.ac.in

Counseling Centre

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