B.Tech. Program in Electrical Engineering
Department of Electrical Engineering
IIT Jodhpur

Unique Features of the B.Tech. (EE) Program

New broad-based curriculum and flexible program structure

Balance of theoretical foundations, hands-on, and experiential learning

Emphasis on design-oriented thinking, creativity, and life-long learning

Capability-linked Minor, Interdisciplinary, and Department-specific Specializations

Skillset targeted towards emerging technologies like 5G & Beyond Communication, Industry 4.0, & Smart City Technologies

Prepares students to compete effectively in a world of rapid technological advancements

Option to pursue entrepreneurship & industry collaboration through engineering innovation

Startup ecosystems to translate ideas into business models (Tinkering Lab, Technology Innovation & Startup Center, & Research Park)

The vision of the Department is to develop a world-class teaching and research atmosphere by excelling in fundamental knowledge and applications of Electrical Engineering through curricular and co-curricular activities.

To accomplish this, the Department offers an undergraduate program in the broad discipline of electrical engineering, with embedded capability-linked specializations, for enabling the students to pursue a chosen career path.

ee.iitj.ac.in   head_ee@iitj.ac.in

Features of 4-Year B.Tech. Program in Electrical Engineering

Option 1:
Regular B.Tech.

Option 2:
B.Tech. with Specialization
Cyber-physical systems
Communication Engineering
Intelligent Communication & Networking
Visual Computing
Sociodigital Reality
Artificial Intelligence of Things
VLSI Systems
Nano & Flexible Electronics
Smart Grid
Engineering Innovation
Robotics & Mobility Systems
Artificial Intelligence
Smart Healthcare

Option 3:
B.Tech. with Minor in
Entrepreneurship / Management

Option 4: Convert into 5-year
B.Tech. + M.Tech. in
Sensors & Internet of Things (SIoT)
Cyber Physical Systems (CPS)
Communication Engineering Discipline
Signal Processing Discipline
VLSI Systems Discipline
Interdisciplinary Specializations
Entrepreneurship

Option 5: Convert into 5-year
B.Tech. + M.B.A. Dual Degree

B.Tech. Program in Electrical Engineering
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Unique Features of the B.Tech. (EE) Program

Departmental Specialization Tracks

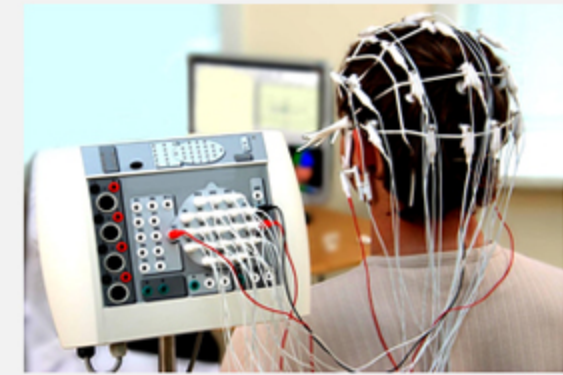### 5G & Beyond Communication

PXIe Communication Setup

Communication & Microwave Lab
Wireless Communications & Navigation Lab

Signal Processing & Interpretation

EEG Machine

Signal Processing Lab
Image Processing & Computer Vision Lab

VLSI Systems

Chip Fabrication

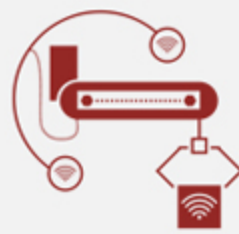Electronics Lab
Electronic Circuit Simulation & VLSI Systems Lab

Smart Grid

Real-time Grid Simulator

Microgrid & Real-time Simulator Lab
Power Electronics Lab, Energy Conversion & Systems Lab
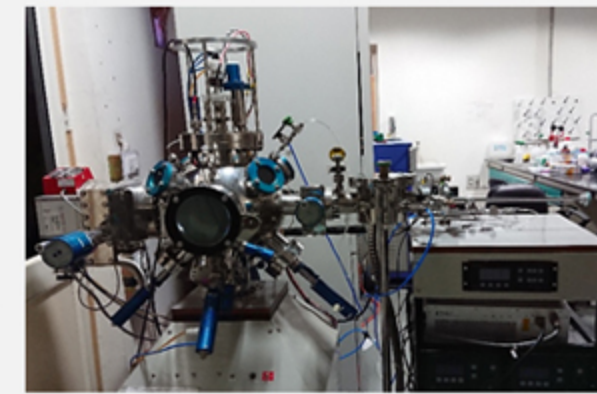
Cyber-Physical Systems

Helicopter Emulator

Cyber-Physical Systems (CPS) Modelling Lab
Control & Computing Lab
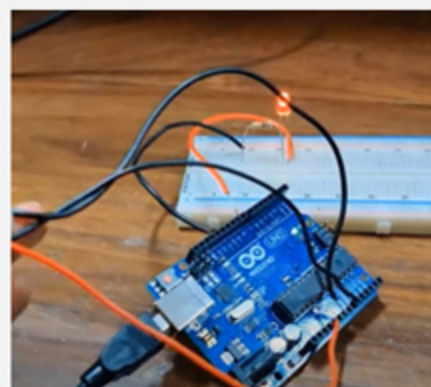
Nanoelectronics & Quantum Devices

RF Multi-target Sputtering

Device Fabrication Lab, Sensor Fabrication Lab,
Semiconductor Characterization Lab, SMDP Lab

Artificial Intelligence of Things (AIoT)

Sensor node for IoT

Internet of Things (IoT) Lab
Microprocessor & Embedded Systems Lab

Engineering Innovation

Product realization in
collaboration with industry

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