

The ECE curriculum allows specialization in VLSI systems, Networking and Communication and Artificial Intelligence and Machine Learning. The VLSI Systems domain encompasses a broad range of topics covering several aspects such as, digital and analog hardware systems, FPGA implementations, custom fabricated VLSI circuits, verification and validation, system prototyping, design methodologies around EDA flows, verification and validation and hardware accelerator design for AI applications. Further, it also includes realization of real time embedded systems where both the hardware and the software components are treated agnostically based on end system requirements; embedded implementation of feedback control using variegated sensors.

PROGRAM TIMELINE

Program	Duration	# of Students	Internship Period	Available for FTE
M.Tech (ECE)	2 years	28	6 months (mid Dec - mid June)	From July
iM.Tech (ECE)	5 years	18	6 months (mid Dec - mid June)	From July

SPECIALIZATIONS

VLSI Systems

ELECTIVE COURSES

- Digital CMOS VLSI Design
- Analog CMOS VLSI Design
- Analysis and Design of VLSI Sub-systems
- System design with FPGA
- Processor Architecture
- High Level Synthesis
- Formal Verification of VLSI
- ARM architecture
- Device Drivers
- Realtime Operating Systems

Networking and Communication

ELECTIVE COURSES

- Wireless Access Networks
- Network Security
- Advanced Cyber Security
- Internet of Things
- Advanced Computer Networks
- Mathematical Analysis of Networks

Artificial Intelligence and Machine Learning

ELECTIVE COURSES

- Machine Learning
- Automatic Speech Recognition
- Natural Language Processing
- Visual recognition
- Neural Networks and Reinforcement Learning
- Artificial General Intelligence

PLACEMENT STATISTICS

FULL TIME CTC

(INR in Lakhs per annum)

MTech

Highest - 40.88
Average -21.91

iMTech

Highest - 29.96
Average - 21.97

INTERNSHIP STIPEND

(INR in Thousands per month)

MTech

Highest - 50
Average - 38.43

iMTech

Highest - 90
Average - 53.83

RESEARCH

- The students are exposed to industry standard research with hands on experience on projects in various research labs:
 - [VLSI Design Lab and Center for Electronics and Embedded Systems \(CEEMS\) Lab](#)
 - [High Density Electronics System \(HIDES\) Lab](#)
 - [Machine Intelligence and Robotics Center \(MINRO\)](#)
 - [Surgical and Assistive Robotics \(SARL\) Lab](#)
 - [Multimodal Perception Lab](#)
- Our students have worked on fundamental research problems along with our Faculty in diversified fields and have showcased their work in renowned conferences and published their work in Journals. Take a look at the work [here](#).

Faculty

Projects

[Recruiter Guidelines](#)

Programme Outcomes