
**Report on Design to Reality: 5-Day Skill Development Workshop cum
Internship Program on AutoCAD & Total Station****Organized by****Department of Civil Engineering,****Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex****In Collaboration with Arambagh Government Polytechnic Institute**

Title: Design to Reality: 5-Day Skill Development Workshop cum Internship Program on AutoCAD & Concrete Mix Design

Trainers:

Prof. Baibaswata Das, Assistant Professor & TIC, Department of Civil Engineering

Prof. Sourav Kumar Singha, Assistant Professor, Department of Civil Engineering

Event Coordinators:

Coordinator: Prof. Souradeep Roy, Assistant Professor, Department of Civil Engineering

Co-Coordinators: Prof. Krishnendu Kundu and Prof. Souvik Chakraborty, Assistant Professor, Department of Civil Engineering

Date and Time: 9th to 12th and 15th December, 2025.

Number of Participants: 32 students from Diploma 3rd Year

Objective: The primary objective of this workshop was to provide diploma students with practical and industry-relevant training in AutoCAD drafting and Total Station surveying techniques. The program aimed to bridge the gap between theoretical concepts taught in classrooms and their real-time application in field surveying and engineering drawing practices. It also focused on enhancing students' technical confidence and employability skills.

Brief Description: The five-day skill development workshop was carefully structured to offer a balanced exposure to both computer-aided drafting and modern surveying techniques.

On **Day 1 (09.12.2025)**, students were introduced to the fundamentals of surveying and Total Station technology, including its components, working principles, and applications in civil engineering projects. The session also covered safety precautions and basic survey terminology.

On **Day 2 (10.12.2025)**, participants received hands-on training on Total Station setup, centering, leveling, and orientation. Students practiced angle and distance measurement, data recording, and basic coordinate calculations under supervised field conditions.

Day 3 (11.12.2025) focused on AutoCAD training, where students learned the interface, drawing commands, layers, units, and drafting standards commonly followed in civil engineering drawings.

On **Day 4 (12.12.2025)**, advanced drafting exercises were conducted, including preparation of building plans, elevations, and simple sections. Students were also introduced to integrating survey data with drafting outputs for practical project understanding.

The concluding session on **Day 5 (15.12.2025)** emphasized data interpretation, basic plotting of survey points, and preparation of consolidated reports. Students worked in teams to compile their learning outcomes and submit practical documentation.

Outcome: The workshop resulted in significant improvement in students' practical skills and technical understanding. Participants gained hands-on experience in operating a Total Station, performing basic surveying tasks, and handling field data confidently. They also developed proficiency in AutoCAD 2D drafting and learned to prepare standard engineering drawings.

The program enhanced students' ability to correlate field survey results with drafting outputs, strengthened teamwork and analytical skills, and increased their readiness for site-based roles in construction and infrastructure projects.

Conclusion: The Design to Reality: 5-Day Skill Development Workshop cum Internship Program on AutoCAD & Total Station was successfully conducted and achieved its intended objectives. The collaborative effort between Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex and Arambagh Government Polytechnic Institute provided students with valuable exposure to practical engineering tools and methodologies.

The structured sessions, active participation of students, and dedicated guidance from the trainers ensured a meaningful learning experience. The workshop concluded on a highly positive note, reinforcing the importance of practice-oriented training programs in strengthening technical competence and preparing students for professional challenges in the field of civil engineering.

Please find the glimpses of the event -



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