# Ph.D. Admission Academic Session 2024-25 (Under Visvesvaraya Scheme for Electronics and IT)

	APPLICATION HAS TO BE FILLED ONLINE				
(Link available at <b>www.mnit.ac.in</b> ).					
$\triangleright$	Start Date of Online Application	:- 28	8-08-2024		
	Last Date of submission of Online Application form	:- 19	9-09-2024 (till 5.00 PM)		
Provisional list of shortlisted/eligible candidates for written test/interview will be displayed on Institute website by <b>24-09-2024.</b>					
	Dates of written test & Interview of the shortlisted candidates	:-	04-10-2024		
~	Final Result	·_	09-10-2024		

# ADMISSION CATEGORIES (Ph.D.)

## FULL TIME

i. Full Time (Visvesvaraya Ph.D. Scheme)

## PART TIME

i. Part Time (Visvesvaraya Ph.D. Scheme) candidate working within 70 km of Jaipur

Visvesvaraya Ph.D. Scheme for Electronics and IT : Phase II of MeitY, Govt. of India (Only for the Department of Electronics and Communication Engineering (ECE), Computer Science and Engineering (CSE) and Electrical Engineering (EE))

GATE score will be mandatory for admission to Ph.D. The GATE score should have been acquired either within past three years or the candidate should have completed respective Master's degree with a valid GATE score.

# Guidelines for Ph.D. Entrance Exam, Academic Session 2024-25 (Under Visvesvaraya Scheme)

Written exam and interview for Ph.D. entrance exam, Academic Session 2024-25 will be held on **04<sup>th</sup> October 2024 at MNIT campus**.

Selection process will comprise of two steps (i) Written test (ii) Interview of shortlisted candidates. The written test will comprise of two sections: Section A will test the research aptitude of the candidate and Section B, which will test the subject knowledge of the candidate. A candidate is required to score a minimum of 35% separately in both Part A and Part B in order to qualify for the interview round.

The written exam will be conducted at Computer Centre, first floor, Prabha Bhawan, MNIT Jaipur. Candidates who successfully clear the written exam will be interviewed in the respective departments as per the notified schedule.

# Tentative Dates of Written Test & Interview for Ph.D. Admission (Academic Session 2024-25)

Venue (Written Test) : Computer Centre, first floor, Prabha Bhawan, MNIT Jaipur

**Venue (Interview)** : Respective Departments MNIT Jaipur

GN		Wri	tten Test	I	nterview
S.No.	Department/Centres	Date	Time	Date	Time
1.	Computer Science and Engineering	04-10-2024	10.00 to 11.30 AM	04-10-2024	3.00 PM onwards
2.	Electrical Engineering	04-10-2024	10.00 to 11.30 AM	04-10-2024	3.00 PM onwards
3.	Electronics and Communication Engineering	04-10-2024	10.00 to 11.30 AM	04-10-2024	3.00 PM onwards

### VISVESVARAYA PH.D. SCHEME FOR ELECTRONICS AND IT : PHASE II (MEITY, GOVT. OF INDIA)

A total of **o7 fellowships for Full-Time** candidates and **o4 seats for Part Time** Ph.D. candidates are available under Visvesvaraya Ph.D. Scheme for Electronics and IT : Phase-II . It is a part of the II phase of Visvesvaraya Ph.D. Scheme to enhance the number of Ph.Ds in Electronic System Design and Manufacturing (ESDM) and IT/IT Enabled Services (ITES) Sector. Listing of areas for this session admission is attached for three departments- Electronics and Communication Engineering (ECE), Computer Science and Engineering (CSE), Electrical Engineering (EE). Once selected in this scheme, a student is entitled for following:

- a) Fellowship for Full-time Ph.D. candidate @ Rs. 38,750/- per month (1st 2nd year) and @Rs. 43,750/- per month for 3rd, 4th and 5th year of Ph.D. (support till Ph.D. completion or 05 years whichever is earlier).
- b) Reimbursement of Rent (RoR) : This component is linked with the fellowship of Ph.D. candidate. The rate of RoR is 16%.
- c) Support for attending International Conference: Support upto Rs. 1.5 Lakhs/Full- time Ph.D. candidate
- d) The Part-time PhD candidate under Visvesvaraya Ph.D. Scheme for Electronics and IT: Phase-II of MeitY is eligible to receive a one-time incentive of Rs. 3.00 Lakhs, through DBT in his/her bank account, on successful completion of PhD.

### ADMISSION OF SPONSORED CANDIDATES

- i. A candidate who is sponsored for either Full time (FT) or Part time (PT) studies at MNIT by his/her employer and who meets the additional conditions specified below may be admitted through the Dept. Selection Committee appointed.
- ii. A sponsored candidate full time or part time must have total experience of more than two years, and in the case of full time sponsored candidate, he/she must have been in service of the sponsoring organization for at least one year at the time of admission. The sponsoring organization must specifically undertake to relieve him/her to pursue the programme for its full duration. The sponsored candidates are required to submit No Objection Certificate (NOC) from their employer/organization stating that:

### The format of NOC is enclose as Annexure I and Annexure II at the end of the brochure

## **GENERAL INFORMATION**

- (1) The provisions for reservation of seats given above are subject to modification in accordance with any Government Order, if issued subsequently by the Government of India.
- (2) It will entirely be the responsibility of the candidate to prove his/her eligibility in terms of minimum educational qualifications and for claiming reservation under a specific category, if any, at the time of submitting the application.
- (3) The requisite certificate for SC/ST/OBC category must be submitted at the time of interview, failing which the benefit of the reserved category will not be given. The OBC/EWS certificate should have been issued after March 31, 2024.

- (4) PWD candidates should submit along with the application, the certificate, in original, from a Government medical board. Such a candidate may, however, be asked to appear before a Medical Board duly constituted by MNIT, Jaipur for this purpose. The Medical Board will decide the courses, which cannot be offered to a candidate, on the basis of the nature of his/her disability. The candidate will be offered admission out of the remaining courses as per the institute policy.
- (5) The candidate should be ready with all original documents and PG dissertation thesis at the time of interview for Ph.D. admission.

## FEES

Updated Fees structure will be available on Institute website <a href="https://mnit.ac.in/academics/fee\_structure">https://mnit.ac.in/academics/fee\_structure</a>

### MINIMUM QUALIFICATION(S) FOR ADMISSION TO Ph.D. PROGRAMME

#### PH.D. IN ENGINEERING

The applicant must have a Master's degree in Engineering/Technology with CGPA not below 6.5 on a 10-point scale or 60% marks (Where CGPA is not awarded). In exceptional cases brilliant candidates (graduated from CFTI and other institutions whose NIRF ranking is up to 100) with CGPA of more than 8 (75% marks) in Bachelors degree in Engineering/Architecture/Planning may be recommended by DPGC to SPGB for admission in Ph.D. program. Such candidates having, sufficient experience in the relevant area and publications in refereed conferences/journals as notified by DPGC, may also be considered.

Department	Minimum Educational Qualification
Computer Science &	B.E./B.Tech .in CSE/IT/ECE/EE or equivalent disciplines
Engineering	M.E./M.Tech./M.S. in CSE/IT/ECE/EE or equivalent disciplines
Electrical Engineering	M.E./M.Tech. or equivalent degree in respective & relevant Engineering disciplines
Electronics &	B. Tech. and M.Tech. Electrical/ Electronics/ Computer/ Communication/
Communication	Telecommunication/ Instrumentation/ Control/ Microelectronics or equivalent
Engineering	discipline consistent with research areas of department.

#### Table 1 : Minimum qualification(s)

# AVAILABLE RESEARCH AREAS IN VARIOUS DEPARTMENTS

Table. Research Areas offered in various Departments for admission in Ph. D.

## FULL TIME (VISVESVARAYA PH.D. SCHEME)

FULL TIME (VISVESVARAYA PH.D. SCHEME)				
Department/Centres	Faculty member Name	Tentative Research Area of proposed Ph.D.		
COMPUTER SCIENCE AND ENGINEERING	DR. VIJAY LAXMI	Generative AI for Cyber-Defense Applications		
COMPUTER SCIENCE AND ENGINEERING	DR. VIJAY LAXMI	Privacy Preservation in Source Code Analysis		
COMPUTER SCIENCE AND ENGINEERING	DR. NAMITA MITTAL	Large language Modeling in low resource languages		
COMPUTER SCIENCE AND ENGINEERING	DR. NAMITA MITTAL	Generative AI		
COMPUTER SCIENCE AND ENGINEERING	DR. MEENAKSHI TRIPATHI	Machine learning for network security		
COMPUTER SCIENCE AND ENGINEERING	DR. MEENAKSHI TRIPATHI	Explainable AI based solutions		
COMPUTER SCIENCE AND ENGINEERING	DR. YOGESH KUMAR MEENA	Image Processing and Machine Learning		
COMPUTER SCIENCE AND ENGINEERING	DR. YOGESH KUMAR MEENA	Natural Language Processing and Machine Learning		
COMPUTER SCIENCE AND ENGINEERING	DR. RAMESH BABU BATTULA	AI for 6G communication and its security		
COMPUTER SCIENCE AND ENGINEERING	DR. RAMESH BABU BATTULA	Secure Quantum Communication		
COMPUTER SCIENCE AND ENGINEERING	DR. PILLI EMMANUEL SHUBHAKAR	Cyber Security		
COMPUTER SCIENCE AND ENGINEERING	DR. PILLI EMMANUEL SHUBHAKAR	Cloud Computing		
COMPUTER SCIENCE AND ENGINEERING	DR. DINESH KUMAR TYAGI	AI & Machine Learning		
COMPUTER SCIENCE AND ENGINEERING	DR. DINESH KUMAR TYAGI	5G Communication		
COMPUTER SCIENCE AND ENGINEERING	DR. ARKA PROKASH MAZUMDAR	AI-ML Applications in IoT/IoV		
COMPUTER SCIENCE AND ENGINEERING	DR. ARKA PROKASH MAZUMDAR	Smart Applications for ICN and SDWSN		
COMPUTER SCIENCE AND ENGINEERING	DR. JYOTI GROVER	AI & Machine Learning		
COMPUTER SCIENCE AND ENGINEERING	DR. JYOTI GROVER	Cyber Security		
COMPUTER SCIENCE AND ENGINEERING	DR. MAHIPAL PRITHVISINH JADEJA	Applications of Artificial Intelligence and Graph Neural Networks in Emerging Domains		
COMPUTER SCIENCE AND ENGINEERING	DR. MAHIPAL PRITHVISINH JADEJA	Machine Learning on Graphs		
COMPUTER SCIENCE AND ENGINEERING	DR. ASHISH KUMAR TRIPATHI	ARTIFICIAL INTEELIGENCE BASED SMART FARMING		

COMPUTER SCIENCE AND ENGINEERING	DR. ASHISH KUMAR TRIPATHI	REMOTE SENSING BASED APPLICATIONS FOR ENVIRONMENT MONITORING USING AI
COMPUTER SCIENCE AND ENGINEERING	DR. LAVIKA GOEL	Pattern recognition using machine learning
COMPUTER SCIENCE AND ENGINEERING	DR. LAVIKA GOEL	Explainable AI and deep learning for smart farming
COMPUTER SCIENCE AND ENGINEERING	DR. SMITA NAVAL	Cyber Security
COMPUTER SCIENCE AND ENGINEERING	DR. SMITA NAVAL	AI and Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. DEEPAK RANJAN NAYAK	Deep Learning for Computer Vision
COMPUTER SCIENCE AND ENGINEERING	DR. DEEPAK RANJAN NAYAK	Machine/Deep Learning and its Applications to Biomedical Image Processing and Anomaly detection
COMPUTER SCIENCE AND ENGINEERING	DR. VIKASH KUMAR	Cybersecurity modeling for Critical Infrastructure
COMPUTER SCIENCE AND ENGINEERING	DR. VIKASH KUMAR	AI-based AI-Driven Intrusion Detection for Low-power IoT Devices
COMPUTER SCIENCE AND ENGINEERING	DR. SADBHAWNA	Latest Generative AI modeling based Image/Video Super-Resolution
COMPUTER SCIENCE AND ENGINEERING	DR. SADBHAWNA	Video Action Quality Assessment in various applications
COMPUTER SCIENCE AND ENGINEERING	DR. PRASANTA MAJUMDAR	Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. PRASANTA MAJUMDAR	AI and Machine Learning
ELECTRICAL ENGINEERING	DR. RAJIVE TIWARI	Smart grids
ELECTRICAL ENGINEERING	DR. RAJIVE TIWARI	Electric vehicle
ELECTRICAL ENGINEERING	DR. ROHIT BHAKAR	Smart Grids
ELECTRICAL ENGINEERING	DR. ROHIT BHAKAR	AI applications in Power System Operation
ELECTRICAL ENGINEERING	DR. PRERNA JAIN	AI and Machine Learning
ELECTRICAL ENGINEERING	DR. PRERNA JAIN	Cyber Physical Systems
ELECTRICAL ENGINEERING	DR. MANOJ FOZDAR	Operational issues in smartgrid
ELECTRICAL ENGINEERING	DR. MANOJ FOZDAR	Economics in smartgrid operations
ELECTRICAL ENGINEERING	DR. NITIN GUPTA	Microgrid and Distributed Energy Management in Smart Grid

ELECTRICAL ENGINEERING	DR. NITIN GUPTA	Power Electronics Converters for Energy Management in EV
ELECTRICAL ENGINEERING	DR. HEMANT KUMAR MEENA	Signal Processing, Image Processing
ELECTRICAL ENGINEERING	DR. DIPTI SAXENA	Electric Vehicles for distribution system managemnt
ELECTRICAL ENGINEERING	DR. DIPTI SAXENA	Electric Vehicles, integration in Distribution System
ELECTRICAL ENGINEERING	DR. NEELI SATYANARAYANA	Investigation and Control of Robotic Systems
ELECTRICAL ENGINEERING	DR. NEELI SATYANARAYANA	Attack Detection in Cyber-Physical Systems
ELECTRICAL ENGINEERING	DR. AKHILESH MATHUR	Smart Grids
ELECTRICAL ENGINEERING	DR. AKHILESH MATHUR	Virtual Energy Storage
ELECTRICAL ENGINEERING	DR. VINAY PRATAP SINGH	AI & Machine Learning
ELECTRICAL ENGINEERING	DR. VINAY PRATAP SINGH	Smart Grids
ELECTRICAL ENGINEERING	DR. SATISH SHARMA	Cyber Security Application to Smart Grid
ELECTRICAL ENGINEERING	DR. SATISH SHARMA	Distributed Optimization in Smart Grid
ELECTRICAL ENGINEERING	DR. SARAVANA PRAKASH P	Electric Vehicle
ELECTRICAL ENGINEERING	DR. SARAVANA PRAKASH P	Power Electronic Converters
ELECTRICAL ENGINEERING	DR. MAN MOHAN GARG	Cyber Physical Energy System
ELECTRICAL ENGINEERING	DR. MAN MOHAN GARG	Virtual Energy Storage
ELECTRICAL ENGINEERING	DR. SURENDER HANS	Application of Machine Learning in Medical Robotics
ELECTRICAL ENGINEERING	DR. SURENDER HANS	Control Design for Autonomous Vehicle
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. M. M. SHARMA	Design of Frequency Selective surfaces/Absorbers, Rasorbers for RF/ wireless communication
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. M. M. SHARMA	Study and design of the nature and structure of human intelligence using the Cognitive Architecture
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. KAMALESH KUMAR SHARMA	Antenna design for 5G and beyond applications
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. D. BOOLCHANDANI	Analog Integrated Circuits
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. D. BOOLCHANDANI	MEMS Sensors
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. VINEET SAHULA	AI and Cognitive Approaches for language translation
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. VINEET SAHULA	AI Approaches for EDA/VLSI/IoT-CPS

	DR. TARUN VARMA	MEMS
COMMUNICATION ENGINEERING ELECTRONICS AND	DR. TARUN VARMA	Signal Processing
COMMUNICATION ENGINEERING ELECTRONICS AND	DR. VIJAY JANYANI	AI-Driven Intelligent Optical
COMMUNICATION ENGINEERING ELECTRONICS AND COMMUNICATION ENGINEERING	DR. VIJAY JANYANI	Networks for 5G and Beyond ML-Enhanced Optical Fiber Channel Estimation for Free Space
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RITU SHARMA	VLSI design
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RITU SHARMA	Low Power design for wi fi
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. GHANSHYAM SINGH	Photonics Components and Circuits for High Performance Computing applications
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. GHANSHYAM SINGH	AI applications for optimization of Photonic Integrated Circuits
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. R. P. YADAV	5G Communication
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. R. P. YADAV	Beam formation through arrays in 5G Communication
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. SATYASAI JAGANNATH NANDA	5G Communication
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. SATYASAI JAGANNATH	Image Processing/DSP
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RAVI KUMAR MADDILA	LiFi transmitter and receiver integration
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RAVI KUMAR MADDILA	Universal portable operating system implementation
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. AMIT MAHESH JOSHI	AI/ML in Healthcare
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. AMIT MAHESH JOSHI	Biomedical Circuits
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. SARTHAK SINGHAL	(RF/Wireless Communications) Design of Multiband/Wideband Microstrip Antenna For Wireless Applications
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. SARTHAK SINGHAL	(RF/Wireless Communications) Design of Multiband/Wideband Metasurfaces For Wireless Applications
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RAJENDRA MITHARWAL	Electromagnetic Interference
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RAJENDRA MITHARWAL	Near Field Measurements
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. KULDEEP SINGH	AI based health care applications

ELECTRONICS AND COMMUNICATION ENGINEERING	DR. KULDEEP SINGH	Al applications in Agriculture
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. MENKA	Computer in memory applications using advanced devices
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. MENKA	HEMT device- simulation and modeling
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. DEEPAK BHARTI	Electronic Devices and Sensors
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. DEEPAK BHARTI	Microelectronics
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. ILA SHARMA	Emerging Technologies in 5G Communication
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. ILA SHARMA	Emerging Technologies in DSP and Filter Design
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. BHARAT CHOUDHARY	Analog and Digital VLSI Design
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. BHARAT CHOUDHARY	Nano Electronics Device Modelling & Simulation
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. ANKIT	5G Communication
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. ANKIT	RF/Wireless Communications
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. REENA KUMARI	Antenna for Millimeter-Wave Applications
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. REENA KUMARI	Circularly Polarized MIMO Antenna

# PART TIME (VISVESVARAYA PH.D. SCHEME)

Department/Centre	Faculty Name	Tentative Research Area of proposed Ph.D
COMPUTER SCIENCE AND ENGINEERING	DR. VIJAY LAXMI	Code Deobfuscation Techniques
COMPUTER SCIENCE AND ENGINEERING	DR. VIJAY LAXMI	AI-enabled Deep Packet Analysis for robust Firewalls
COMPUTER SCIENCE AND ENGINEERING	DR. VIJAY LAXMI	Detection Techniques for Living off Land Malware
COMPUTER SCIENCE AND ENGINEERING	DR. VIJAY LAXMI	Efficient and Reliable Software Design for Untrustworthy Hardware
COMPUTER SCIENCE AND ENGINEERING	DR. NAMITA MITTAL	Large language Modelling in low resource languages
COMPUTER SCIENCE AND ENGINEERING	DR. NAMITA MITTAL	Responsiblie Al
COMPUTER SCIENCE AND ENGINEERING	DR. MEENAKSHI TRIPATHI	Machine learning for network security
COMPUTER SCIENCE AND ENGINEERING	DR. MEENAKSHI TRIPATHI	Explainable AI based solutions

COMPUTER SCIENCE AND ENGINEERING	DR. MEENAKSHI TRIPATHI	Adversial networks for improved security
COMPUTER SCIENCE AND ENGINEERING	DR. MEENAKSHI TRIPATHI	Software defined networks
COMPUTER SCIENCE AND ENGINEERING	DR. YOGESH KUMAR MEENA	Image Processing and Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. YOGESH KUMAR MEENA	Natural Language Processing and Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. YOGESH KUMAR MEENA	Abstractive Text Summarization
COMPUTER SCIENCE AND ENGINEERING	DR. YOGESH KUMAR MEENA	Event Prediction using Natural Language Processing
COMPUTER SCIENCE AND ENGINEERING	DR. RAMESH BABU BATTULA	Blockchain for AI and AI for Blockchain
COMPUTER SCIENCE AND ENGINEERING	DR. RAMESH BABU BATTULA	Federated learning for Digital Twins
COMPUTER SCIENCE AND ENGINEERING	DR. RAMESH BABU BATTULA	Secure 6G communication
COMPUTER SCIENCE AND ENGINEERING	DR. RAMESH BABU BATTULA	AI enabled Immersive communication in 6G
COMPUTER SCIENCE AND ENGINEERING	DR. PILLI EMMANUEL SHUBHAKAR	Quantum Computing / Communication
COMPUTER SCIENCE AND ENGINEERING	DR. PILLI EMMANUEL SHUBHAKAR	Blockchain
COMPUTER SCIENCE AND ENGINEERING	DR. PILLI EMMANUEL SHUBHAKAR	AI and Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. PILLI EMMANUEL SHUBHAKAR	Internet of Things
COMPUTER SCIENCE AND ENGINEERING	DR. DINESH KUMAR TYAGI	AI & Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. DINESH KUMAR TYAGI	Cyber Security
COMPUTER SCIENCE AND ENGINEERING	DR. DINESH KUMAR TYAGI	Internet of Things/Wireless Sensor Network
COMPUTER SCIENCE AND ENGINEERING	DR. DINESH KUMAR TYAGI	5G Communication
COMPUTER SCIENCE AND ENGINEERING	DR. JYOTI GROVER	AI & Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. JYOTI GROVER	Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. JYOTI GROVER	Cyber Security
COMPUTER SCIENCE AND ENGINEERING	DR. JYOTI GROVER	Internet of Things/Wireless Sensor Network
COMPUTER SCIENCE AND ENGINEERING	DR. MAHIPAL PRITHVISINH JADEJA	Applications of Artificial Intelligence and Graph Neural Networks in Emerging Domains
COMPUTER SCIENCE AND ENGINEERING	DR. MAHIPAL PRITHVISINH JADEJA	Machine Learning on Graphs

COMPUTER SCIENCE AND ENGINEERING	DR. ASHISH KUMAR TRIPATHI	DATA CLUSTERING USING SWARM INTELLIGENCE
COMPUTER SCIENCE AND ENGINEERING	DR. ASHISH KUMAR TRIPATHI	DEEP LEARNING BASED DISASTER MANAGEMENT
COMPUTER SCIENCE AND ENGINEERING	DR. ASHISH KUMAR TRIPATHI	EXPLAINABLE AI FOR REMOTE SENSING BASED APPLICATIONS
COMPUTER SCIENCE AND ENGINEERING	DR. ASHISH KUMAR TRIPATHI	SWARM DRONE FOR CROP MONITORING
COMPUTER SCIENCE AND ENGINEERING	DR. LAVIKA GOEL	Explainable AI & Machine learning in agriculture
COMPUTER SCIENCE AND ENGINEERING	DR. LAVIKA GOEL	Natural Language processing using deep learning and Generative AI
COMPUTER SCIENCE AND ENGINEERING	DR. SMITA NAVAL	Cryptography
COMPUTER SCIENCE AND ENGINEERING	DR. SMITA NAVAL	Hardware Security
COMPUTER SCIENCE AND ENGINEERING	DR. DEEPAK RANJAN NAYAK	Medical Image Analysis using Deep Learning
COMPUTER SCIENCE AND ENGINEERING	DR. DEEPAK RANJAN NAYAK	Machine Learning, Image Processing and Explainable AI
COMPUTER SCIENCE AND ENGINEERING	DR. VIKASH KUMAR	AI-based Cybersecurity modeling for Critical Infrastructure
COMPUTER SCIENCE AND ENGINEERING	DR. VIKASH KUMAR	AI-Driven Intrusion Detection for Low- power IoT Devices
COMPUTER SCIENCE AND ENGINEERING	DR. SADBHAWNA	Latest Generative AI modeling based Image/Video Super-Resolution
COMPUTER SCIENCE AND ENGINEERING	DR. SADBHAWNA	Video Action Quality Assessment in various applications
COMPUTER SCIENCE AND ENGINEERING	DR. PRASANTA MAJUMDAR	Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. PRASANTA MAJUMDAR	Quantum Computing
COMPUTER SCIENCE AND ENGINEERING	DR. PRASANTA MAJUMDAR	AI and Machine Learning
COMPUTER SCIENCE AND ENGINEERING	DR. PRASANTA MAJUMDAR	AI and Machine Learning
ELECTRICAL ENGINEERING	DR. RAJIVE TIWARI	Smart grids
ELECTRICAL ENGINEERING	DR. RAJIVE TIWARI	Electric vehicle
ELECTRICAL ENGINEERING	DR. ROHIT BHAKAR	Smart Grids
ELECTRICAL ENGINEERING	DR. ROHIT BHAKAR	AI applications in Power System Operation
ELECTRICAL ENGINEERING	DR. ROHIT BHAKAR	Blockchain Technology
ELECTRICAL ENGINEERING	DR. ROHIT BHAKAR	Electric Vehicles
ELECTRICAL ENGINEERING	DR. PRERNA JAIN	Cyber Physical Systems
ELECTRICAL ENGINEERING	DR. PRERNA JAIN	AI and Machine Learning
ELECTRICAL ENGINEERING	DR. PRERNA JAIN	Cyber Security
ELECTRICAL ENGINEERING	DR. PRERNA JAIN	Smart Grid
ELECTRICAL ENGINEERING	DR. MANOJ FOZDAR	Operational issues in smartgrid
ELECTRICAL ENGINEERING	DR. MANOJ FOZDAR	Economics in smartgrid operations

ELECTRICAL ENGINEERING	DR. HEMANT KUMAR MEENA	Signal Processing
ELECTRICAL ENGINEERING	DR. HEMANT KUMAR MEENA	Image processing
ELECTRICAL ENGINEERING	DR. DIPTI SAXENA	Connected Vehicles for traffic flow management
ELECTRICAL ENGINEERING	DR. DIPTI SAXENA	Distribution System management
		Electrical Vehicles integrated Microgrids
ELECTRICAL ENGINEERING	DR. DIPTI SAXENA	management
ELECTRICAL ENGINEERING	DR. DIPTI SAXENA	Advanced Distribution System management
ELECTRICAL ENGINEERING	DR. AKHILESH MATHUR	Smart Grids
ELECTRICAL ENGINEERING	DR. AKHILESH MATHUR	Virtual Energy Storage
ELECTRICAL ENGINEERING	DR. AKHILESH MATHUR	Artificial Intelligence
ELECTRICAL ENGINEERING	DR. AKHILESH MATHUR	Machine Learning
ELECTRICAL ENGINEERING	DR. VINAY PRATAP SINGH	AI & Machine Learning
ELECTRICAL ENGINEERING	DR. VINAY PRATAP SINGH	Smart Grids
ELECTRICAL ENGINEERING	DR. VINAY PRATAP SINGH	Robotics
ELECTRICAL ENGINEERING	DR. VINAY PRATAP SINGH	Image Processing
ELECTRICAL ENGINEERING	DR. SATISH SHARMA	Cyber Security Application to Smart Grid
ELECTRICAL ENGINEERING	DR. SATISH SHARMA	Distributed Optimization in Smart Grid
ELECTRICAL ENGINEERING	DR. SARAVANA PRAKASH P	Power Electronic Converters
ELECTRICAL ENGINEERING	DR. SARAVANA PRAKASH P	Electric Vehicle
ELECTRICAL ENGINEERING	DR. SARAVANA PRAKASH P	DC-DC converters
ELECTRICAL ENGINEERING	DR. SARAVANA PRAKASH P	AC-DC converters' power quality
ELECTRICAL ENGINEERING	DR. MAN MOHAN GARG	Cyber Physical Energy System
ELECTRICAL ENGINEERING	DR. MAN MOHAN GARG	Virtual Energy Storage
ELECTRICAL ENGINEERING	DR. MAN MOHAN GARG	Smart Grids
ELECTRICAL ENGINEERING	DR. SURENDER HANS	Application of Machine Learning in Medical Robotics
ELECTRICAL ENGINEERING	DR. SURENDER HANS	Control Design for Autonomous Vehicle
ELECTRICAL ENGINEERING	DR. SURENDER HANS	Design of Robust Controller for Electric Vehicle
ELECTRICAL ENGINEERING	DR. SURENDER HANS	Application of Deep Learning in Speech and Image Processing
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. M. M. SHARMA	Design of Frequency Selective surfaces/Absorbers, Rasorbers for RF/ wireless communication
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. M. M. SHARMA	Study and design of the nature and structure of human intelligence using the Cognitive Architecture
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. M. M. SHARMA	Design and performance evaluation of planar antenna using AI for RF/ wireless communication
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. M. M. SHARMA	Design and performance evaluation of meta material surface using AI for 5G communication

ELECTRONICS AND COMMUNICATION ENGINEERING	DR. KAMALESH KUMAR SHARMA	Antenna design for 5G and beyond applications	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. D. BOOLCHANDANI	Analog Integrated Circuits	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. D. BOOLCHANDANI	MEMS Sensors	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. VINEET SAHULA	AI and Cognitive Approaches for language translation	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. VINEET SAHULA	AI Approaches for EDA/VLSI/IoT-CPS	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. VIJAY JANYANI	ML-Enhanced Optical Fiber Channel Estimation for High-Speed 5G	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. VIJAY JANYANI	AI-Driven Intelligent Optical Networks for 5G and Beyond	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RITU SHARMA	Cognitive Networks	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. GHANSHYAM SINGH	intelligent photonic system	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. GHANSHYAM SINGH	Al-enabled Silicon Photonics System Design	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. GHANSHYAM SINGH	Microelectronic and photonic device modeling	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. GHANSHYAM SINGH	AI-enabled Microelectronics System Designs	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. R. P. YADAV	Non Orthogonal Multiple Access for 5G	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. R. P. YADAV	28/38 GHz Dual Band Antenna for millimeter wave 5G Applications	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. R. P. YADAV	Wireless Communication	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. R. P. YADAV	MEMS	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. SATYASAI JAGANNATH NANDA	5G Communication	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. SATYASAI JAGANNATH NANDA	Image Processing/DSP	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. AMIT MAHESH JOSHI	AI/ML in Healthcare	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. AMIT MAHESH JOSHI	Security of Cyber Physical System	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. AMIT MAHESH JOSHI	Biomedical Circuit	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. SARTHAK SINGHAL	(RF/Wireless Communications) Design of Multiband/Wideband Microstrip Antenna For Wireless Applications	

ELECTRONICS AND COMMUNICATION ENGINEERING	DR. SARTHAK SINGHAL	(RF/Wireless Communications) Design of Multiband/Wideband Metasurfaces For Wireless Applications	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RAJENDRA MITHARWAL	Electromagnetic Radiations	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RAJENDRA MITHARWAL	Ground Penetrating Radars	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RAJENDRA MITHARWAL	High Frequency Selective Surfaces	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. RAJENDRA MITHARWAL	Triboelectric Effects	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. KULDEEP SINGH	AI based health care applications	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. KULDEEP SINGH	AI applications in Agriculture	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. MENKA	HEMT device- Emerging applications	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. MENKA	Advanced nano devices for circuit/memory or sensor applications	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. MENKA	HEMT device- Emerging applications in electrical domain	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. MENKA	Edge computing applications of nanodevices	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. DEEPAK BHARTI	Electronic Devices and Sensors	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. ILA SHARMA	Emerging Technologies in DSP and Filter Design	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. ILA SHARMA	Emerging Technologies in Biomedical signal processing	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. ILA SHARMA	Emerging Technologies in 5G Communication	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. ILA SHARMA	Digital Signal Processing	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. BHARAT CHOUDHARY	Analog and Digital VLSI Design	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. BHARAT CHOUDHARY	Nano Electronics Device Modelling & Simulation	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. BHARAT CHOUDHARY	Millimeter Wave Radar Sensing Circuits	
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. BHARAT CHOUDHARY	Mixed Signal Integrated Circuits	

### SPONSORSHIP CERTIFICATE (Required from Full-time Sponsored Candidates only)

(This should be typed on the letterhead of the Sponsoring Organization and enclosed with application for admission)

To, The Director MNIT, Jaipur Sub: Sponsoring of an employer for Ph.D. Programme.

We hereby Sponsor the candidature of Mr./Ms	who is working in this organization
for the lastyears and is presently holding the rank/position of .	for joining
his/her Ph.D programme in at your Institute as a Full Time with s	•
1	
2	
3	

His/her conduct and character is good.

The Institution/Organization would relieve him/her immediately for joining the above course, if selected for admission. We shall fully relieve him/her duties in the organization to devote sufficient time for Ph.D.

Place:	Signature of Head of the Institution/Organization with seal	
Date:	Name	
	Designation	

\*Candidate should also give a separate undertaking that he would fulfill the attendance requirements of all the courses undertaken by him for fulfillment of the course pursued.

Annexure II

#### NO OBJECTION CERTIFICATE

#### (Required from Candidates Seeking Admission on Part-time Basis)

	(On a	letterhead of the sponsoring	organiz	zation 8	& end	closed with a	pplication	for adı	mission)	
unders	signed	is pleased to permit Mr./Ms.					. who is we	orking	in this organiza	tion
the	last		years	and	is	presently	holding	the	rank/position	of
		for pursuing	the pr	ogrami	me (	course) at I	MNIT Jaip	ur in t	the Departmen	t of
			with s	speciali	zatic	on in the follo	owing area	S:		
							-			
	the 	undersigned the last	undersigned is pleased to permit Mr./Ms. the last for pursuing	undersigned is pleased to permit Mr./Ms the last years for pursuing the pr with s	undersigned is pleased to permit Mr./Ms the last years and for pursuing the program with speciali	undersigned is pleased to permit Mr./Ms the last years and is for pursuing the programme ( with specializatio	undersigned is pleased to permit Mr./Ms	undersigned is pleased to permit Mr./Ms	undersigned is pleased to permit Mr./Ms	

3. .....

His/her conduct and character is good. We are ready to relieve him/her during study hours (usually about 6 hours of classroom instructions in a week) to undergo the Ph.D. programme as per time-table of the Institute, which follows slot system. We understand that the duration of course work is expected to be 5 semesters for part-time Ph.D. programme, while total duration is expected to be 6 years for part-time Ph.D.

Place:	Signature of Head of the Institution/Organization with seal	
Date:	Name	
	Designation	

## Annexure III

# OBC Undertaking

# Declaration / undertaking - for OBC Candidates only

l,	son/daughter of Shri	_ resident of village/town/city
district S	tate hereby declare that I belong to the	community which is recognized as a
backward class by the	Government of India for the purpose of	reservation in services as per orders contained in
Department of Personr	nel and Training Office Memorandum No	0.36012/22/93- Estt. (SCT), dated 8/9/1993. It is also
declared that I do not I	pelong to persons/sections (Creamy Lay	rer) mentioned in Column 3 of the Schedule to the
above referred Office	Memorandum, dated 8/9/1993, which	is modified vide Department of Personnel and
Training Office Memor	randum No.36033/3/2004 Estt.(Res.) da	ted 9/3/2004.I also declare that the condition of
status/annual income f	for creamy layer of my parents/guardia	an is within prescribed limits as on financial year
ending on March 31, 20	24.	

Place: Signature of the Candidate

Date:

Declaration/undertaking not signed by Candidate will be rejected

# **DECLARATION FORM**

Id. No.	
Programme:	Ph.D.
Department	
Name	
Son/Daughter/Wife of	

I declare that:

- I shall not receive any salary, scholarship, stipend or any other financial benefit from any other source except the institute assistantship during the period of my study at MNIT. (except top up grants from Institute Project/Industry and income from participating in consultancy projects of faculty of the Institute)
- 2. I shall not accept and join any job without obtaining prior permission of the institute.
- 3. I understand that I shall not be permitted to leave the programme midway and shall complete my programme successfully. Failing which I shall pay back entire assistantship received from the institute by me.
- 4. I also understand that in case I withdraw from the enrolled programme, the caution money shall not be refunded to me.

Signature of the student Email Address Mobile No. Dated:

# Contact Details of DPGC Convener of the Department/Centre

S. No.	Department/Centre	Email	
1	COMPUTER SCIENCE AND ENGINEERING	dpgc.cse@mnit.ac.in	
2	ELECTRICAL ENGINEERING	dpgc.ee@mnit.ac.in	
3 ELECTRONICS AND COMMUNICATION		dpgc.ece@mnit.ac.in	
	ENGINEERING		