

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

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On April 30, 2024, the B.Tech 2nd year students of the Department of Civil Engineering at Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (SurTech) organized the publication of a wall magazine focusing on the theme of "Automation in Civil Engineering." The initiative aimed to explore the role of automation in revolutionizing various aspects of civil engineering, ranging from construction and design to maintenance and monitoring. The publication of The Wall magazine was done by the following coordinators -

Student Coordinator: Aditya Raj Singh, Matrika Rai, Ayush Shreshta, B.Tech CE 2nd Year Students.

Faculty Coordinator: Mr. Souvik Chakraborty, Assistant Professor, Department of Civil Engineering.

The wall magazine featured a diverse range of articles, infographics, and illustrations highlighting different facets of automation in civil engineering. Here highlights: some of the key content are Automation in Construction: Articles discussed the use of robotics, drones, and 3D printing technology in construction processes, emphasizing their efficiency, precision, and potential to reduce labor costs and time. **Smart Infrastructure:** Infographics showcased examples of smart infrastructure projects worldwide, illustrating how automation and sensor technology are being integrated into bridges, roads, and buildings to enhance safety, sustainability, and functionality.

Building Information Modeling (BIM): Students elucidated the benefits of BIM software in streamlining the design, planning, and management of construction projects, leading to better collaboration among stakeholders and improved project outcomes.

Automated Monitoring Systems: Articles delved into the importance of automated monitoring systems in civil engineering, discussing the use of sensors, IoT (Internet of Things), and data analytics for real-time monitoring of structural health, environmental conditions, and infrastructure performance. **Future Trends and Challenges:** Students speculated on future trends in automation technology, such as the integration of AI (Artificial Intelligence) and machine learning in civil engineering practices. They also addressed potential challenges, including cybersecurity risks and ethical considerations.

Outcome: The publication of the wall magazine on "Automation in Civil Engineering" by the B.Tech 2nd year students of the Department of Civil Engineering at Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex served as a commendable platform for exploring the intersection of

technology and infrastructure development. It not only showcased the students' enthusiasm for innovation but also provided valuable insights into the evolving landscape of civil engineering practices.

Please find the attached glimpses.



