# SVKM's NMIMS Deemed-to-be University Mukesh Patel School of Technology Management & Engineering

## Ph.D. in Engineering & Technology Management (2021 Batch)

### **Instruction Sheet**

#### 1. Programmes & Specialisation:

- Ph.D. Engineering: Electronics & Telecommunication, Computer, Information Technology, Civil Engineering, Mechanical Engineering, Chemical, Applied Physics, Applied Chemistry, Applied Mathematics, English / Communication Skill, and Data Science.
- Ph.D. Technology Management

#### 2. Eligibility and Admission Criteria:

#### A) Ph.D. (Engineering):

Candidates for admission to the Programme shall have a Master's degree (M.E./M.Tech.) /(M.Phil / M. Sc. for Applied Physics, Applied Chemistry & Applied Mathematics). Minimum 2 years Programme or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

#### B) Ph.D. (Technology Management):

Candidates for admission to the Programme shall have a Master's degree M.E./M.Tech. / (MBA with B.E./B.Tech.) (Minimum 2 years Program) / M.C.A. or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized

by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

#### Note:

- Candidates appearing or awaiting for final year result are **NOT ELIGIBLE** to apply. Candidates
  are required to submit marksheet at the time of admission.
- Candidates who have cleared their graduation by doing a part-time course or through distance learning, correspondence courses, externally, open school from recognized University are eligible to apply & register as per UGC guidelines.
- o Candidates has to choose specialization based on specialization at Master program
- Ph.D. is a full time program. During first year of the program, all students will have to complete Pre-Ph. D. course work. On successful completion of Pre-Ph.D. course work student will be registered for Ph. D.
- 3. Duration of the Programme: Minimum 3 including course work & Maximum 6 Years (full time)

Intake: (for 2021 Batch):

Sr	Department	Eligibility	Campus	Specialization	Seats
No 1	Electronics & Telecommunic ation Engineering	Masters degree in Computer, Information Technology, Electronics, Electronics & Tele-communication Engineering, Electrical, Mechatronics.		<ul> <li>Soft Computing</li> <li>Bio-Medical Engineering</li> <li>Power Electronics</li> <li>Networking</li> <li>Signal and speech processing</li> <li>Computational neuro-science</li> <li>Wireless communication</li> <li>Signal processing</li> <li>Machine learning</li> <li>Architectural design,</li> <li>Approximate computation</li> <li>VLSI Design Optimization, Placeand Route Algorithms, Advanced Logic Design, WSN,</li> </ul>	3
				Wearable Electronics and Remote Health Monitoring  Total	11
2	Computer Engineering	Masters degree in Computer, Information Technology, Electronics, Electronics &		<ul><li>Block chain Technology</li><li>System Security</li><li>Cloud Computing</li></ul>	2
		Tele-communication Engineering, Electrical, Mechatronics.	Shirpur	<ul><li>Soft computing</li><li>Machine learning</li><li>Fog and Edge computing</li></ul>	2

3	Information Technology	Masters degree in Computer, Information Technology,	Navi Mumbai Indore	<ul> <li>Dependable Computer         Architecture</li> <li>Hardware Security</li> <li>Graph Theory</li> <li>Machine Learning, Information         Retrieval</li> <li>Renewable Energy, Solar energy,         wind energy, biomass energy,         tidal energy</li> <li>Total</li> <li>IoT</li> <li>Wireless Sensor Networks</li> </ul>	1 4 9 7
		Electronics, Electronics &Telecommunication Engineering, Electrical, Mechatronics.	Shirpur	<ul><li>Data Mining</li><li>Data science</li><li>Soft computing</li></ul>	2
4	Civil Engineering	Masters degree in Civil Engineering, Construction.	Mumbai	<ul> <li>Transportation Engineering</li> <li>Geotechnical Engineering</li> <li>Construction management</li> <li>Water Resource Engineering</li> <li>Earth Sciences</li> <li>Structural Engineering</li> </ul>	<b>9</b> 6
			Jpui	Total	7
5	Mechanical Engineering	Masters degree in Mechanical, Production, Mechatronics, Automobile, Automation, Robotics Engineering, Textile Machinery.	Mumbai	<ul> <li>Dynamic modeling</li> <li>Linear and Nonlinear Control</li> <li>Robotics and mechatronics</li> <li>Automation</li> <li>Digital Manufacturing</li> <li>Logistics and Supply Chain</li> <li>Industrial Internet of things</li> <li>Operations</li> <li>Heat Transfer</li> <li>Thermal Aspects of manufacturing processes</li> <li>Computational Fluid Dynamics</li> <li>Energy Management</li> <li>Solar Thermal Systems</li> <li>Alternative fuels in IC engines</li> <li>Off shore structures</li> <li>Wind turbines</li> </ul>	8
			Shirpur	<ul><li>Thermal engineering</li><li>Material design</li><li>Industrial design</li></ul>	3
				Total	11
6	Chemical Engineering	Masters degree in Chemical Engineering	Mumbai	<ul> <li>Reaction kinetics</li> <li>Nano material Synthesis</li> <li>Green and sustainable engineering</li> </ul>	2

				• Catalysis	
			<u> </u>	Total	2
7	Applied Physics	M.Phil. or Masters degree in Applied Physics	Mumbai	<ul> <li>Graphene nanostructure</li> <li>Material Science and condensed matter Physics</li> <li>Applied Physics</li> <li>Microwave and Plasma Physics</li> </ul>	7
			Shirpur	Nonlinear Optics and nano- materials	2
			Indore	Atomic Physics	2
				Total	11
8	Applied Chemistry	M.Phil. or Masters degree in Applied Chemistry	Mumbai	<ul> <li>Surfactant development</li> <li>Polymer materials</li> <li>Active Pharmaceuticals intermediate (API) synthesis</li> <li>Organic synthesis using green chemistry</li> <li>Catalysis and Nano Material research.</li> <li>Sustainable Engineering Systems, Organic Synthesis and Green Chemistry.</li> <li>Organic process development.</li> <li>Organic and inorganic synthesis,</li> </ul>	7
			Indore	Electrochemistry, Material chemistry and Molecular Docking     Organic Chemistry	2
					11
9	Applied Mathematics	M.Phil. or Masters degree in Applied Mathematics	Mumbai	<ul> <li>Integral transforms and special functions</li> <li>Computational fluid dynamics</li> <li>Fractal Geometry , Discrete Mathematics</li> </ul>	5
			Shirpur	<ul> <li>Topological Data Analysis,</li> <li>Abstract Harmonic Analysis,</li> <li>Non-Newtonian fluids,</li> <li>Similarity analysis</li> </ul>	2
			Navi	Thermoelasticity, heat	
			Mumbai	conduction applications	1
			Indore	<ul> <li>Fixed point theory and it's applications, Predictive Analytics</li> </ul>	2
			]		2

				Differential Equations with     Application in Control     Problems.	
			1	Total	12
10	Data Science	<ul> <li>Masters degree in Data Science and Analytics</li> <li>Computer Science Engineering</li> <li>Electrical Engineering</li> <li>Information Technology</li> <li>Electronics and Telecommunications Engineering,</li> <li>Instrumentation Engineering</li> <li>Artificial Intelligence</li> </ul>	Mumbai	<ul> <li>Machine Learning</li> <li>Deep Learning</li> <li>Data Science</li> <li>Statistics</li> <li>Financial Analytics</li> <li>Health Care</li> <li>Predictive Modeling</li> <li>Artificial Intelligence</li> <li>OR areas very similar to above list and related fields</li> </ul>	2
			1	Total	2
11	Technology Management	Masters degree in any of the following:  • Business Management (provided Bachelor's degree in any branch of Engineering)	Mumbai	<ul> <li>Finance- 1</li> <li>Economics- 2</li> <li>Operations &amp; Supply chain- 2</li> <li>OB and HR- 2</li> <li>General /Technology Management- 3</li> </ul>	10
	<ul> <li>Electronics and         Telecommunication         Engineering</li> <li>Computer Engineerin</li> <li>Information Technological</li> <li>Civil Engineering</li> </ul>	Telecommunication	Shirpur	<ul><li>Finance, Marketing,</li><li>Entrepreneurship,</li><li>General Management</li></ul>	2
		<ul><li>Engineering</li><li>Computer Engineering</li></ul>	Navi Mumbai	Financial technology	2
		<ul><li> Mechanical Engineering</li><li> Chemical</li></ul>	Indore	IT Management	2
				Total	16
				Grand Total	101

## 4. Online registration & Payment of registration fee:

## Online registration:

- Visit <u>www.nmims.edu</u> for online registration
- Before filling the online form, please read all the instruction carefully mentioned in instruction sheet, important dates and also Terms & Condition given in online application form.

#### **Payment of Registration fee:**

- Pay registration fee of Rs 1,500/- (Non-refundable). (Please refer online registration for payment details.)
- Registration fee is **NON REFUNDABLE**
- On the basis of information indicated in the Application Form, call letter for Test / personal interview will be communicated to the candidate as per important dates through the NMIMS website.
- Call letter of Entrance test will be sent to Candidate's registered e-mail ID. Only successive candidates of Entrance test will be called for further Personal Interview.
- NET / SET candidates will be called directly for Personal Interview only.
- Candidate will not be permitted to join the admission process unless he / she send the SOP with the necessary required documents. The candidate is requested to send their SOP & Presentation at <a href="MPSTME.SOP@gmail.com">MPSTME.SOP@gmail.com</a> from their registered e-mail ID. Subject line should have contained their Registration Number & Full name. Candidate is allowed to submit their SOP / Presentation at one time only, no up-dation / revision / re-submission will be allowed. The last date of SOP/Presentation submission is 21<sup>st</sup> April 2021 till 12 noon.

#### 5. Selection Process: Entrance Test & Personal Interview

A) Entrance Test (Time: 90 minutes / Total: 50 Marks), will be conducted through online platform.

Section A: 50% of Research Methodology

Section B: 50% Area / Domain Specific

The candidate must have qualified entrance test with qualifying marks as 50% conducted by the NMIMS University.

NOTE: The candidate qualified in UGC-NET (including JRF) / UGC-CSIR NET (including JRF) / SLET / GATE / Teacher Fellowship holder or have passed M.Phil.programare exempted from NMIMS entrance test. However, they have to appear for Personal Interview.

- B) Personal Interview (Total 50 Marks), will be conducted through online platform.
  - Presentation based on SOP will be followed by Personal Interview
  - During interview candidates are expected to discuss their research Interest / area
  - Final merit list will be based on entrance Test & Personal Interview
  - Admission offer is given as per the merit and vacancy available. WAITLISTED candidates have
    to check their merit list status as per the date given on the website. SELECTED candidate
    should upload necessary required documents at the link provided in the admission offer

letter, and after verification of the documents, the candidate will get the payment details (RTGS/NEFT details) for the payment of course fees within the stipulated time frame.

#### 6. **Fees:**

Fees for 2020-2021for first year (for information only): Rs. 1,00,000/- p.a.

Fees for current year/batch will be intimated at the time of admission.

7. **Refund Rules:** The Schedule of refund of fees will be as follows as per UGC rule October 2018.

If a student chooses to withdraw from the program of study in which he / she is enrolled, the institution concerned shall follow the following five-tier system for the refund of fees remitted by the student.

Sr.	Percentage of Refund	Point of time when notice of withdrawal of admission is served to
No.	of Aggregate fees	HEI
(1)	100%	15 days or more before the formally-notified last date of admission
(2)	90%	Less than 15 days before the formally-notified last date of admission
(3)	80%	15 days or less after the formally-notified last date of admission
(4)	50%	30 days or less, but more than 15 days, after formally-notified last date of admission
(5)	00%	More than 30 days after formally-notified last date of admission

In case of (1) in the table above, the deduction will be 5% of the fees paid as processing charges from the refundable amount, subject to a maximum of Rs 5,000/-.

Note: The above refund rules are subject to revision as per UGC notification (as applicable).

Candidates to refer Important Dates of the respective programme.

#### 8. Important Instructions:

- Please see the important dates and preserve it as a guide. All announcements from the University will be through its website <a href="https://www.nmims.edu">www.nmims.edu</a> and there will be no separate mail sent.
- It is the sole responsibility of the candidate to check whether he/she is eligible for the program as per the eligibility criteria stated above.
- AIU certificate is mandatory for those candidates who have completed their Post-graduation from overseas Universities
- For cancellation/ withdrawal of admission: Withdrawal / cancellation means voluntary withdrawal / cancellation by candidate for any reason. Candidate should email at <a href="mailto:admissioncancellation@nmims.edu">admissioncancellation@nmims.edu</a>, the soft copy of admission cancellation form duly filled and

signed (form available on <a href="www.nmims.edu">www.nmims.edu</a>&<a href="https://www.nmims.edu/students/">https://www.nmims.edu/students/</a>, fee paid receipt copy & cancelled cheque (personal account only).

- Canvassing in any form will disqualify the candidate.
- If at any stage, it is found that a candidate does not satisfy the eligibility criteria or the information furnished by him/her is incorrect, then application for the admission to the Program, even if selected and fees paid, will stand cancelled and fees will be forfeited.
- NMIMS has full right to disqualify a candidate at any stage of admission process if found ineligible.
- All disputes under Mumbai jurisdiction only.