



राष्ट्रीय प्रौद्योगिकी संस्थान मिज़ोरम

NATIONAL INSTITUTE OF TECHNOLOGY MIZORAM

(An Institution of National Importance under Ministry of Education, Govt. of India)

चलत्लांग, आइज़ोल, मिज़ोरम / CHALTLANG, AIZAWL, MIZORAM – 796012

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F. No.:NITMZ/ACAD/Ph.D/2024-25 (S)/1905

Date: 30 SEP 2024

Admission into Ph.D Program Spring Semester 2024-25

Applications are invited for admission into the Ph.D. program in the following Departments (Jan-June 2025 Session):

Sl. No.	Name of the Department	Ph.D Category Advertised	Specialization/Area
1.	Electronics & Communication Engineering (ECE)	Full-Time (Regular) (Under Institute and Visvesvaraya PhD Scheme) and Full-Time (Sponsored, Self-financed) Part-Time	Nano-microelectronics, TCAD, Quantum ATK simulations, Solid state electronics, Semiconductor devices, VLSI, Biosensors, IOT, 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) AlGaIn/GaN HEMTs.
2.	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.

3.	Mechanical Engineering (ME)	<p>Full-Time (Regular, Sponsored, Self-financed)</p> <p>Part-Time</p>	<p>Fluid and Thermal Engineering, (Energy Conversion Technology, Drying Technology, Solar Energy Wind Energy). Hydro Kinetic Energy, Aerodynamics, Optimisation Techniques, Computational Fluid Dynamics.</p> <p>Industrial engineering and management, materials, Additive manufacturing (Automation in welding, solid state welding, underwater welding, etc.)</p> <p>Additive Manufacturing, 3D printing, laser Materials Interaction, Laser powder bed fusion (LPBF), Direct Energy Deposition (DED), Metal Matrix Composites, Laser Cladding, Advanced Manufacturing Processes (EDM, ECM, AWJ, EBM)</p>
4.	Civil Engineering (CE)	<p>Full-Time (Regular, Self-financed, Sponsored)</p> <p>Part-Time</p>	<p>Structural Engineering, Geotechnical engineering, Transportation engineering, Environmental Engineering</p>
5.	Computer Science & Engineering (CSE)	<p>Full-Time (Regular, Sponsored, Self-financed)</p> <p>Part-Time</p>	<p>Natural Language Processing, Machine Learning and Deep Learning, Social Robotics, Artificial Intelligence, Computer Vision Applications, Deep Learning Applications, Wireless networks, Communication, Network Security</p>
6.	Basic Science & Humanities & Social Sciences (BS & HSS)		
i)	English	Full-Time (Regular)	Indian Writing in English, War & Trauma literature, Diaspora studies
ii)	Mathematics	Full-Time (Regular)	Nonsmooth optimization vector optimization, robust optimization, equilibrium, switching and vanishing constraints optimization problems, Numerical Methods for Fractional PDEs, Numerical Approximations of Fractional Derivatives, Variable and Distributive Order PDEs, and Operational Matrix Methods.
iii)	Economics	Full-Time (Regular)	Development Economics, Political Economy, Peace and Conflict Studies
iv)	Physics	Full-Time (Regular)	Materials Science/Experimental Condensed Matter Physics
v)	Chemistry	Full-Time (Regular)	Colloids, Kinetics, Nanomaterials, Polymers, Electrochemistry
7.	Center of Interdisciplinary Research (CIR)	Part-Time	Nanoelectronics, Energy, Grid System, Semiconductor devices, VLSI, Data Science, AI, Intelligent Engineering

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 (6th semester) with CGPA 8.0 and above are eligible for admission for PhD program in Regular Category. Also NIT Mizoram MTech candidates on completion of their 1st year (2nd semester) with CGPA 8.0 and above are eligible for admission for PhD program in Regular Category. All these 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**)

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

**Conversion from CGPA to percentage or vice-versa shall not be allowed.*

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 Institute.
- 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.

How to Apply:

- Interested candidate(s) satisfying the eligibility criteria may submit their **online application at**
<https://admission.nitmz.ac.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 should be uploaded in the Application Portal.
- OBC (NCL) certificate issued on or after April 1, 2024 (01.04.2024).
- Candidates are to pay the application fees through the portal itself before submitting their application of Rs. 200/-for General/OBC OR Rs. 100/- for SC/ST.
- 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 (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 application portal.

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.

- Applicants can apply through the portal upto **8th November, 2024 till 5:00 PM**.
- 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.
- For any queries regarding the application candidates may contact the concerned **Head of the Department**.

Important Dates:

- Application through the online Application Portal to be filled and the supporting documents to be uploaded till: **8th November, 2024 upto 5:00 PM.**
- Display the list of provisionally Shortlisted Candidates: **13th November, 2024.**
- 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: **14th -20th November, 2024**
- Display of Final list of Selected Candidates: **29th November, 2024**
- Online Payment of fee for selected students: **1st -10th December, 2024**
(Once candidate takes admission and fees is paid the fees cannot be refunded)
- Registration and joining for selected students: **13th – 17th January, 2025 [compulsory Physical registration for Full-Time (Regular, Sponsored, self-financed) candidates]. Physical joining and registration date as given by the Supervisor will be considered as the date for start of stipend for Full-Time (Regular) candidates.**
- Start of Semester: 13th January, 2025.

**Sd/-
Registrar
NIT Mizoram**

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