



श्री माता वैष्णो देवी विश्वविद्यालय  
SHRI MATA VAISHNO DEVI UNIVERSITY

# SCHOOL BOOKLET

## School of CIVIL ENGINEERING

Faculty of Engineering



[www.smvdu.ac.in](http://www.smvdu.ac.in)



[office.dce@smvdu.ac.in](mailto:office.dce@smvdu.ac.in)



SMVDU

Kakryal, Katra - 182320

**THE** World University Rankings 2024

Young University 201-250

Asia University 251-300

World University 801-1000

**nirf** INDIA RANKINGS 2024

Architecture 31

State Public Universities 51-100

Engineering 151-200

# OVERVIEW

---

<b>Introduction to SoCE</b>	<b>01</b>
<b>Vision &amp; Mission</b>	<b>02</b>
<b>Academic Programs at SoCE</b>	<b>03</b>
<b>HOD's Message</b>	<b>04</b>
<b>Faculty Profile</b>	<b>05</b>
<b>Technical Staff Profile</b>	<b>08</b>
<b>Consultancy Services</b>	<b>09</b>
<b>In House Summer Internship Program</b>	<b>10</b>
<b>SoCE Milestones</b>	<b>11</b>
<b>Student Achievements in 2025</b>	<b>12</b>
<b>Student Life</b>	<b>13</b>
<b>Our Recruiters</b>	<b>14</b>

---

# ABOUT OUR SCHOOL

Established in 2019, the School of Civil Engineering (SoCE) at SMVDU aims to produce skilled engineers ready to tackle modern infrastructure challenges. Over the years, it has grown in academic programs, faculty expertise, and research initiatives, solidifying its reputation for quality education and innovation.

The school offers a B.Tech. program with a curriculum integrating theoretical knowledge and practical applications in sustainable construction and smart infrastructure. With highly qualified faculty specializing in structural, geotechnical, transportation, and environmental engineering, the school actively contributes to industry advancements and research.

A team of highly qualified and experienced faculty members drives the academic and research excellence of the school. Faculty research spans diverse areas such as structural engineering, geotechnical engineering, transportation systems, environmental engineering, and smart materials, contributing significantly to industry advancements and scientific innovation.

Equipped with state-of-the-art laboratories, SoCE provides hands-on learning, fostering innovation, industry collaboration, and real-world problem-solving, shaping the next generation of civil engineers.



# VISION

---

To craft the excellence in the field of civil engineering, with highest standard of professionalism and technological integrations.



# MISSION

---

To develop program and knowledge base that prepares the manpower suitable for serving the society with high quality of technological application

# ACADEMIC PROGRAMS AT SOCE



- Structural Engineering Lab
- Geotechnical Engineering Lab
- Transportation Engineering Lab
- Environmental Engineering Lab
- Surveying Lab

## ABOUT US

The School of Civil Engineering (SoCE) at Shri Mata Vaishno Devi University (SMVDU) is dedicated to providing cutting-edge education, innovative research opportunities, and hands-on learning experiences in the field of Civil Engineering. The school is part of the Faculty of Engineering and is committed to producing competent professionals who contribute to infrastructure development and technological advancements.

## B.TECH (4 YEARS)

A four-year undergraduate program focusing in core civil engineering courses

## B.TECH MINOR (4 YEARS)

B.Tech minor in Civil Engineering

## B.TECH HONORS (4 YEARS)

B.Tech Honors in

- Structural Engineering
- Environmental Engineering

## PHD (REGULAR/PART-TIME)

The Ph.D. program at the School of Civil Engineering (SoCE), SMVDU, is designed for scholars aiming to pursue advanced research in various domains of civil engineering.

The program focuses on innovation, problem-solving, and industry-oriented research, contributing to advancements in infrastructure and sustainable development.

# HOD'S MESSAGE

---



**DR. V.K DOGRA**  
**(ASSOCIATE PROFESSOR)**  
**HEAD OF SCHOOL OF CIVIL ENGINEERING**

It gives me great pleasure to welcome you all to the School of Civil Engineering (SoCE). The Department offers B. Tech., B. Tech. Minor, B.Tech. Honors in Environmental Engineering and B.Tech. Honors in Structural Engineering. The Department also has a vibrant PhD programme in various specializations.

At SoCE, we are committed to building a strong foundation in civil engineering, guided by both fundamental principles and a deep sense of compassion toward our students.

I firmly believe that learning thrives in an open and inclusive environment—where questions are encouraged, curiosity is nurtured, and every student feels valued. With the right support and a spirit of collaboration, education becomes not just a process, but an enjoyable and transformative journey.

We strive to create a culture where students feel empowered to express themselves, explore innovative ideas, and grow both academically and personally. Together, let us shape a future where learning is a shared adventure, full of purpose and possibility.

I look forward to welcoming all the prospective candidates to the department.

Dr. V.K. Dogra  
Head, School of Civil Engineering (SoCE)  
Shri Mata Vaishno Devi University

# FACULTY PROFILE



**DR. V.K DOGRA**  
(ASSOCIATE PROFESSOR &  
HEAD OF SCHOOL)

## **Qualification:**

B. E., M. Tech. (Structural Engineering), Ph. D. In Civil Engineering from IIT Delhi.

## **Experience:**

- 39 years of vast experience in Structural Consultancy including 19 years in teaching.
- Experience of Structural Design of Large Span Structures with Folded Plates, Shells, Domes, Flat Slabs, Flat slabs with drops and pyramids.
- Completed more than 60 consultancy projects with a total Consultancy fee of more than Rs. 50 Lacs.
- Head, School of Civil Engineering since 08-07-2019.



**DR. BHARAT BHUSHAN  
JINDAL**  
(ASSOCIATE PROFESSOR)

## **Qualification:**

B.E (Civil Engineer), M.E. (Civil – Soil Mechanics & Foundation Engineering), M. Tech. (Civil – Structural Engineering), Ph.D. (Civil-Structures) from IKJPTU, Jalandhar.

## **Experience:**

- Research Area: Structures, Concrete Technology and Sustainable Construction Materials.
- 50+ publications out of which 25 are in SCI/SCIE/ESCI/SCOPUS.
- Listed in 2% scientist in the world by Stanford University list.
- Published 2 books (1 book chapter).
- Granted 1 patent.



**DR. RAHUL SHARMA**  
(ASSISTANT PROFESSOR)

## **Qualification:**

B.Tech(Civil Engineering) M.Tech(Structural & Construction Engg.)  
Ph.D. in Civil Engineering from NIT Jalandhar.

## **Experience:**

- Structures, Concrete Technology, Construction Materials.
- Received fellowship from Ministry of Education Govt OF India.
- 30+ publications
- 3 books authored.
- 550+ Scopus index citations from the research paper.
- 1 patent published.
- Research Interest: -Structures, Recycling of Materials, Life Cycle Assessment, Concrete Technology, Concrete Composite, Self-Compacting Concrete, High Performance Concrete, Fibre Reinforced Concrete, Microstructural Analysis and Durability of Concrete

# FACULTY PROFILE



**DR. VAIBHAV RAJIV  
SAPKAL  
(ASSISTANT PROFESSOR)**

## **Qualification:**

B.E. (Civil Engineer), M.Tech. (Civil – Environmental Engineering)  
Ph.D. (Civil – Environmental Engineering) from IIT Roorkee.

## **Experience:**

- 6 years of experience (teaching).
- Research Paper International Journal: 6
- National / International Conference: 10
- 1 Book Published.
- 2 Patent Published.
- National/International level lectures delivered: 10
- Wastewater treatment and management, Solid waste management, MSW leachate treatment and management, Membrane technology and Advance chemical treatment.



**DR. SHANKAR SINGH  
KHUSHWAH  
(ASSISTANT PROFESSOR)**

## **Qualification:**

B Tech (Civil Engineering), M Tech (Civil Engineering)  
Ph.D. (Civil Engineering) from MNIT BHOPAL.

## **Experience:**

- 4 Years of teaching experience.
- Research Publications: 9
- National / International Conference:- 5
- 1 Book Published
- Research Interest:- Geo Technology, Geo Environmental Engineering, Ground Improvement, Geo Tech Engineering and Stability Analysis.
- Member of IGS (Indian Geo Tech Society).
- Guided 4 M Tech students and 5 Ph.D. Students
- Self placed Course: Construction Material Testing.
- Master Trainer Of Indian Knowledge System from UGC.



**DR. NAQEEB UL ISLAM  
(ASSISTANT PROFESSOR)**

## **Qualification:**

B Tech (Civil Engineering), M Tech (Civil Engineering) from NIT SRINAGAR,  
Ph.D. (Civil Engineering) from IIT BOMBAY and POST DOC IIT BOMBAY  
(Research Experience).

## **Experience:**

- 9 months of teaching experience in NIT SRINAGAR.
- Research Paper Journal:- 8
- National / International Conference:- 9
- Guided 2 M Tech students
- Specialization: - Structure Control, Earthquake Engineering, Bridge Design, Steel Design.
- Editor of News letter for EERI (Earth Engineering Research Institute) Students chapter IIT BOMBAY.

# FACULTY PROFILE



**DR. YATI AGGARWAL**  
(ASSISTANT PROFESSOR)

## **Qualification:**

B Tech (Civil Engineering), M Tech (Civil Engineering) from DTU (Delhi Technical University) and Ph.D. (Civil Engineering) from IIT MANDI.

## **Experience:**

- 4 Years and 10 Months of teaching experience.
- Worked as Project Scientist for 3 months in IIT MANDI.
- Research Paper Journal: 7
- National / International Conference: 5
- 1 Book Chapter.
- Research Interests: Seismic Vulnerability, Seismic Loss Assessment, Multi-Hazard Vulnerability, Rapid Visual Screening, Vibration Control.
- Guided 3 M Tech Students.

# TECHNICAL STAFF PROFILE



**MR. LOVE SHARMA**  
(LABORATORY ASSISTANT)

## **Qualification:**

B.Tech. (Civil Engineering)

M.Tech. (Geotechnical Engineering)

## **Experience:**

- 10 Years of experience (Teaching and Non Teaching)
- Authored numerous research papers in research journals, book chapters, and conference proceedings.
- Received accolades from various institutions for organizing workshops on Civil Engineering software, laboratory practices, and emerging topics within the discipline.
- In addition to his academic contributions, Mr. Sharma is an active consultant specializing in Material testing, Structural Analysis and Geotechnical Engineering.
- Author of the book "Laboratory Manual of Strength of Materials with Theory for Civil Engineers".
- Guided 2 B.Tech. projects.
- Research Interests:



**MR. SHIVANG GUPTA**  
(LABORATORY ASSISTANT)

## **Qualification:**

B Tech (Civil Engineering)

## **Experience:**

- 5 Years of experience (Teaching and Non Teaching)
- Experience in Construction Industry (Buildings and Highways) and Highway Maintenance in many National Highway Projects across the state and also participated in material testing and lab work related to Concrete Technology , Transportation (Highway) & Geo Technical Engineering.
- Mr. Shivang has also been part of the latest technology CGBM (Cement Grouted Bituminous Macadam) introduced in India by CRRI (Central Road Research Institute) in joint venture with IIT JAMMU, for road pavements to protect it from rutting and damages.

# CONSULTANCY SERVICES

The School of Civil Engineering provides extensive consultancy services through its advanced laboratories and experienced faculty & technical staff, catering to a wide range of civil engineering research and practical applications.

These services are designed to support infrastructure development, quality control, and academic research by offering precise, reliable testing and design solutions. The consultancy covers both laboratory-based material testing and on-site field investigations, utilizing cutting-edge equipment and standard testing procedures.

## **Below are the key areas and specific testing offered:**

- Soil Testing
- Aggregate Testing
- Bitumen Testing
- Concrete Testing
- Cement Testing
- Water Testing
- Steel Testing
- Field Tests
- Structural Designing
- Surveying and Mapping



These consultancy services not only cater to the needs of construction companies, government agencies, and research organizations but also provide practical training and project exposure to students, bridging the gap between academic learning and real-world engineering challenges.

# IN-HOUSE SUMMER INTERNSHIP PROGRAM



Waste Water  
Purification

Soil mechanics  
Foundation  
Engineering

Geopolymer  
Concrete

Green  
Construction  
Materials



Disaster Risk  
Analysis

Structural  
Designing

Ground  
Improvement  
Techniques



## KEY AREAS

- GEOTECHNICAL ENGINEERING
- CONCRETE & MATERIAL TECHNOLOGY
- STRUCTURAL ENGINEERING & SUSTAINABILITY
- WATER RESOURCE ENGINEERING
- TRANSPORTATION ENGINEERING
- SURVEYING & REMOTE SENSING
- ENVIRONMENTAL ENGINEERING



**STATE-OF-THE-ART LABS**



**CONSULTANCY PROJECTS**



**FIELD EXPOSURE**



**RESEARCH & INDUSTRY TIE**

# SOCE MILESTONES



## 2018 | School Establishment

The School of Civil Engineering (SoCE) was founded as part of the Faculty of Engineering at Shri Mata Vaishno Devi University (SMVDU) to provide high-quality education and research opportunities in Civil Engineering.

## 2023 | Publication in a Scopus Indexed Journal

SoCE students presented a paper titled "Use of Geotextile as an Innovative Material in Geotechnical Engineering" at ICACM 2023 (Indo-African Conference). The paper was later selected for publication in a Scopus Indexed Journal.



## 2023 | Presented a Research Paper at IGC

SoCE student Abhivik Singh presented a research paper at the Indian Geotechnical Conference (IGC 2023), marking a major academic milestone.

## February 2025 | 1st International Conference on WSRSCC 2024

Students participated in the 1st International Conference on WSRSCC 2024 at IIT Jammu, presenting research on sustainable construction materials and climate change impact assessment.

# STUDENTS ACHIEVEMENTS IN 2025



## 2025 | Students Presented a Technical Research Paper at IIT Jammu

Civil Engineering Students of SMVDU presented a technical paper at the 1st International Conference on Recent Trends & Advances in Water Science, Remote Sensing, and Climate Change (WSRSCC 2024) held at IIT JAMMU.

Bhagyadeep Sahu, Rohit Kumar, Abhijeet Gupta and Shashwat Singh presented a paper titled “*Enhancing the Properties of Concrete by Replacing Sand with Different Percentages of Paper Waste*” another group of students Samaira Sinha and Rishabh Kumar presented a paper titled “*Understanding and Assessing Critical Tipping Points in Earth’s System for Maintaining Global Sustainability*”. Also, Preeti Choudhary presented a paper titled “*Conversion of Waste Paper into Eco Friendly Insect Repellent Sticks*”. All the groups were guided by Dr. Vaibhav Sapkal (Assistant Professor, SoCE) and Dr. Rahul Sharma (Assistant Professor, SoCE). The conference was organized by Indian Institute of Technology, JAMMU.

## 2025 | SMVDU Civil Engineering Students Successfully Complete Surveying Camp at Khajjiar, Himachal Pradesh

Fourth-semester students from the School of Civil Engineering (SoCE), participated in a week-long surveying camp at Khajjiar, Himachal Pradesh. The camp aimed to provide hands-on training in essential surveying techniques, allowing students to bridge the gap between classroom learning and practical applications. Throughout the camp, students worked with modern instruments such as Total Stations and Auto Levels while also engaging in traditional methods like Plane Table and Compass Surveying.

The camp was organized under the guidance of Dr. Naqeeb Ul Islam (Assistant Professor and Course Coordinator), Dr. Shankar Singh Khushwaha, and Dr. Yati Aggarwal (Assistant Professors), along with Mr. Love Sharma (Lab Assistant). Their mentorship and expertise provided students with valuable insights into real-world surveying challenges. Beyond academics, the trip also fostered a sense of adventure, as students explored the breathtaking landscapes of Khajjiar, making the learning experience both enriching and memorable.

# STUDENT LIFE



## Diverse Students

Our school prides itself on its diverse student population, with students from over 18 states/UT, creating a vibrant and multicultural community. This diversity enriches the learning experience and encourages cross-cultural friendships.



## Extracurricular Activities

Our students actively engage in various extracurricular activities, including sports, arts clubs, workshops etc.



## Community Service

Our students are committed to giving back to the community. They actively participate in various community service projects like NSS, NCC, Vikalp, etc. volunteering their time and skills to make a positive impact locally and globally.



## Global Perspective

We encourage students to embrace a global perspective through cultural exchange programs, international partnerships, and educational trips. These experiences broaden their horizons and prepare them for an interconnected world.



## Academic Excellence

School of CE at SMVDU places a strong emphasis on academic excellence. Our students are dedicated to their studies and many of them achieve high honors and go on to attend prestigious universities/ Industries.

# OUR PARTNERS





श्री माता वैष्णो देवी विश्वविद्यालय  
SHRI MATA VAISHNO DEVI UNIVERSITY

Sub-Post Office, Katra, Jammu and Kashmir 182320

[www.smvdu.ac.in](http://www.smvdu.ac.in)

School of Civil Engineering

### **Design Team**

Mr. Deepankur Gupta , LA, SoECE

Mr. Love Sharma , LA, SoCE

Mihit Saxena, 2<sup>nd</sup> year SoECE

School of Civil Engineering