

MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY, BHOPAL

Ref. No.Acad/2021/1419

Date : 25/11/2021

NOTICE

All qualified candidate for Ph.D (2021-22) interview are required to give their preference of **prime area of research** available in the respective Department. Candidate who have applied for more than one department are required to give preference for respective departments separately. Prescribed form shall be made available before the interview.

PRIME AREAS OF RESEARCH

1) Department Name: Civil Engineering

1. Environmental Engineering
2. Geoinformatics (Surveying & geology)
3. Geotechnical Engineering
4. Structural Engineering
5. Transportation Engineering
6. Water recourses Engineering & Hydropower Engineering/River Engineering

2) Department Name: Mechanical Engineering Department

1. Design
2. Thermal
3. Production

3) Department Name: Electrical Engineering Department

1. Power System
2. Power Electronics & Electrical Drives
3. Renewable Energy Systems
4. Control & Instrumentation



4) Department Name: Electronics and Communication Engineering (ECE)

1. VLSI and Embedded system.
2. Communication System.
3. Signal Processing

5) Department Name: Computer Science & Engineering

1. Artificial intelligence and Machine Learning
2. Data Mining and Information Retrieval
3. High performance computing
4. Information security

6) Department Name: Materials and Metallurgical Engineering

1. Optical and Magnetic Materials
2. Corrosion and oxidation
3. Processing metallurgy
4. Metal joining
5. Ceramic and Nano materials
6. Mechanical behaviour

7) Department Name: Department of Chemical Engineering

1. Wastewater treatment and pollution control
2. Advanced separation technology
3. Catalysis and reaction engineering
4. Advanced materials

8) Department Name: Department of Physics

1. Condensed Matter Physics and Nanomaterials



9) Department Name: Energy Centre

1. Multi level Inverter
2. Energy Audit
3. Micro Grid issues
4. Bio Energy, Bio Fuel

10) Department Name: Mathematics, Bioinformatics and Computer Applications

Mathematics/ Bioinformatics		Computer Applications	
M1	Mathematical Modelling and Simulation	C1	Cognitive Science
M2	Biomathematics	C2	Artificial Intelligence
M3	Computational Biology	C3	Data Science
M4	Bioinformatics	C4	Machine Learning
M5	Financial Mathematics	C5	Information Retrieval
M6	Computer vision and Mathematical Imaging	C6	Internet of Things (IoT)
M7	Image Processing and Machine Learning	C7	Wireless sensor networks/ Next Generation Networks
M8	Cryptography and Network Security	C8	Soft Computing
M9	Cyber security	C9	Software quality management
M10	ILL-posed Problems	C10	Data Mining

11) Department Name: Architecture and Planning

1. Architectural Studies
2. Planning Studies
3. Environment Studies
4. Transportation Studies



12) Department Name: Chemistry

1. Water Treatment, Adsorption
2. Polymer Composite, Natural Product
3. Nanomaterials and catalysis, Organic synthesis
4. Photophysics of Nanomaterials
5. Material Chemistry, Thermoelectric and Gas sensor

13) Department: Humanities & Social Sciences

1. English Literature/ English Language
2. Public Policy/Administration
3. Economics
4. Psychology/Mental Health

14) Department Name: Management Studies

1. Marketing Management
2. Financial Management
3. Human Resource Management
4. General Management

15) Department Name: Biological Science & Engineering

1. Genomics, Environmental Microbiology
2. Bioinformatics and Proteomics and Natural Products
3. Computational Biology and Plant Tissue Culture
4. Molecular Signalling, Microbial Infections , Host Pathogen Interaction


Assistant Registrar (Academic)