



## Tenure-Track Faculty Positions in Electronics and Communication Engineering

The Department of Electronics and Communication Engineering at IIT-Delhi is looking to recruit tenure-track faculty. Applications are invited from candidates with a focus on a range of research areas, including, but not limited to:

1. VLSI
  - a) Quantum devices
  - b) Computer Architecture
  - c) Embedded Systems
  - d) Electronic circuit design (Digital, Analog, mmwave, RFIC)
  - e) Experimentalist in Nanoelectronics/ Semiconductor Devices/ Spintronics
2. Signal Processing and AI/ML
  - a) Large Language Models for Signal Processing
  - b) Reliable and trustworthy ML
  - c) Time-series prediction
  - d) Signal Processing and ML applications in Energy Systems
  - e) Computational Imaging, Computerized Tomography, Diagnostics
  - f) Signal Processing in IoT and healthcare
3. Communications & Networks
  - a) Privacy and Security in Communication Networks
  - b) Quantum Communication and Networks
  - c) ORAN, Network Virtualization, RAN slicing
  - d) Integrated Sensing and Communication
  - e) Modelling and Analysis of Wireless Networks
  - f) Non terrestrial networks, satellite communication
4. Robotics & Autonomous Systems
  - a) Field Robotics
  - b) End-to-End Learning for Policy Design
  - c) Dynamic Path Planning
  - d) Deep RL applications in Autonomous Systems
  - e) Sensor Fusion and Perception
5. Control, Estimation, Information & Learning
  - a) Control with Safety Guarantee (Formal methods for control and related)
  - b) Data-driven Control
  - c) Coding Theory (lattice codes, polar codes etc.), coding for distributed storage/computation
  - d) Distributed estimation
  - e) Learning theory, High dimensional probability
  - f) Quantum Information Theory
  - g) Social networks, disease spreading models, graph percolation

### Eligibility

We are seeking candidates with a Ph.D. from a top Institution from around the world (post-doc experience will be an added bonus) with strong academic training and publication record in the relevant areas. Scholars who have the capability to independently develop and lead a program of research and provide innovative, quality teaching at both the undergraduate and graduate levels are especially encouraged to apply.

### **Research, Innovation and Development Focus**

IIIT-Delhi (Indraprastha Institute of Information Technology, Delhi) <[iiitd.ac.in](http://iiitd.ac.in)> is an autonomous Institute created by the Government of Delhi with a mission to become a world class R&D led Institution in IT and interdisciplinary areas. It offers one of the most vibrant academic environments and is an ideal place for a young researcher who wishes to work in India in these exciting times. Please click here for details about our faculty <https://www.iiitd.ac.in/people/faculty>

IIIT-Delhi emphasizes research, innovation and development to create impact through published papers, reports, projects, and technology design. It extends significant support for initial career aspirations via initiation research grants, funds for international conference travel, professional society membership, and continuing collaborations with foreign partner institutions (with options for short-term leave support). It has implemented systems of yearly appraisal/ feedback and a tenure process to help faculty members aim high and create an Institute whose reputation is benchmarked against international standards.

### **Compensation and Quality of Life**

The Institute provides a compensation of over Rs.2.50 lakh/month (CTC) for a starting Assistant Professor position and allows a faculty member to supplement it through research grants, summer sabbaticals in R&D labs/ companies and consultancy engagements. The campus is situated in Okhla Phase-III, New Delhi near a Metro station, with suitable accommodation for faculty.

### **Application Process**

Applications are processed regularly. Please send your CV along with a covering letter, a statement of research, a statement of teaching plan, external engagement plan for exploring Industry/ Government funding and names of three references to:

[faculty-applications@iiitd.ac.in](mailto:faculty-applications@iiitd.ac.in)

Please put “Application for Faculty Position in ECE” as the subject line.

***Last date for application submission is 15<sup>th</sup> March 2025.***

### **Technical Seminar**

Selected candidates will be invited for a seminar on a mutually convenient date.