



Sandip Institute of Technology and Research Centre

At & Po – Mahirawani, Trimbak Road, Tal & Dist .– Nashik Phone: (02594) 222552,53,54, Fax: (02594) 222555

website: www.sandipfoundation.org, e-mail: principal@sitrc.org
(Approved by-AICTE, New Delhi, & Govt. of Maharashtra and Permanently Affiliated to

Savitribai Phule Pune University (Formerly Pune University), Pune.

Accredited with "A" grade by NAAC With CGPA Score of 3.11

NRA Accordited for Computer & Machanical Engineering (UC Course)

NBA Accredited for Computer & Mechanical Engineering(UG Course) w.e.f. 2023-24 to 2025-26

An Autonomous Institute w.e.f. 2023-24





Department of Civil Engineering

Academic Year 2024-2025

Report on Expert Lecture on "Various Software Used in Civil Engineering"

1. Event Title: A Webinar on "Various Software Used in Civil Engineering"

2. Even Date : 19-12-2024

3. Event Venue : Department Of Civil Engineering

4. Event Duration : 1.00 hrs

5. Event Coordinator: Mr.Sachin W.Manjarwal

6. **Event Resource Person**: Er Sumit Mandlik and Er.Shradha Jaybhave

7. **Event Objective:** The main objective of the webinar was to familiarize civil engineering students with the latest software tools used in the industry for design, analysis, and project management. Specific objectives included

- 1. Highlighting the importance of software proficiency in the civil engineering profession.
- 2. Demonstrating the application of software for structural, geotechnical, transportation, and environmental projects.
- 3. Providing insights into the role of Building Information Modeling (BIM) in modern construction.
- 4. Introducing career opportunities related to software expertise in the civil engineering field.
- **8. Event Summary:** The webinar was attended by 28 Civil Engineering students from the third-year batch. It provided a comprehensive overview of industry-relevant software tools essential for various domains of civil engineering. The

session began with an introduction to software such as ETABS and STAAD. Pro for structural analysis, PLAXIS and AutoCAD Civil 3D for geotechnical and surveying applications, MX Road for transportation engineering, and Revit, Primavera, and MS Project for BIM and construction management. Live demonstrations of ETABS and Revit were conducted, along with case studies showcasing the role of BIM in enhancing construction efficiency. The interactive session addressed students' queries about selecting the right tools, accessing learning resources, and pursuing certifications to enhance their career prospects.

9. Event Outcomes: Students gained:

- 1. **Awareness:** Knowledge of various software tools essential for civil engineering tasks, including their features and applications.
- 2. **Practical Insights:** Understanding how to use these tools to solve real-world problems in design and analysis.
- 3. **Career Guidance:** Insights into the growing demand for software proficiency in the civil engineering sector and how it enhances employability.
- 4. **Next Steps:** Information on free/paid certification programs to gain expertise in popular software tools.

10: Mapping of Outcome with POs and PSOs:

Outcome Description	PO/PS O	Mapping Level (1– 3)	Justification
Awareness of various software tools civil engineering tasks.	e: PO5, PSO1	3	Demonstrates the application of modern engineering tools (e.g., ETABS, STAAD.Pro, Revit) for solving complex problems.
Practical insights into software applications for real-world problems in design and analysis.	PO3, PSO2	3	Focuses on designing solutions and analyzing problems using tools such as PLAXIS, MX Road, and AutoCAD Civil 3D.
Understanding the role of BIM in modern construction.	PO7, PSO1	3	Highlights sustainability and the integration of advanced tools like BIM for efficient construction processes.
Guidance on software certifications to enhance employability.	PO11, PSO3	2	Provides direction on certifications and training programs to improve professional competence and career readiness.
Insights into career opportunities related to software proficiency in civil engineering.	PO8, PSO3	2	Encourages ethical and professional growth through knowledge of industry trends and employability requirements.

11: Event Photos:



Photo: Guest Lecture Session



Photo: Students Participating in a Guest Lecture

Event Co ordinator

Mr. Sachin W Manjarwal

Civil engineering Department

HOD

Dr.J.GNayk

Civil engineering Department

Head of Department
Civil Engineering
Sandip Institute of Technology & Research Center
Mahiravani, Nashik - 422 213