



## School of Engineering

### Ph.D. Admission Announcement: 2015-16 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.

#### **Broad Research Areas:**

##### **Mechanics: Modeling, Experimentation, & Computation**

Computational Structural and Fracture Mechanics, Mechanics of Solids, Non linear material models, Functionally Graded Materials, Composite Structures.

##### **Thermodynamics & Energy**

Solar energy, Wind energy, Energy and CFD (Computational Fluid Dynamics), Hybrid Renewable Energy Systems.

##### **Nanomaterials and Biomedical Engineering**

Synthesize and characterization of nanoparticles. multifunctional nano-hybrid materials (magnetic, optical etc), Biomaterials, nanomedicine, drug targeting.

##### **Manufacturing, Product Development & Industrial Engineering**

Application of Multi-agent systems in Manufacturing, Surface Engineering (Coating and patterning), Thin film Fabrication, Supply Chain Management.

##### **Robotics, Mechatronics & Control**

Biomimetic robotics.

##### **Tribology**

Fluid Film Lubrication, hydrostatic and Hydrodynamic Bearing, Coriolis Mass Flow Measuring Devices, Advanced Materials for tribological application, Wear & Friction at Macro/micro/nano scale.

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/Material Science and Engineering/Nano Science and Technology/Structures, with a minimum of 60% marks or an equivalent grade point from a recognized technical institute or university. AND B. Tech/BE. in Mechanical/Aerospace or relevant Discipline. Candidates who have qualified for GATE are highly preferred.</p> <p style="text-align: center;">OR</p> <p>2. B.E./B.Tech in Mechanical/Aerospace Engineering with exceptional academic credentials, good GATE score and strong aptitude for research.</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> <p>Separate Test and Interview Centers may be opened at various locations within India depending upon the pool of shortlisted applicants.</p>

Short-listed candidates will be required to demonstrate their knowledge through an on-site written test and interview. Selections will be based on past academic performance, written examination and/or interview.

## 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

**Financial Assistance:** All candidates admitted to the Ph.D. program will receive teaching/research assistantships of INR 35,000 per month along with tuition fee waiver, and hostel fee waiver. The assistantship is subject to satisfactory performance in the program evaluated continuously, and compliance with all University regulations.

**Application Process:** Fill PhD **Application** Form by downloading from <http://snu.edu.in/pdf/SNU-MECHANICAL-ENGINEERING-2015-Form.pdf> ; Please send the filled and signed application form with the **demand draft** of Rs 1000/- in favor of “**Shiv Nadar University**” and **self-attested enclosures** to the following mailing address with “**Ph.D. application for MED-SNU 2015-16**” written on the envelope:

Mr. Bhupender Verma,  
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School of Engineering  
Shiv Nadar University  
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**Telephone: 0120 266 3801 Ext. 701**  
[bhupender.verma@snu.edu.in](mailto:bhupender.verma@snu.edu.in)

### **Important Dates**

<b>Last date for the receipt of completed application form &amp; application fee</b>	<b>November 10, 2015</b>
<b>Written Tests and Interview</b>	<b>November 27-28, 2015</b>
<b>Declaration of Results</b>	<b>December 15, 2015</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.

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