

# 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

Phone/Fax: 0389-2391236 / 0389-2391774 Email: <u>nit mizoram@nitmz.ac.in</u> Website: www.nitmz.ac.in Date: 18/11/2022

#### Ref. No.: NITMZ/ACAD/Ph.D/2022-23 (S)/3663

# Admission into Ph.D Program 2022-23

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

S1. No.	Name of the Department	Ph.D Category Advertised	Specialization/Area
1.	Civil	Full-Time (Regular)	Structural Engineering,
	Engineering	Full-Time	Environmental Engineering
	(CE)	(Sponsored/ Self-	
		financed)	
		Part-Time	Structural Engineering,
			Environmental Engineering,
			Geotechnical Engineering
	Mechanical	<b>Full-Time</b> (Regular)	Fluid and Thermal Engineering,
	Engineering		(Energy Conversion
	(ME)		Technology, Drying Technology,
			Wind Energy)
2.			Design and Manufacturing
			(Welding & additive
			manufacturing, robotics, and
			automation in welding, Welding
			mechanics etc.)
	Computer	Full-Time (Regular)	Natural Language Processing,
	Science &	(Under Institute	Machine learning
	Engineering	and Visvesvaraya	
3.	(CSE)	PhD Scheme) Full-Time	
		(Sponsored/ Self- financed)	
		Part-Time	
	Electronics &	Full-Time	Nanoelectronic systems and devices,
4.	Communicati	(Regular)	Semiconductor devices, Biosensors,
	on	(Under Institute	Nanomaterial electronics,
	Engineering	and Visvesvaraya	Optoelectronic devices
	(ECE).	PhD Scheme)	TCAD Simulation & Modeling of
	· /	*	Compound Semiconductor (III-N
			devices), AlGaN/GaN HEMTs.

5.	Electrical & Electronics Engineering (EEE)	Full-Time (Regular) Full-Time (Sponsored/ Self- financed) Part-Time	Microwave Devices, Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics TCAD Simulation & Modeling of Compound Semiconductor (III-N devices), AlGaN/GaN HEMTs. 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, Renewable Energy Systems, Power Electronics and Machine Drive Systems, Control systems, Control Engineering Smart Grid and E-mobility,
	Electronics Engineering	(Regular) <b>Full-Time</b> (Sponsored/ Self- financed)	Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics TCAD Simulation & Modeling of Compound Semiconductor (III-N devices), AlGaN/GaN HEMTs. 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
	Electronics Engineering	(Regular) <b>Full-Time</b> (Sponsored/ Self- financed)	Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics TCAD Simulation & Modeling of Compound Semiconductor (III-N devices), AlGaN/GaN HEMTs. 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,
	Electronics Engineering	(Regular) <b>Full-Time</b> (Sponsored/ Self- financed)	Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics TCAD Simulation & Modeling of Compound Semiconductor (III-N devices), AlGaN/GaN HEMTs. Micro-grid, Non-conventional Energy sources Integration and Control, Power System, Battery and Electric-Vehicle based power management and control Power System, High Voltage,
	Electronics Engineering	(Regular) <b>Full-Time</b> (Sponsored/ Self-	Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics TCAD Simulation & Modeling of Compound Semiconductor (III-N devices), AlGaN/GaN HEMTs. Micro-grid, Non-conventional Energy sources Integration and Control, Power System, Battery and Electric-Vehicle based power
	Electronics Engineering	(Regular) <b>Full-Time</b>	Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics TCAD Simulation & Modeling of Compound Semiconductor (III-N devices), AlGaN/GaN HEMTs. Micro-grid, Non-conventional Energy sources Integration and Control, Power System, Battery
		(Regular)	Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics TCAD Simulation & Modeling of Compound Semiconductor (III-N devices), AlGaN/GaN HEMTs. Micro-grid, Non-conventional Energy sources Integration and
	Electrical &	Full-Time	Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics TCAD Simulation & Modeling of Compound Semiconductor (III-N devices), AlGaN/GaN HEMTs.
			Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics TCAD Simulation & Modeling of Compound Semiconductor (III-N
			Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics
			Microwave Communication, Microwave Devices, Communication
			Microwave Imaging, MMIC, Wireless Communication, THz Technology
		financed) Part-Time	Antennas, Metamaterials,
		<b>Full-Time</b> (Sponsored/ Self-	Nano-microelectronics, Green nano- technology, Solid state electronics.
			Microwave Communication, Microwave Devices, Communication systems, Image Processing, Electromagnetics
			Antennas, Metamaterials, Microwave Imaging, MMIC, Wireless Communication, THz Technology

i)	Chemistry	<b>Full-Time</b> (Regular, Self - finance)	Surface chemistry, Electrochemistry, Chemical kinetics, nanomaterials
ii)	Mathematics	<b>Full-Time</b> (Regular, Self- finance) <b>Part-Time</b>	Vector optimization, Mathematical Programming, Nonsmooth optimization, Fluid Dynamics
iii)	Economics	<b>Full-Time</b> (Regular, Part-Time)	Development Economics, Peace and Conflict Studies, Environmental Economics
iv)	English	<b>Full-Time</b> (Regular)	Post-colonial Literature, Feminism, Eco-criticism, Indian Writing in English

## **Eligibility Criteria:**

## Ph.D in Engineering:

Masters Degree in the area of Engineering/Technology 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 score is compulsory for Full-Time Regular candidates.

#### 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.

## 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 10point scale or 60% of marks in the qualifying examinations and qualify the NET/GATE. NET/GATE shall not be compulsory for Sponsored, Self-Financed, Project-Staff, and Part-Time categories. No Institute scholarship to be awarded for these types of students.

## 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 10point scale or 55 % marks in the qualifying examinations and qualify the NET.

\*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:

- Regular: He/she receives assistantship from the Institute or fellowship i. from recognized funding depending any agency on GATE/NET(UGC/CSIR)/other qualifications.
- Sponsored: He/She is sponsored by recognized R&D ii. а Organization/Institute/Industry etc. for doing Research, but gets no fellowship from the Institute.
- Self-financed: He/She works full time for the Degree but gets no iii. fellowship from the Institute.
- Project-Staff: He/ She gets fellowship from the Sponsored Project, works iv. 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.

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://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 the account mentioned below 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 (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 up to 15<sup>th</sup> December, 2022 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.
- The session is likely to start from Second Week of January 2023 (Tentative). 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: 15<sup>th</sup> December, 2022 up to 5:00 PM.
- Display the list of provisionally Shortlisted Candidates: 19th December, 2022. (Tentative)
- 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: 20<sup>th</sup> to 25<sup>th</sup> December, 2022 (Tentative)
- Display of Final list of Selected Candidates: 4<sup>th</sup> January, 2023. (Tentative)
- Online Payment of fee for selected students and Registration for selected students: **09-14 January,2023 (Tentative)**
- Start of Semester: **16th January, 2023** (Tentative)

Sd/-Registrar NIT Mizoram

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