

# SHIV NADAR UNIVERSITY

School of Engineering

Ph.D. Admission Announcement: 2021-2022, Summer 2021

## Department of Mechanical Engineering

The Mechanical Engineering Department in the School of Engineering at Shiv Nadar University invites applications for admission in the Ph.D. program. The broad research areas of the Mechanical Engineering Department are given below:

### **Broad Research Areas:**

- *Surface Engineering, Energy Storage, Supercapacitors, Biomaterials, High entropy alloys*
- *Additive manufacturing, Tribology & Biomimetics, Polymer science & engineering, Nanoscience & Nanotechnology, Wetting and Self-cleaning surfaces*
- *Vibrations and Aeroelasticity*
- *Nonlinear FEA, Composite Structures and Functionally Graded Materials*
- *Computational mechanics*
- *Computational Fluid Dynamics and Multiphase flows*
- *Robotics, Mechatronics and Control - Bio-inspired Robot*
- *Heat and mass transfer, Renewable energy*
- *Reliability, Smart manufacturing, Industrial engineering and Quality Control*

More detailed descriptions of research interests of our faculty can be found at [http://snu.edu.in/engineering/engineering\\_mechanical\\_engineering\\_faculty.aspx](http://snu.edu.in/engineering/engineering_mechanical_engineering_faculty.aspx)

Many of our research projects are interdisciplinary in nature, involving collaborations with other schools and research centers of the university.

### **Eligibility**

Level of Education of Applicant	Selection process
<p>1. ME/MTech degree in Mechanical / Aeronautical / Aerospace / Automobile /Industrial Engineering/Production and Industrial Engineering/Material Science and Engineering/Nano Science and Technology/Chemical Engineering/Structures, with a minimum of 60% marks or an equivalent grade point from a recognized technical institute or university. AND</p> <p>B. Tech/BE. in Mechanical/Aerospace/ Production and Industrial Engineering/Material Science and Engineering/Nano Science and Technology or relevant Discipline. Candidates who have qualified for GATE are highly preferred.</p> <p>Applicants waiting for the qualifying examination results are also eligible to apply.</p>	<p>Shortlisted candidates will be intimated well in advance for appearing in written tests and interview. The written tests and interview will be conducted at Shiv Nadar University (SNU) campus in Gautam Buddha Nagar District (near Greater Noida), U.P.</p>

**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 an on-site written test and interview, to be held in **July 2021**. Selections will be based on past academic performance, written examination and/or interview. **Please note that not all candidate meeting the minimum eligibility criteria may be shortlisted.** The department reserves the rights to alter the eligibility requirements and course specifications as and when required.

## **Syllabus for Mechanical Engineering (MED)**

### **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 and Engineering Materials, Surface Engineering and Tribology, Renewable energy technology, Production Technology.

## **PART-TIME PhD PROGRAM REGULATIONS**

Qualified candidates unable to attend SNU on a Full-Time basis may choose to pursue part-time Ph.D. program. SNU 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. candidate is same as that of full-time candidate. 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.

### **Residence Requirement**

Part-Time external candidates have to fulfill residence requirement of at least one semester in the University.

### **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 Director 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**. All full-time Ph.D. students admitted into the program shall receive a **doctoral research and teaching assistantship consisting of 100% tuition-fee waiver and 70% hostel-**

**fee waiver.** The student shall also receive a **monthly stipend of ₹50,000 for the first two years, and ₹55,000** for the next two years subject to bench-marked performance. The assistantship is subject to satisfactory performance in the program evaluated continuously and compliance with all University regulations.

### **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)
- **A Statement of Purpose**

• **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 University” 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 at 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
- 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**

<b>Last date for the receipt of completed application form &amp; application fee</b>	<b>June 14, 2021</b>
<b>Written Tests and Interview</b>	<b>July 2<sup>nd</sup>, 2021</b>
<b>Declaration of Results</b>	<b>July 10<sup>th</sup>, 2021</b>

Applications will be considered immediately upon receipt and shortlisted candidates will be notified (email) by June 22, 2021 (tentatively). **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 written test and interview.

Supporting documents may be sent by Speed Post to:

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School of Engineering  
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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).