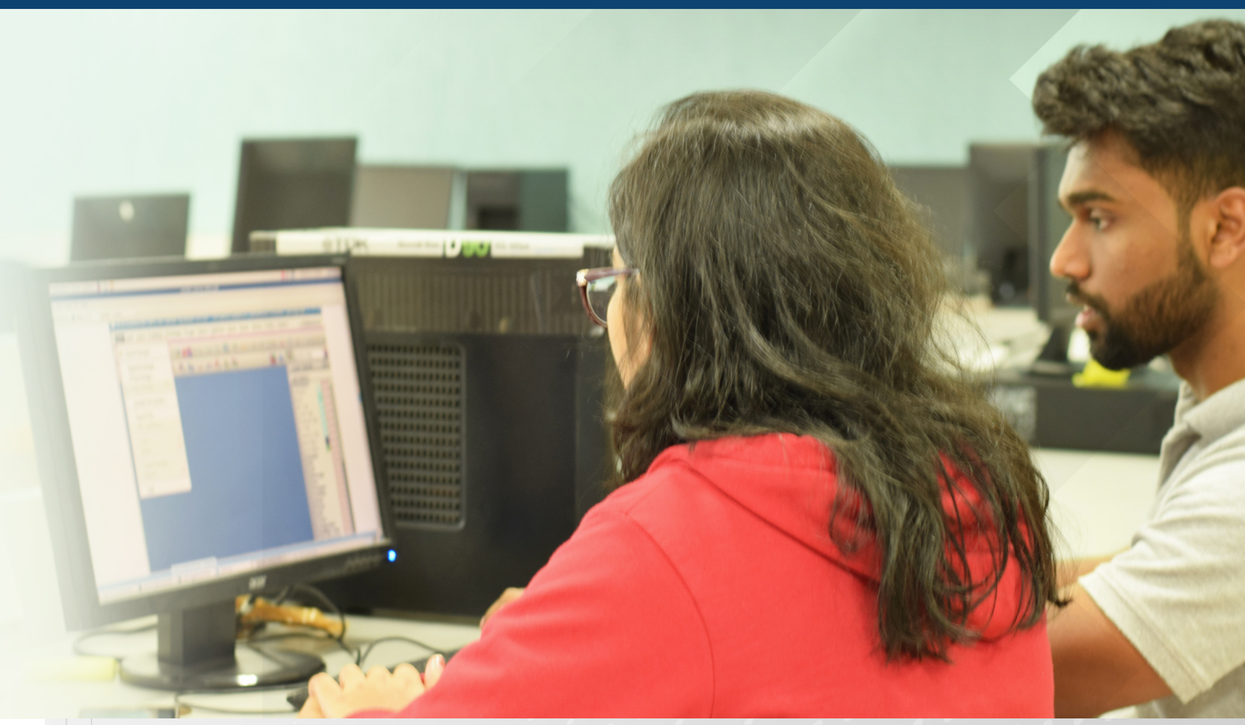
International Institute of
Information Technology Bangalore
www.iiitb.ac.in

Pioneering Excellence in Education, Research & Innovation

2024 Graduates

MS (Research)/ PhD



Program Details

The M.S by Research/PhD program provides a transformative academic experience for mature students to expand knowledge and conduct research in a supportive environment. Through rigorous research endeavours, students cultivate analytical, problem-solving, and critical thinking skills, fostering creativity and independent thought. By investigating complex issues with cutting-edge methodologies, students advance expertise and generate novel insights. The culmination is a comprehensive master's thesis showcasing original research findings. Emphasizing research and development skills, students become leaders, driving innovation and making a lasting impact in academia, industry, and beyond, enhancing employability.

Specializations

Networks Communication & signal processing | Computer and Data Science

ELECTIVE COURSES

- Radar Sensing
- Next Gen Wireless Communication
- Design Optimization
- Information theory and coding
- Probabilistic machine learning
- Mathematics for ML
- Signal processing
- Application of Linear algebra
- Physical Layer Security

ELECTIVE COURSES

- Advanced visual recognition
- Reinforcement learning
- Natural language processing
- Few shot learning
- Machine learning
- Data Visualization
- Automatic speech recognition
- Network Science for the Web

Labs

- Advanced Wireless Communication
- RADAR Sensing
- Web Science
- Multi Modal Perception
- EHRC-Web
- ScaDS
- Surgical and Assistive Robotics Lab
- MINRO
- GRAPHICS-VISUALIZATION COMPUTING
- Networking and Communication

Placement Timeline

Candidates will be available for internship/FTE from December 2023.

Research

Students gain invaluable hands-on experience in industry-standard research on cutting-edge technologies like 6G,Radar, Deep Learning, Computer Vision, through active involvement in following research centres & labs.

Advanced Wireless Communication Lab

- Modelling optimization and channel estimation of Intelligent reflecting surfaces assisted underlay spectrum sharing for 5G/6G communication.
- Optimal relay and antenna selection for improving physical layer security in underlay wiretap spectrum sharing network.

Radar Sensing Lab

- Designing state of art Deep Learning and signal processing based solutions for Suspicious Human Activity Recognition, Cross-domain frequency adaptation, tailored for the Indian Army and health care.
- Development of time-based Deep Learning architectures to detect automotive targets in both cluttered and non-cluttered environments, for close-proximity detection.

E - Health Research Centre (EHRC)

- Use of Information & Communication Technologies (ICTs) towards improving affordability, accessibility and availability of technology solutions covering medical devices, health data, and delivery platforms and models.

Multimodal Perception Lab

- Time optimisation of Panoptic segmentation with novel task and loss functions modelled on physical features. Panoptic segmentation explainability using deformable-grid based downsampling.
- Object detection under uncontrolled acquisition environment and scene context constraints.
- Analysis of interviewee perception and interaction with expressive virtual interviewing agents and automatic assessment of communication skills in job interviews using Deep Learning and domain adaptation.

Student's exceptional work is regularly featured in prestigious conferences and renowned journals that can be found here, highlighting their remarkable contributions to their respective fields.

Emails: placement.committee@iiitb.org iiitb_placement@iiitb.ac.in