# Research Programmes Department of Electrical Communication Engineering Indian Institute of Science

### **Research Areas in ECE**

- Digital communications
- Information and coding theory
- Signal processing and machine learning
- Nanoelectronics and VLSI systems
- Networks and optimisation
- Integrated optics and photonics
- Radio frequency circuits and electromagnetics

# What is involved in doing a PhD in ECE?

- Acquire knowledge in a broad area
- Take courses on foundational and cutting-edge topics
- Read research papers and attend seminars to develop an advanced understanding of field of study
- Perform original research, which typically leads to high-quality peerreviewed publications, patents, and technologies

# Other opportunities during a PhD

- Collaboration and visits to other universities
- Internship and placement
- Financial support for attending international conferences
- Support for entrepreneurial efforts

# Why ECE, IISc?

- Work alongside world-renowned faculty on cutting-edge research topics
- Environment and peer group that encourage research
- State-of-the-art research facilities
- Several fellowships from the government and industry for students

Admissions: https://admissions.iisc.ac.in/

More info: https://ece.iisc.ac.in/







