About IIIT-Delhi: IIIT-Delhi (www.iiitd.ac.in) is an Autonomous Institute created by Govt. of Delhi with a mission to become a world-Class R&D led Institution in IT and allied areas. It offers one of the most vibrant and exciting academic environments in India and is an ideal place for a young researcher who wishes to work in India in these exciting times. It has recruited over 100 faculty members, mostly holding PhD from US and Europe, and has built strong research groups in areas like VLSI, Circuits and Systems, Signal Processing and Machine Learning, Controls and Robotics, Communications and Networks, etc.

Areas of Interest: The Institute is looking for tenure-track faculty to strengthen its programs in Electronics and Communication Engineering. Applications are invited from candidates with a focus on a range of research areas, including, but not limited to:

- 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

- 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

- 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

- 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

- 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

The strong candidates in other areas will also be considered primarily.

Research, Innovation and Development:
The Institute puts a strong emphasis on research, innovation and development to create impact through published papers, hardware and software prototyping, deployments and ultimately, technology transfer. It strongly focuses on graduate education via the PhD program (various policies to attract PhD students have already yielded about 500 scholars in sixteen years). It also extends significant support for initial career development via initiation research grant, support for conference travel and professional society membership, and encouragement of 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.

How to Apply?

For applying, send an email with CV (with names of at least three references), a research statement, and a teaching statement indicating the core and advanced courses and external engagement plan for exploring Industry / Government funding of interest to: faculty-applications@iiitd.ac.in
Please put the subject as "Faculty position in ECE"

Education:
The Institute also aims to provide an excellent education. The BTech (ECE) Program has many innovative concepts like starting with the ECE courses, allowing long duration projects, streams providing limited specializations in CS/ECE/CB as well as interdisciplinary areas, etc. In the MTech program, it has both thesis and non-thesis options, and possibility of specialization in areas like VLSI, Circuits and Systems, Signal Processing and Machine Learning, Controls and Robotics, Communications and Networks, etc.

Compensation and Quality of Life:

The Institute provides a compensation (CTC) of over Rs.2.50 lac/month for a starting Assistant Professor and allows a faculty member to supplement it through research grants, summer sabbaticals in R&D labs/ companies, consultancy, etc.

The campus is situated in Okhla, Phase-III with a Metro station within ½ km, with modern, good quality and spacious accommodation for faculty.

Eligibility:
The ideal candidate will have a PhD from a top Institution in India or abroad, perhaps some post doc experience, good research and publication track record, and show future potential.

We seek candidates grounded in some of the core areas of ECE, who are driven by emerging systems applications, have the capability to build a research program, and provide innovation and quality teaching at both the undergraduate and graduate levels.

Schedule:
For applying: Anytime-applications processed regularly.
Technical Seminar: On a mutually convenient date; often when the candidate is visiting India. E-seminar also possible.
Interaction with Selection Committee: Held regularly, every few months.