SVKM's NMIMS University

Mukesh Patel School of Technology Management & Engineering

Ph.D. in Engineering & Technology Management (Spring – 2019 Batch)

<u>Instruction Sheet</u>

1. **Programmes & Specialisation**

   - Ph.D. Engineering**:** Electronics & Telecommunication, Computer, Information Technology, Civil Engineering, Earth Sciences / Geology, Mechanical Engineering, Applied Physics, Applied Chemistry, Applied Mathematics, and Chemical Engineering.

   - 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.
- 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)

4. **Intake: (for 2019 batch)**

Sr No	Department	Eligibility	Mumbai		Shirpur		Total
			Specialization	Seats	Specialization	Seats	
1	Electronics & Telecommunication Engineering	Masters degree in Computer, Information Technology, Electronics, Electronics & Telecommunication Engineering, Electrical, Mechatronics.	• Sensor Networks • Biomedical Engineering • Power Electronics and Renewable Energy • Controls and Communication Engineering	5	• Signal Processing • Approximate computation • Wireless Communication • Image Processing • Machine Learning	2	7
2	Computer Engineering	Masters degree in Computer, Information Technology, Electronics, Electronics & Telecommunication Engineering, Electrical, Mechatronics.	• Image Processing • Machine Learning • Distributed Computing • Blockchain • Cloud Computing • Internet of Things	3	• Soft Computing • Machine Learning	3	6
3	Information Technology	Masters degree in Computer, Information Technology, Electronics, Electronics & Telecommunication Engineering, Electrical, Mechatronics.	• Web Mining & Data Analytics • Wireless Sensor Networks • Home area networks • Controller Area Networks • Smart Grid Communications Protocols	3	• Data Science	1	4
4	Civil Engineering	Masters degree in Civil Engineering, Construction.	• Water resources Engineering • Structural Engineering • Geotechnical Engineering	6	• Structural Engineering	2	8
5	Earth Sciences / Geology	Masters degree in Earth Sciences / Geology or Engineering Geology	• Geology	2	Nil	Nil	2
6	Mechanical Engineering	Masters degree in Mechanical, Production, Mechatronics, Automobile, Automation, Robotics Engineering, Textile Machinery.	• Manufacturing / Sustainable Development • Metal Cutting • Manufacturing / Design • Thermo-fluid	5	• Thermal Engineering • Material Design • Industrial Engineering • IC Engine	6	11
7	Applied Physics	• M.Phil. or Masters degree in Applied Physics	• Graphene nanostructure • Material Science • Applied Physics • Microwave & Plasma Physics	4	Nil	Nil	4
8	Applied Chemistry	• M.Phil. or Masters degree in Applied Chemistry	• Surfactant Development • Polymer materials separation studies • Green Process Organic Synthesis	5	Nil	Nil	5

				Organic Synthesis using Green Chemistry • Catalysis & Material Research • Sustainable Engineering & Green Chemistry • Bio organic chemistry				
9	Applied Mathematics	• M.Phil. or Masters degree in Applied Mathematics	• Integral transforms and special functions • Computational Fluid Dynamics • Fractal Geometry & discrete mathematics	5	Nil	Nil	5	
10	Chemical Engineering	• Masters degree in Chemical Engineering.	• Reaction kinetics & Catalysis, Fine Chemical synthesis • Green Chemistry & Engineering • Advance Nanoparticle synthesis and applications.	2	Nil	Nil	2	
11	Technology Management	*Masters degree in any of the following:* • Business Management (provided the Bachelor's Degree in any branch of Engineering) • Computer Applications • Electronics and Telecommunication Engineering • Computer Engineering • Information Technology • Civil Engineering • Mechanical Engineering • Chemical • Or allied branches	• Emerging Technologies in Business & Management, Blockchain • Innovation Management • Financial Markets and Risk Management, Corporate Finance. • Operations Management • Green Supply Chain Management • Energy Management • Transportation Economics • Corporate governance, Corporate Disclosure & Organizational Culture	6	Nil	Nil	6	
			Total	46		14	60	

5. **Online registration & Payment of registration fee :**

    Online registration:

- Visit www.nmims.edu 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

Forward below mentioned documents to:

To:
Admissions Department,
SVKM's NMIMS University,
V. L. Mehta Road, JVPD Scheme,
Vile Parle (West), Mumbai-400 056.

List of Documents

- Copy of duly filled Online application form

- Post-Graduation Marksheet (All years) & Certificate (Self attested photo copy)

- Statement of Purpose (Format attached). SOP should describe area of research

- **UGC-NET / SET (including JRF) / UGC-CSIR NET / SET (including JRF) / SLET / GATE / Teacher Fellowship or M.Phil. Certificate** (if applicable) (Self attested photo copy) (if appeared, Self-attested photo copy)

- **Candidate's application form will not be considered if they fail to submit the above mentioned document till 2nd November 2019.**

- Candidate will not be permitted to Join the programme unless he / she submit the application along with SOP & list of documents (as mentioned above) in time **AND** complete the selection process successfully.

6. **Selection Process:** Written Test & Personal Interview

   A) Written Test (Time: 90 minutes / Total : 50 Marks)

      Section A: 50% of Research Methodology

      Section B: 50% Area / Domain Specific

   The candidate must have qualified written 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. program are exempted from NMIMS entrance test. However they have to appear for Personal Interview

   B) Personal Interview (Total 50 Marks)

      - 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 Written Test & Personal Interview

7. **Fees :**

   Fees for 2019-2020 for first year (for information only): Rs. 90,000/- p.a.

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

8. **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. No.	Percentage of Refund of Aggregate fees*	Point of time when notice of withdrawal of admission is served to HEI
(1)	100%	15 days or more before the formally-notified last date of admission (on or before 2nd December 2019)
(2)	90%	Less than 15 days before the formally-notified last date of admission. (i.e. from 3rd December 2019 to 18th December 2019)
(3)	80%	15 days or less after the formally-notified last date of admission (i.e from 19th December 2019 to 2nd January 2019)
(4)	50%	30 days or less, but more than 15 days, after formally-notified last date of admission (i.e. 3rd January 2019 to 17th January 2019)
(5)	00%	More than 30 days after formally-notified last date of admission (i.e from 18th January 2019 onwards)

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.

9. **Important Instructions:**

- Please see the important dates and preserve it as a guide. All announcements from the University will be through its website www.nmims.edu 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 of admission required cancellation request letter & original fee receipt to be scanned and send by courier/post to Mumbai address as below :

To:
Admissions Department,
SVKM's NMIMS University,
V. L. Mehta Road, JVPD Scheme,
Vile Parle (West), Mumbai – 400 056.

The cancellation form is made available on the website www.nmims.edu

- 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, than 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.

Format for preparing SOP

Title: The Title of the project should be concise (with sub-title, if any) reflecting the scope of the investigation.

Aim of the proposed area of research: The broad Aim of the research emphasizing the overall thrust of the proposed investigation should be clearly mentioned.

Statement of the Problem: The problem to be investigated should be clearly contextualized in the theoretical framework of the discipline.

Overview of Literature: The problem identified should be logically linked to other studies on the theme in the literature delineating the need for the present investigation.

Conceptual Framework: The concepts to be used, their relevance and applicability to the study and their operationalisation should be indicated.

Research Questions or Hypotheses: The research questions to be answered/ addressed need to be unequivocally stated.

Research Methodology:
(a) **Coverage:** The proposal should clearly indicate the universe of the study, sampling frame, sampling methods, sampling size, units of observation etc.
(b) **Data Collection:** The proposal should indicate sources of data types of data, tools and techniques for collection of various categories of proposed data.
(c) **Data Analysis:** It should indicate the statistical techniques, if any, proposed to be used in data processing, specific packages for data analysis, content analysis, indices/scaling techniques proposed to be used etc.

Implications: The proposal should state whether this research would bring forth any implications for policy making either for the region concerned or the country, any methodological innovations or contribute to theory building.

References: The proposal should include a 'List of References' mentioned in the text along with other important recent additions to the literature on the theme. The references should indicate the author, title, publisher and year of publication.