

# Department of Civil Engineering Institute of TECHNOLOGY,

# University of Kashmir

Date: 16<sup>th</sup> June, 2025

#### Report on One-Day Workshop on STAAD Pro

Title: Focused Session on RCC & Steel Structure Design and RCDC Integration

**Date:** 12th June 2025

Venue: Department Seminar Hall, Civil Engineering Block

Guest Speaker: Mr. Azmat Hussain

**Participants:** B.Tech Civil Engineering students (4th, 6th & 8th Semesters)



Figure 1.

#### Introduction

A One-Day Workshop on STAAD Pro was successfully conducted by the Department of Civil Engineering, Institute of Technology, Zakura Campus, University of Kashmir. The workshop was designed to provide students with practical exposure to RCC and steel structure design, real-world application of STAAD Pro software, and an introductory walkthrough of RCDC (STAAD's detailing and design module).

## **Objective of the Workshop**

- To introduce students to structural analysis and design using STAAD Pro.
- To demonstrate the design of real-time RCC and steel structures.
- To familiarize students with the RCDC module for automated reinforcement detailing.
- To offer career guidance and software skill-building pathways for structural engineering aspirants.
- To create awareness of industry expectations and software competency in civil engineering jobs.



Figure 2.

## **Workshop Highlights**

- **Technical Session:** A focused presentation on the fundamentals of STAAD Pro and its interface. The resource person demonstrated how to model, analyze, and design simple RCC and steel structures.
- **Live Demonstration:** Real-time modeling of structural elements, application of loads, assignment of supports, and interpretation of analysis results.
- **RCDC Introduction:** Participants were given an overview of RCDC, its capabilities in automated detailing, and its practical application in structural project documentation.

- **Q&A Session:** An open-floor interaction where students asked questions related to STAAD application, industry workflows, career options in structural design, and future learning resources.
- Career Counselling Segment: A dedicated discussion on how proficiency in STAAD Pro and RCDC can open avenues in core civil engineering domains, including structural consulting, infrastructure design, and BIM collaboration.

#### **Learning Outcomes**

- Acquired hands-on exposure to STAAD Pro interface and basic functionalities.
- Understood structural modelling techniques for both RCC and steel members.
- Learned the practical significance of RCDC in automating detailed design tasks.
- Gained insights into the role of structural design software in the civil engineering job market
- Developed a stronger foundation for further self-learning and advanced certification in structural design tools.

#### **Conclusion**

The workshop received an enthusiastic response from students and was instrumental in strengthening their understanding of modern design tools used in structural engineering. The Department of Civil Engineering extends its appreciation to **Mr. Azmat Hussain** for conducting the session. Such industry-aligned workshops not only enhance technical competence but also empower students to align their skills with evolving career demands.