

# राष्ट्रीय प्रौद्योगिकी संस्थान मिजोरम NATIONAL INSTITUTE OF TECHNOLOGY MIZORAM

(An Institute of National Importance under Ministry of Education, Govt. of India) CHALTLANG, AIZAWL, MIZORAM – 796 012

Date: 03/04/2023

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Ref. No.:NITMZ/ACAD/Ph.D/2023-24 (A)/4526

## Admission into Ph.D Program 2023-24

Applications are invited for admission into the Ph.D. program in the following Departments (July-December 2023 Session):

Sl. No.	Name of the Department	Ph.D Category Advertised	Specialization/Area		
Computer Science & Engineering (CSE)		Full-Time (Regular, Sponsored, Self- financed) Part-Time	Natural Language Processing, Machine Learning and Deep Learning, Social Robotics, Artificial Intelligence, Computer Vision Applications, Deep Learning Applications, Wireless network Communication		
2.	Electronics & Communication Engineering (ECE)	Full-Time (Regular)	Nano-microelectronics, Green nano-technology, Solid state electronics, Semiconductor devices, VLSI, Biosensors, Optoelectronic devices.  Microwave Communication, Microwave Devices, Communication, Image Processing, Electromagnetics.  TCAD Simulation & Modeling of Compound Semiconductor (III-V devices), AlGaN/GaN HEMTs.		
		Full-Time (Sponsored, Self-financed) Part-Time	Nano-microelectronics, Green nano-technology, Solid state electronics, Semiconductor devices, VLSI, Biosensors, AI, Optoelectronic devices.  Antennas, Metamaterials, Microwave Imaging, MMIC, Wireless Communication, THz Technology. Microwave Communication, Microwave Devices, Communication, Image Processing, Electromagnetics.  TCAD Simulation & Modeling of Compound Semiconductor (III-V devices) AlGaN/GaN HEMTs.		

3.	Electrical Engineering (EE)	Full-Time (Regular, Sponsored, Self- financed) Part-Time	Micro-grid, Non-conventional Energy sources Integration and Control, Power System, Battery and Electric-Vehicle based power management and control.  Power System, High Voltage, Power and Energy Systems, Renewable Energy Systems, Power Electronics and Machine Drive Systems, Control systems, Control Engineering, Magnetic Levitation System and Magnetic Bearing System Smart Grid and E-mobility, Renewable Energy Integration and Control, Energy management.  Power Electronics converter design, Electric Drives and Control, E-mobility energy management, Electric vehicle and charging station design.		
4.	Mechanical Engineering (ME)	Full-Time (Regular, Sponsored, Self-financed) Part-Time	Fluid and Thermal Engineering, (Energy Conversion Technology, Drying Technology, Solar Energy Wind Energy).  Hydro Kinetic Energy, Aerodynamics, Optimisation Techniques, Computational Fluid Dynamics.  Industrial engineering and management, materials, Additive manufacturing (Automation in welding, solid state welding, underwater welding, etc.)		
5.	Civil Engineering (CE)	Full-Time (Regular, Sponsored, Self- financed) Part-Time	Geotechnical Engineering, Structural Engineering, and Environmental Engineering		
6.	Basic Science & Humanities & Social Sciences (BS & HSS)				
i)	Physics	Full-Time (Regular)	Materials Science/Experimental Condensed Matter Physics		
ii)	Chemistry	Full-Time (Regular, Project Staff)	Colloids, Kinetics, Nanomaterials		
iii)	Mathematics	Full-Time (Regular)	Nonsmooth optimization vector optimization, robust optimization, equilibrium, switching and vanishing constraints optimization problems		
		Full-Time (Regular) Part-Time	Computational Fluid Dynamics		
iv)	Economics	Full-Time (Regular) Part-Time	Development Economics, Political Economy, Peace and Conflict Studies		

7.	Center of		Nanoelectronics,	Energy,	Grid S	System,
	Interdisciplinary	Part-Time	Semiconductor	devices,	VLSI,	Data
	Research (CIR)		Science, AI, Intel	lligent Eng	ineering	

### **Eligibility Criteria:**

#### Ph.D in Engineering:

Master's Degree in the area of Engineering/Technology (ME/MTech/MSc etc) from a Recognized University/ Institute with a minimum CGPA of 6.5 in 10 point scale or 60% of marks in the qualifying examinations. (**GATE/NET not required**)

OR

Bachelor's degree in Engineering/Technology in a relevant area with a minimum CGPA of 7.5 or 70% of marks and with a valid GATE score. The requirement of valid GATE score shall apply to only those who seek admission under Full-time Category.

OR

3rd Year BTech students from NIT Mizoram on completion of their 3rd year (6<sup>th</sup> semester) with CGPA 8.0 and above are eligible for admission for PhD program in Regular Category. The candidates will be waived from the requirement of GATE/NET and will be provided Institute Fellowship as Full-time Regular Category students for 5 years for completion of PhD. Also a submission of a high level research proposal in the proposed research area is required in line with the research area of concerned Supervisor.

#### Ph.D. in Science (Physics/Chemistry/Mathematics):

Master's degree in the area of Physics/Chemistry/Mathematics from a recognized University/ Institute with a minimum CGPA of 6.5 in 10 point scale or 60% of marks in the qualifying examinations. (GATE/NET not required)

#### Ph.D. in HSS (Economics/English):

Master's degree in Economics/English from a recognized University/ Institute with a minimum CGPA of 6.0 in 10 point scale or 55 % marks in the qualifying examinations. (GATE/NET not required)

#### **CATEGORIES OF Ph.D. STUDENTS**

The Institute admits Ph.D. students under the following categories. However, admission with respect to this advertisement will be held for the advertised categories only.

#### 2.1. Full-time:

- i. **Regular**: He/she receives assistantship from the Institute or fellowship from any recognized funding agency as per institute norms and other qualifications.
- ii. **Sponsored**: He/She is sponsored by a recognized R&D Organization/Institute/Industry etc. for doing Research, but gets no fellowship from the Institute.
- iii. Self-financed: He/She works full time for the Degree but gets no fellowship from the

<sup>\*</sup>For SC/ST candidates, there is a relaxation of 0.5 CGPA or 50% of marks.

<sup>\*</sup>Conversion from CGPA to percentage or vice-versa shall not be allowed.

Institute.

application portal.

- iv. **Project-Staff**: He/ She gets fellowship from the Sponsored Project, works full-time for the Degree and on completion of the Project before the award of the Degree, the category will be changed to Self-financed Mode.
- **2.2. Part-time**: He/She in this category works without fellowship from the Institute and should be employed. If Permanent Employee, he/she should provide NOC from the Employer.

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How	to Apply:
	Interested candidate(s) satisfying the eligibility criteria may submit their online
	application at
	https://nitmzadmission.mastersofterp.in/PHDLogin.aspx
	Read this Advertisement and the Instructions mentioned herewith, carefully, to fill in the
	online application form given in the online portal.
	Self-attested copies of necessary supporting documents and receipt of online payment (of
	Rs. 200/-for General/OBC OR Rs. 100/- for SC/ST); in favour of "Registrar, NIT
	Mizoram" payable at SBI, Bawngkawn Branch, Aizawl, Mizoram should be uploaded in
	the Application Portal. Transaction ID should be clearly mentioned in the Application
	Form.
	Name of Account: National Institute of Technology Mizoram
	SBI Account No.: 33755447886
	IFSC: SBIN0007059
	Women candidates are exempted from the payment of the application fee.
	The required document is to be furnished along with the application by candidates
	applying under various categories.
	Form I: Sponsorship Letter (for the Sponsored Category).
	Form II: No Objection Certificate (NOC) from the Institute (for Project
	Staff category).
	Form III: No Objection Certificate from the Employer (for Part-Time
	Category).
	Form V: No Objection Certificate (for NIT Mizoram Employee - Part-Time
	Category).
	Candidates should submit the above Forms (Form I/II/III/V) only in the prescribed format

Names of the short-listed candidates for attending test/interview shall be made available on the Institute's website or may be intimated by e-mail by the respective Head of the Department.

(provided in the Ph.D. Regulations of the Institute). No other format will be accepted.

□ Candidates are advised to mention their Contact No. & Email IDs correctly in the

☐ Applicants can apply through the portal upto 3<sup>rd</sup> May, 2023 till 5:00 PM.

Ш	Hard copy of the filled-in application form complete in all respect to be produced at the
	time of Written-Test / Interview/ or as per the instruction of Institute's Authority. If the
	candidate(s) fail to produce the original application form and supporting documents at
	the time of test, or if their claims are found to be incorrect on verification, their
	candidature shall be cancelled automatically.
	List of finally selected candidates shall be published on the Institute's website.
	Candidates are advised to visit the Institute's website regularly. Any modification/
	changes/additions in the advertisement, if required, will be uploaded only in the Institute's
	Website.
	The number of candidate(s) to be selected will be decided afterward.

#### **Important Dates:**

- Application through the online Application Portal to be filled and the supporting documents to be uploaded till: 3<sup>rd</sup> May, 2023 upto 5:00 PM.
- Display the list of provisionally Shortlisted Candidates: 12<sup>th</sup> May, 2023.
- Submission of hard copy of application and the supporting documents, verification of the documents:

#### Will be announced in the Institute's Website.

- Method of selection, verification of documents etc. shall be decided by the competent
  authority and the information in this regard shall be uploaded in the Institute's website.
  Written Test, Interview and document verification etc. to be conducted by concerned
  Departments.
- Test/Interview of the Shortlisted Candidates: 13th -18th May, 2023
- Display of Final list of Selected Candidates: 26<sup>th</sup> May, 2023
- Online Payment of fee for selected students: 2<sup>nd</sup> -7<sup>th</sup> June, 2023 (Once candidate takes admission and fees is paid the fees cannot be refunded)
- Registration for selected students: 24<sup>th</sup> -28<sup>th</sup> July, 2023 [only Physical registration for Full-Time candidates]
- Start of Semester: 1st August, 2023

Sd/-Registrar NIT Mizoram

NB: Number of candidates for each Department shall be decided by the Competent Authority.