

Key Indicator- 2.3 Teaching – Learning Process

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process.

1. Hands on workshop for Elective V (Architectural Conservation) - PHOTOGRAMMETRY

Semester II | B.Arch Fourth Year Elective V (Architectural Conservation)

During Semester II, fourth-year B.Arch students participated in a hands-on workshop on Photogrammetry as part of the Architectural Conservation elective. The aim of the workshop was to expose the 4rd year B.Arch students of Architectural conservation elective to the digital documentation tools & techniques used in documentation of heritage sites. This workshop provided an in-depth, practical experience in the digital documentation of heritage structures.



The program introduced students to the methodology of photogrammetry, which involves capturing a series of photographs of architectural sites and processing them to generate accurate 3D digital models. Students engaged in field photography, followed by sessions on image processing and 3D reconstruction using specialized software.

The workshop equipped students with key skills in:

- Heritage site documentation using photogrammetric techniques.
- Digital modeling for conservation and analysis.
- Understanding the role of technology in cultural heritage preservation.

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Through collaborative learning and problem-solving, students gained exposure to integrating traditional conservation knowledge with contemporary digital tools. The outputs from the workshop serve as valuable documentation aids and educational references for ongoing and future conservation efforts.

This initiative not only strengthened their technical and analytical abilities but also broadened their perspective on conservation methodologies, marking a significant contribution to their academic and professional growth in the field of architectural heritage.



2. Touch-Activated Interactive Panel – Automation Design Project

During Semester II, students from the Fourth year of the B.Arch had Elective (Parametric) subject. In this program the students successfully developed a touch-responsive interactive panel. The entire project was conceptualized, designed, and executed by the students with the guidance of faculty, offering them a comprehensive, hands-on experience.

The journey started with ideation and digital modelling, where students translated their concepts into 3D visualizations. This was followed by CNC machining to shape the physical components of the panel, and intricate epoxy finishing to give it form and durability.

A key feature of the project was the incorporation of interactive electronics. By integrating touch sensors and circuitry, students created a panel that responds to physical contact through illumination. This required them to apply skills in circuit design, soldering, and understanding the behaviour of automation components.

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Throughout the project, students tackled challenges that required collaboration and critical thinking, making it a valuable learning experience that spanned across disciplines — including architecture, electronics, and digital fabrication.

Now utilized as a demonstration model in workshops, the panel not only showcases the students' creativity and technical abilities but also serves as an educational tool to explain automation and sensor-based interactions to diverse audiences.

This initiative not only refined their technical competencies but also deepened their insight into the development of responsive design systems, making it a defining project in their academic journey.

