



School of Engineering  
Ph.D. Admission Announcement: 2023-2024, Monsoon 2023  
**Department of Mechanical Engineering**

The Mechanical Engineering Department in the School of Engineering at Shiv Nadar Institution of Eminence (deemed to be University) invites applications for admission in the Full time/ Part time Ph.D. program. The broad research areas of the Mechanical Engineering Department are given below:

### **Broad Research Areas**

- **Material Science and Manufacturing**  
*Additive manufacturing, Biomimetics, Tribology, Polymer science, Functional surfaces, Thermal spray coatings, Surface modifications, Composite structures, Computational Materials Science, Electrochemical energy storage devices, Green hydrogen generation, Catalysis.*
- **Fluid and Thermal Engineering**  
*Computational fluid dynamics, Solar energy/Thermal, Adsorption/Absorption cooling, Thermal storage materials, Desalination, Battery thermal management, Multiphase flows.*
- **Solid Mechanics**  
*Nonlinear dynamics and aeroelasticity, Composite structures.*
- **Robotics, Automation and Industrial Engineering**  
*Robotics, Mechatronics and control, Bio-inspired robots, Smart manufacturing, Industrial engineering, Quality control, Supply chain analytics, Predictive analytics, and Reliability engineering.*

More details on the research interests of our faculty can be found at <https://mech.snu.edu.in/people/faculty>  
Many of our research projects are interdisciplinary in nature, involving collaborations with other schools and research centers of the university.

## Eligibility

### Ph.D.

- M. Tech. / M.E. or equivalent degree in Mechanical/Aeronautical /Aerospace / Automobile /Industrial Engineering/Production and Industrial Engineering/Material Science and Engineering/Nano Science and Technology /Chemical Engineering /Structures, Electronics/Robotics / relevant discipline **with a minimum of 60% marks or an equivalent grade point (6.5 CGPA)** from a recognized technical institute or university.

### Direct B.Tech/M.Sc to Ph.D

- Candidates should have a Bachelor's degree in Mechanical/Aerospace/ Production and Industrial Engineering/Material Science and Engineering/Nano Science and Technology OR a B. Tech/M.Sc. in a relevant discipline with **70% marks or a CGPA of 7.5 or higher on a 10-point scale.**
- Undergraduate students in their final semesters are also encouraged to apply.

## Selection Process

The eligibility criteria mentioned above are minimum standards and applications not meeting the same will be summarily rejected. Short-listed candidates will be required to demonstrate their knowledge through a written test and an interview to be held in **July 2023**. Selections will be based on past academic performance, written examination, and interview. **Candidates with valid GATE score  $\geq$  95 percentile are exempted from the written test.**

**Please note that not all candidates meeting the minimum eligibility criteria may be shortlisted.** The department reserves the right to alter the eligibility requirements and course specifications as and when required.

Shortlisted candidates will be intimated for appearing in written test and interview on the dates mentioned below (see 'Important Dates'). The written test and interview will be conducted online.

The shortlisting will be done based on the complete application material received (including the academic qualification, statement of purpose, and reference letters). Incomplete applications will be summarily rejected.

## Syllabus for Mechanical Engineering

### ENGINEERING MATHEMATICS

Linear Algebra, Calculus, Differential equations, Probability and Statistics, Numerical Methods.

### MECHANICAL ENGINEERING

Strength of Materials, Fluid Mechanics, Heat Transfer, Thermodynamics, IC Engines, Refrigeration and Air Conditioning, Theory of Machine, Machine Design, Turbomachines, Computer Integrated Manufacturing, Robotics, Operation Research, Production Planning and Control, Engineering Materials, Surface Engineering and Tribology, Renewable Energy Technology, Production Technology.

## Part-Time Ph.D. Program Regulations

Qualified candidates unable to attend SNIoE on a Full-Time basis may choose to pursue a part-time Ph.D. program. SNIoE does not provide fellowship/assistantship to such candidates. The candidate can be self-sponsored or sponsored by other organizations.

**Eligibility criteria** for Part-Time Ph.D. candidates is the same as that for full-time candidates. Additional criteria (geographic limitations, minimum experience levels etc.) shall be imposed by the department. A part-time Ph.D. external (sponsored) candidate has to provide a no-objection certificate from his/her employer before admission and must have work experience of at least 2 years.

### Residence Requirement for Part-Time candidates

A compulsory residency period of six months is required at the SNIoE campus. However, this period can be spread across the term of the Ph.D. program.

### Duration

The minimum duration of part-time Ph.D. studies is 6 semesters (3 years). The maximum duration of the program cannot exceed 12 semesters (6 years). However, an extension of one year may be provided by the Dean of the school on case-by-case basis.

### Fees and Financial Assistance

Detailed information about the fee structure and the nature of assistantships are available on the [website](#). [Click Here](#)

All full-time Ph.D. students admitted into the program shall receive a doctoral award (teaching and research assistantship) consisting of tuition-fee waiver (as per department) and **a monthly stipend of ₹40,000 for the first two years, and ₹45,000 for the next three years**, subject to benchmarked performance. The continuation of the award is subject to satisfactory performance in the program evaluated continuously and in compliance with all

University regulations. Support will be available for deserving Ph.D. students to disseminate their work through conferences and publications.

### **Application Instructions:**

All interested applicants should apply online by clicking on **"Apply Now"** button. Please follow the instructions carefully.

- Fill all the mandatory fields
  - **Online upload** the following documents:
    - Passport size color photograph
    - Current CV
    - All Mark sheets/Degree Certificates (10th Standard onwards)
    - Standardized Examination certificate- CSIR, UGC, GATE etc. (If applicable)
    - Letter of recommendation
    - **A Statement of Purpose (one-page research proposal)**
  - **Application Fees:** You will be required to pay a non-refundable application fees of ₹ 1,200 (One Thousand Two Hundred Only). **The application fee may be paid online or a Demand Draft (in favor of "Shiv Nadar IOE DTB University Trust-Fee Collection" payable at NOIDA) may be sent to the under mentioned address.** No requests for refund of the application fee shall be entertained whether or not the candidates are called for written examination.
  - After online submission, print the completed form and send by speed post to the address given below. **A reference letter** in support of your application will also be required.
  - Following is the checklist of the documents (You may add additional documents if required)
    - Completed form
    - Standardized examination certificate- CSIR, UGC, GATE etc. (If applicable)
    - At least one reference letter in support of application
    - Demand Draft for application fee (If online-fee payment mode is not used)
- Please note that the application is not deemed complete until we receive all the prescribed documents and application fees.**

## Important Dates

Event	Important Dates
Last date for the receipt of the completed application form & application fee	July 15 <sup>th</sup> , 2023
Call letter release to the shortlisted candidates (based on academic qualifications)	July 17 <sup>th</sup> , 2023
Written Tests	July 20 <sup>th</sup> , 2023
Interview	July 24-25 <sup>th</sup> , 2023
Declaration of Results	By July 30 <sup>th</sup> , 2023

Applications will be considered immediately upon receipt. **Hence, candidates are urged to apply as early as possible.** You will be contacted for further admission procedure in case you fulfill the admission criteria and get shortlisted for a written test and interview.

Supporting documents may be sent by Speed Post to:

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Mechanical Engineering Department  
School of Engineering  
Shiv Nadar University  
P.O. SNU, NH-91, Tehsil Dadri  
District Gautam Buddha Nagar, UP 201314  
[bhupender.verma@snu.edu.in](mailto:bhupender.verma@snu.edu.in)

For further enquiry or information, visit our website:  
[www.snu.edu.in](http://www.snu.edu.in) / <http://mech.snu.edu.in>

OR

Contact:  
Dr. Divya Shrivastava, [divya.shrivastava@snu.edu.in](mailto:divya.shrivastava@snu.edu.in)  
(Faculty-in-charge, Post Graduate Programs).

**APPLY NOW**