

## DEPARTMENT OF CIVIL ENGINEERING

# Ph.D. ADMISSIONS MONSOON 2025

SUSTAINABLE  
INFRASTRUCTURE SYSTEMS

WATER, ENVIRONMENT  
& CLIMATE

URBAN NETWORK  
SYSTEMS

### ABOUT THE Ph.D. PROGRAM

The Department of Civil Engineering offers full-time, residential Ph.D. program in various Civil Engineering research domains.

All Ph.D. students will receive Teaching/Research Assistantship of ₹45,000/- per month for the first 2 years and ₹50,000/- for subsequent 3 years and a Research Grant of ₹1.5 lakhs for attending reputed conferences.

### AREAS OF RESEARCH

**Sustainable Infrastructure Systems:** *Structural Engineering, Geotechnical Engineering, Computational Geomechanics, Constitutive Modeling of Engineering Materials, Disaster Management and Risk Reduction, Fracture and Fatigue in Materials, Physics-Based Data Driven Modeling, Sustainable Materials, Seismic Soil Structure Interaction, Structural Health Monitoring, Energy Efficient Built Environment.*

**Water, Environment, and Climate:** *Environmental Engineering, Water Resources Engineering, Remote Sensing and GIS, AI and Emerging Techniques in Agriculture and Water Management, Hydraulic Structures, River Engineering, Hydrology and Water Resources Systems, Air Quality Science and Engineering, Municipal and Solid Waste Management, Water and Wastewater Engineering, Environmental Impact Assessment, Climate Science and Engineering.*

**Urban Network Systems:** *Transportation Engineering, Traffic Engineering, Multi-model Transportation Engineering, Energy Systems Analysis and Sustainability, Sustainable Water Distribution System, Transportation Systems, Urban Drainage System, Urban Water Conservation.*

### INTERESTED CANDIDATES CAN APPLY ONLINE USING:

<https://snu.edu.in/admissions/graduate-programs/>

Please check our information brochure available on the above webpage for "IMPORTANT DATES".

### DOCUMENTS REQUIRED FOR APPLICATION:

Educational documents, updated CV, colored passport photograph, standardized examination certificate (e.g. GATE, UGC-NET, etc.), Statement of purpose and Letter of recommendation.

### ELIGIBILITY

#### □ Ph.D.

M. Tech./M.E. or equivalent degree in relevant discipline with a minimum of 60% or 6 out of 10 CGPA from a recognized technical institute or University.

#### □ Integrated Ph.D. (i-Ph.D.)

Candidates should have a Bachelor's degree in Civil Engineering or equivalent degree in Engineering/Science with a minimum of 75% or 7.5 out of 10 CGPA from a recognized technical institute or University.

### SELECTION PROCESS

- PG / UG students in their final semesters are encouraged to apply.
- Written test and Technical interview (Candidates with valid GATE/NET score (95 percentile and above) are exempted from written test).

**LAST DATE TO  
APPLY:  
30TH JUNE, 2025**

**APPLICATION LINK:**  
[CLICK HERE](https://snu.edu.in/admissions/graduate-programs/) OR SCAN  
THE QR TO APPLY





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## FACULTY PROFILES

**Dr. Atri Nath**  
PhD IIT Kharagpur.  
**Specialization:** Structural Engg, Computational mechanics, Fatigue and fracture, Material modeling

**Dr. Gopal Das Singhal**  
Ph.D. IIT Roorkee  
**Specialization:** Water Resources Engg, Hydraulic structures, River hydraulics, Smart agricultural water management

**Dr. Gyan Vikash**  
Ph.D. IIT Kanpur  
**Specialization:** Geotechnical Engineering, Computational geomechanics, Constitutive modeling of geomaterials, Physics based - data driven modeling

**Dr. Ghanshyam Pal**  
Ph.D. University of Mississippi, USA  
**Specialization:** Structural Engg, Building physics, Novel cementitious composites, Multiscale numerical modelling

**Dr. Hitesh Upreti**  
Ph.D. IIT Roorkee  
**Specialization:** Water Resources Engg, Drone and satellite remote sensing in agriculture and water resources, Irrigation water management, AI in agriculture

**Dr. Jagabandhu Dixit**  
Ph.D. IIT Bombay  
**Specialization:** Earthquake Engg, Natural hazards and disaster risk reduction, Disaster mitigation and emergency management

**Dr. Manoj Kumar Singh**  
PhD IIT Delhi.  
**Specialization:** Building Physics, Adaptive thermal comfort, Occupants behavior and built energy interaction, Building energy simulation, High-performance building envelopes

**Dr. Nitin Burud**  
PhD IISc Bangalore.  
**Specialization:** Structural Engg., Fracture and Fatigue in Materials, Non-destructive Testing, Structural Health Monitoring, Statistical Data Analysis and Machine Learning, Building Information Modelling

**Dr. Sailesh Narayan Behera**  
Ph.D. IIT Kanpur  
**Specialization:** Environmental Engg., Air quality monitoring and aerosol modeling, Pollution studies: water-air-soil interactions

**Dr. Shalini Rankavat**  
Ph.D. IIT Delhi  
**Specialization:** Transportation Engg, Transport planning and policy, Traffic safety, Public transport and NMV planning

**Dr. Sumedha Moharana**  
Ph.D. IIT Delhi  
**Specialization:** Structural Engg, Piezoelectric impedance based structural health monitoring, Smart materials, Concrete durability

**Dr. Susant Kumar Padhi**  
Ph.D. IIT Guwahati  
**Specialization:** Environmental Engg, Biological & physio-chemical processes, Wastewater treatment, Solid waste management

## RESEARCH LABORATORIES AND FACILITIES

**PG-Research Laboratories**

- Advance Materials and Building Energy Laboratory
- Air Quality and Sampling Laboratory
- Disaster Management Laboratory
- Fracture and Fatigue Laboratory
- Intelligent Geosystems Laboratory
- Theoretical and Computational Geomechanics Laboratory
- Water Management Field Laboratory

**UG and PG-Research Laboratories**

- Civil Engineering Computing Laboratory
- Environmental Engineering Laboratory
- Geoinformatics Laboratory
- Hydraulic Engineering Laboratory
- Transportation Engineering Laboratory

**UG Laboratories**

- Concrete Technology Laboratory
- Experimental Soil Mechanics Laboratory
- Fluid Mechanics Laboratory
- Strength of Materials Laboratory

### FOR MORE INFORMATION, VISIT

**Department of Civil Engineering Website**  
<https://snu.edu.in/schools/school-of-engineering/-departments/department-of-civil-engineering/>

For queries, write to:  
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## RESEARCH HIGHLIGHTS

The Department of Civil Engineering received prestigious DST FIST-2022 RESEARCH GRANT from DST, Govt. of India.

**ACTIVE AND RECENTLY COMPLETED EXTERNALLY FUNDED RESEARCH PROJECTS**

Faculty Name (PI of project)	Project Area	Funding Agency
Dr. Atri Nath	Simulation of Cyclic-plastic Response of Additively Manufactured Materials	DST*
Dr. Gopal Das Singhal	AI-based DSS for Improved Crop Water Use Efficiency using Regulated Drip Irrigation in the Backdrop of Climate Change	DST*
Dr. Nitin Burud	Engineered Cementitious Composites: Tailored Solution for Abrasion- and Erosion-Resistant Concrete for Hydraulic Infrastructure	ANRF**
Dr. Ghanshyam Pal	Innovative Approach to Energy Savings in New and Existing Indian Habitat	DST*
Dr. Sailesh Behera	Physicochemical Characterization, Formation Mechanism and Human Health Risk Assessment of Size Fractionated Particulate Matter Emitted from Stationary Engine Exhausts	SERB#
Dr. Sumedha Moharana	Study of Adhesive Bond/Debond Effect on Electro- Mechanical Behavior of Coupled- Piezo Structural System	SERB#
Dr. Susant Kumar Padhi	Simultaneous Treatment of Gaseous BTEX and Wastewater Containing Nitrate and Sulphate by Using an Anaerobic Hybrid Bioreactor for Methane Production	SERB#

\*DST is Department of Science and Technology | #SERB is Science and Engineering Research Board | \*\*ANRF is Anusandhan National Research Foundation