



SHARDA
UNIVERSITY
Beyond Boundaries

MONTHLY NEWSLETTER

DEPARTMENT OF CIVIL ENGINEERING

Transforming Engineering Students into Industry-Ready Professionals

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VISION

To become a globally known and recognized destination for technical, innovation, entrepreneurship and research excellence and transfer its achievements for the larger good of the society.

MISSION

- To create facility to integrate research, quality education, ethical values and professional service in the areas related to civil infrastructure and environmental engineering.
- To provide industry and academia with outstanding graduates, entrepreneurs and scholars who advance both engineering practice and fundamental knowledge and play a leadership role.
- To create a center of higher learning and innovation equipped with befitting infrastructure and faculty to attract the students from across nations to use niche facilities for the societal symbiosis.
- To create an environment to enrich graduates through experimental learning and motivate them for self-learning to provide solutions to the industry and society.

PROGRAMME EDUCATIONAL OBJECTIVES

PEO1: Graduates will develop into proficient resources in the fundamentals of Engineering and Technology with analytical and quantitative reasoning and design abilities to pursue higher education and research.

PEO2: Graduates will apply the skills in developing safe, innovative, sustainable, environmentally conscious and economical solutions to Civil Engineering problems with the help of modern tool usage and maintaining the professional integrity and ethics.

PEO3: Graduates will grow personally and professionally in the careers through continued development of technical and managerial skills and will prepare themselves to take various roles and responsibilities at global level to imprint their presence for the larger good of the society.

PEO4: Graduates will excel as entrepreneurs, outstanding research graduates through continuous enhancement of communication skills, research capabilities, professional networking and life-long learning.

PROGRAMME SPECIFIC OUTCOMES

PSO1: Develop human resources capable of researching on materials and novel methodologies, tools and techniques.

PSO2: Analyze, Design, build, manage and maintain sustainable infrastructure adhering to the highest quality and safety standards.

PSO3: Apply state-of-the-art technologies and develop tools to solve real world civil engineering problems for society.

NEWS AND EVENTS

Sakshi Rai CE 3rd year and team represented Sharda University and won second prize in the Bandish event in Kashiyatra. Kashiyatra is the annual IIT(BHU) Varanasi Socio-Cultural Festival. It is a three-day fiesta that aims to captivate everyone with its enchanting literary, musical, and artistic events.



Sharda University is an organisational member of ICI student chapter(ORG.NO-9665). National Cube Test Competition 2023 is being organised by Indian Concrete Institute(ICI), in association with RDC Concrete. Two teams from CE department are participating in the competition. The objective of the competition is to create awareness and promote right Application of concrete mix design principles among the young students, practicing engineers & Builders having Laboratory testing facilities. The participants should achieve cube strength of 33-35 MPa on the date of testing. Total three cubes are to be submitted by each team at the designated place.

Department of Civil Engineering, Sharda School of Engineering and Technology organised a winter Bootcamp Training Program for CE students (B. Tech Third Year) from 16th January 2023 to 31st January 2023. Intense training sessions of Bootcamp programs are designed to prepare students for placement, higher studies, and competitive exams by providing technical knowledge.

Objective:

- To provide additional training to the students for further improvement and development in technical skills along with knowledge in Civil Engineering.

NEWS AND EVENTS

Interactive Seminar and Alumni Talk was organized on the topic of "Exciting Career Opportunity After Engineering and GATE" Preparation in 17th January 2023, 12:00 PM - 2:30 PM in 005 Auditorium, Block 3.

Speaker: Mr. S K Mondal , Ex. IES Officer, Railways (General Category)



Sakshi Rai an alumni of CE department has published her new book "THE SIMPLE ART OF BEING HAPPY". She is an Indian author and entrepreneur. "THE SIMPLE ART OF BEING HAPPY" renders a helping hand to people who are presently overwhelmed with negativity, sadness, stress, depression, loneliness, and lack of meaning in life; those who want to spark up their lives by incorporating the power of positive energy.

Sakshi Rai CE 3rd year student got featured on a popular YouTube channel called Entertainment Live (A part of ABP news group). You can watch the interview using below link or scanning the QR.

<https://youtu.be/tnU8sZ70HtI>



American Society of Civil Engineers Student Chapter - Vellore Institute of Technology organised the 2nd edition of the Structura Student Conference 2023 in which Dr. Sufyan Ghani, Assistant Professor(CE) delivered a lecture on "APPLICATION OF ARTIFICIAL INTELLIGENCE IN SEISMIC ZONATION OF LIQUEFIABLE FINE SOIL DEPOSITS."

NEWS AND EVENTS

Sharda University, Greater Noida had established Institution Innovation Council(IIC) as per the norms of Innovation Cell, Ministry of Education, Govt. of India during IIC Calendar year 2020-21. The primary mandate of IIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes while they are informative years. Akrim Gam and Yashab Ali Khajoori 3rd Year CE students are IIC co-ordinators from CE department. Students having new ideas can contact with them for various supports from IIC.

INNOVATION SEED FUND

Innovation Seed Fund under SU - ISP 2020 has been created to stimulate and promote the innovative product and technology development (patented or non-patented) leading to commercialization or Venture development in strategic areas of national and global importance.

Students working on innovative ideas and passion to become entrepreneurs can apply for the seed fund.

Applications are invited for the 2nd Cycle of Student Innovation Seed Fund Scheme from Sharda University Students (excluding final year).

The upper limit for support is Rs. 2.0 Lakhs for a project. Any student enrolled in a full-time/regular UG / PG program of the University (excluding final year) with a team of 2 to 4 members can apply for the seed fund. Each team must have at least one Mentor from the University.

Important Dates:

Last Date for submission of duly filled application: 6th February, 2023

Screening of proposals: 10th February, 2023 onward

Presentation by shortlisted applicants: 18th February, 2023 onwards

RESEARCH AND INNOVATION

BOOK CHAPTERS

Title- Plasticity-Based Liquefaction Prediction Using Support Vector Machine and Adaptive Neuro-Fuzzy Inference System

Author- Dr. Sufyan Ghani, Assistant Professor (CE), Sunita Kumari

Publisher- Springer Nature Singapore.

Published in -Soil Dynamics, Earthquake and Computational Geotechnical Engineering.

Brief Description- This paper proposes computational methods mainly based on plasticity of fine-grained soils for evaluating its liquefaction potential. The proposed ANFIS and SVM models are formulated from the datasets collected from the literature. The SVM is firmly founded on statistical learning theory and uses classification techniques, whereas the ANFIS model is a hybrid of an ANN and a fuzzy inference system (FIS). Several soil properties were employed as input parameters for the models, including the SPT-N value (N₁)₆₀, liquid limit (LL), and plasticity index (PI) and few seismic parameters like peak ground acceleration (PGA) and magnitude of earthquake (M_w). The seismic vulnerability of high seismic region of Bihar, India, is evaluated using these developed models, and its performance was evaluated by means of statistical performance tools. The results revealed that SVM and ANFIS model considering plasticity of the fine-grained soil deposit are favourable methods for evaluation of liquefaction susceptibility and capable of becoming a practical approach for geotechnical engineers in the assessment of soil liquefaction response with minimize cost. .

NEWSLETTER TEAM

STUDENT MEMBERS

Shivam, Mohit (3rd year)
Monajir, Gajendra (2nd year)

FACULTY MEMBERS

Dr. Satya Prakash
Mr Sunil Saharan
Ms. Sukalpaa Chaki

STUDENT EDITORS

Shivam Kumar