

# SHIV NADAR

## UNIVERSITY

DELHI NCR

(Institution of Eminence)

School of Engineering

Ph.D. Admission Announcement: 2022-2023, Monsoon 2022

### Department of Mechanical Engineering

The Mechanical Engineering Department in the School of Engineering at Shiv Nadar University invites applications for admission in the Full time/ Part time Ph.D. program. **A total of 6 Ph.D. positions are available with the department for Monsoon 2022 intake.** The broad research areas of the Mechanical Engineering Department are given below:

#### Broad Research Areas

- *Surface Engineering, Energy Storage, Supercapacitors, Electrocatalysis,*
- *Additive manufacturing, Tribology & Biomimetics, Polymer science & engineering, Nanoscience & Nanotechnology, Wetting and Self-cleaning surfaces*
- *Computational Materials Science: focus on energy applications, mechanical deformation and adsorption behaviour*
- *Vibrations and Aeroelasticity*
- *Nonlinear FEA, Composite Structures and Functionally Graded Materials*
- *Computational mechanics*
- *Computational Fluid Dynamics*
- *Multiphase flows and Interfacial flow phenomena*
- *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

##### **Ph.D.**

- M. Tech. / M.E. or equivalent degree in 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** from a recognized technical institute or university.

### **Direct B.Tech 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 relevant Discipline. **with 8.0 or higher CGPA on 10-point scale.**
- **Valid GATE/NET score is mandatory** for applicants with B.Tech degree.
- 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 interview, to be held in **July 2022**. Selections will be based on past academic performance, written examination and/or interview. Applicants with valid GATE/NET score are exempted from the written test.

**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.

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. (admission process may be held online due to travel restrictions enforced by government)

The shortlisting will be done based on application material received (including the academic qualification, statement of purpose and reference letters). **The shortlisted candidates will be entitled for re-imbusement of 3AC train fare (to and fro) against actual ticket for appearing in the selection process. For outstation candidates, accommodation in SNU campus may be arranged on payment basis.** Transport may also be arranged from few NCR metro stations.

## **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, Production planning and

Control, 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 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](#).

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 compliance with all University regulations. Support will be available for deserving Ph.D. students to disseminate their work through conferences and publications. **Please note that students with CSIR, UGC, INSPIRE, ICMR fellowships shall receive 100% tuition fee waiver.**

### 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**

• **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
- 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

|                                                                                      | Old Dates                                             | Extended Dates                    |
|--------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------|
| Last date for the receipt of the completed application form & application fee        | <del>June 30<sup>th</sup>, 2022</del>                 | <b>July 20<sup>th</sup>, 2022</b> |
| Call letter release to the shortlisted candidates (based on academic qualifications) | <del>July 5<sup>th</sup>, 2022</del>                  | <b>July 22<sup>nd</sup>, 2022</b> |
| Written Tests                                                                        | <del>July 13<sup>th</sup>-14<sup>th</sup>, 2022</del> | <b>July 27<sup>th</sup>, 2022</b> |
| Interview                                                                            |                                                       | <b>July 30<sup>th</sup>, 2022</b> |
| Declaration of Results                                                               | <del>July 26<sup>th</sup>, 2022</del>                 | <b>Aug 10<sup>th</sup>, 2022</b>  |

Applications will be considered immediately upon receipt and shortlisted candidates will be notified by email well in advance so that they can plan their travel. **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:

Mr. Bhupender Verma,  
Executive Assistant  
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**