




Department of Civil Engineering



 www.iimtindia.net

 Plot no. 19 & 20, Knowledge Park III,
Greater Noida (U.P.)

 contact_gn@iimtindia.net

Newsletter Highlights

Industrial Visit

Celebrate World Creativity
And Innovation Day

Alumni Connect

Farewell Celebration

April-June 2025

VOLUME XVII, ISSUE II
NEWSLETTER

From Chief Editor's Desk



Prof. (Dr.) Tabassum Abbasi
HOD, Department of Civil Engineering

Message from the Head of Department

It is with great pride and enthusiasm that I connect with you through this edition of our newsletter. This platform allows us to reflect on our recent achievements, share emerging initiatives, and present our vision for the future. As we witness rapid transformations in technology and infrastructure, the responsibility and relevance of civil engineers have never been more profound. Our department remains steadfast in its mission to provide high-quality education, innovation, and shape responsible professionals who can contribute meaningfully to society.

Pursuit of Academic Excellence

The Civil Engineering Department continues to uphold a strong commitment to academic excellence. Our curriculum is regularly updated to align with industry demands and technological trends. Faculty members are dedicated to adopting innovative teaching methodologies, integrating modern software tools, and promoting interdisciplinary learning. These efforts ensure that our students are not only well-versed in theoretical concepts but are also equipped with practical skills essential for a competitive professional environment.

Research, Innovation, and Societal Impact

Innovation lies at the heart of our department's progress. Faculty and students actively participate in research across diverse and critical areas including sustainable construction, smart infrastructure, environmental engineering, and structural health monitoring. Our commitment to high-impact research is reflected in publications in reputed journals, successful grant acquisition, and collaborative projects with academic and industry partners. These research endeavors contribute to the global mission of building a sustainable and resilient future.

Prof. (Dr.) Tabassum Abbasi
Chief Editor & HOD Dept. of CE

Education
is the most powerful weapon
which you can use to
Change the World

~Nelson Mandela

April-June 2025

VOLUME XVII, ISSUE II
NEWSLETTER

WHAT ARE CONSTRUCTION ROBOTS?

In recent years, Construction Robotics has emerged as a groundbreaking solution to the age-old challenges of the construction industry—delays, labor shortages, safety issues, and inconsistent quality. Construction robots are intelligent machines designed to assist or fully automate building activities. From bricklaying robots like SAM100 to 3D concrete printing machines by Apis Cor, robots are taking on tasks that once required hours of manual labor.

Key Areas Where Robots Are Making a Difference:

1. **Earthworks & Excavation:** Self-driving excavators and trucks reduce the need for manual operators.
2. **Bricklaying & Masonry:** Machines like Hadrian X can lay thousands of bricks per hour with extreme precision.
3. **3D Printing:** Entire houses are being printed using robotic arms and concrete mixtures.
4. **Demolition:** Robots like Brokk ensure safer building dismantling.
5. **Inspection & Monitoring:** Drones and robots like Boston Dynamics' Spot help in real-time project monitoring.

Technology Behind the Machines: These robots rely on a mix of AI, GPS, LiDAR, BIM (Building Information Modeling), and computer vision—working together to achieve speed, safety, and accuracy.

Why It Matters:

1. Improves safety by reducing human exposure to hazardous tasks.
2. Speeds up construction timelines drastically.
3. Enhances precision and quality of work.
4. Addresses labor shortages with automation support.

Challenges Ahead: High costs, integration with traditional practices, and the need for skilled operators remain hurdles—but industry experts believe the tide is turning fast.

Glimpse into the Future: Imagine a fully robotic construction site—where humans supervise while machines build with minimal intervention. This is no longer a sci-fi dream but a near-future reality.

April-June 2025

VOLUME XVII, ISSUE II
NEWSLETTER



INDUSTRIAL VISIT

An industrial visit was organized to observe the construction of a hostel building, providing us with the opportunity to understand the practical application of construction techniques, building materials, and project management. The visit aimed to bridge the gap between theoretical knowledge and real-world construction practices. The project involved the construction of a modern, multi-story hostel with state-of-the-art facilities for students.

2. Objective of the Visit

- To observe the construction phases of a hostel building.
- To understand the materials and techniques used in large-scale construction projects.
- To interact with professionals in the field and gain insights into project management.

3. Construction Site Overview

The hostel building under construction is designed to accommodate approximately 500 students. The project includes multiple floors with rooms, common areas, and essential amenities like a dining hall, gym, laundry, and recreational spaces. The building is being constructed using concrete, steel, bricks and features modern design elements for sustainability and energy efficiency.

4. Superstructure Construction

- After the foundation was set, the construction of the superstructure began with the erection of columns and beams.
- Formwork was used to pour concrete for slabs and walls.
- Steel reinforcement was used in various parts of the building for added strength.

5. Materials Used

- The construction materials used in the project included:
- Cement: Used for making concrete and mortar.
- Steel: Used for reinforcement of the structure and in beams, columns, and slabs.
- Bricks and Blocks: Used for wall construction.
- Glass and Aluminum: Used for windows and external finishes.
- Wood and Laminates: Used for doors, paneling, and internal furniture.

6. Conclusion

The industrial visit provided valuable insights into the various stages of hostel building construction, including planning, execution, and safety measures. We gained a deeper understanding of the challenges faced in managing large-scale construction projects and the importance of teamwork, planning, and quality control. The visit has helped us connect theoretical learning with practical application, providing us with a clearer perspective on the construction industry.



April-June 2025

VOLUME XVII, ISSUE II

NEWSLETTER



WORLD CREATIVITY AND INNOVATION DAY

The department has celebrated “World Creativity And Innovation Day” on 21st April, 2025 from 10:am onwards at Room no 310. The event aimed to inspire students to think outside the box and use their talents to contribute to positive change. Activities included idea-generation, poster presentations, and innovation challenges where students showcased creative projects related to sustainable development, technology, and social impact. The event successfully encouraged collaboration, problem-solving, and the celebration of diverse ideas, reinforcing the role of youth in shaping a better and more sustainable future.

Learning Outcomes:

At the end of the program, the students have understood the following points about the

1. **Enhanced Creative Thinking:** Students developed the ability to think creatively and approach problems with innovative solutions.
2. **Improved Collaboration Skills:** Group activities and workshops encouraged teamwork and the sharing of diverse perspectives.
3. **Awareness of Global Issues:** Students gained insights into global challenges like sustainability, climate change, and social inequality, and how innovation can help address them.
4. **Practical Application of Knowledge:** By participating in idea challenges and project displays, students applied their academic learning in real-world contexts.
5. **Boost in Confidence and Communication:** Presenting ideas and projects helped students build public speaking skills and confidence in expressing innovative thoughts.
6. **Inspiration for Future Endeavors:** Exposure to guest speakers and peers' projects inspired students to pursue creativity and innovation in their future careers and personal lives.



April-June 2025

VOLUME XVII, ISSUE II
NEWSLETTER

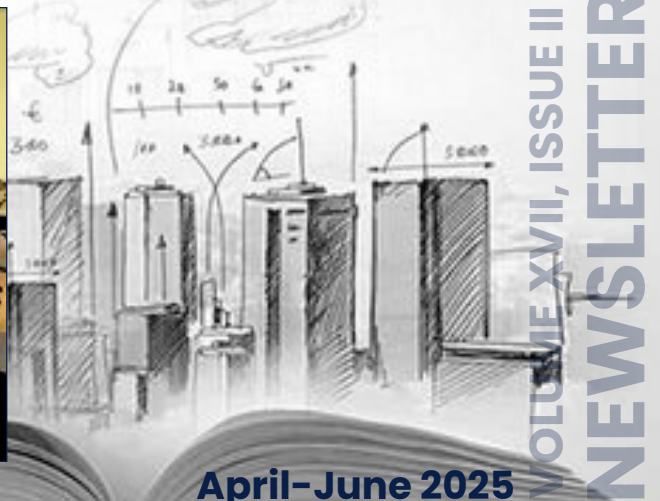


ALUMNI CONNECT

An Alumni connect program was conducted by Civil Department on 2nd June, 2025 from 11:00 am onwards. The speaker for the program was Mr. Sameer Kumar Singh, 2012 pass out. He is currently working Senior Consultant at A.S Infrastructure Pvt Ltd, Noida. He interacted with his juniors and guided them about the

“Career Path in Civil Engineering” with some motivational points as discussed below:-

Civil engineering is more than just building structures — it's about shaping the world around us and solving real-life challenges. As a civil engineer, you have the opportunity to design and construct infrastructure that improves the quality of life for millions, from roads and bridges to water systems and sustainable buildings. This field blends creativity with technical skill, allowing you to turn ideas into reality. What's exciting is that your journey can take many paths — whether it's in construction, design, environmental sustainability, project management, or research. The classroom is just the beginning; the world becomes your project site. Civil engineering offers not just a job, but a chance to leave a lasting impact on society.



April-June 2025

VOLUME XVII, ISSUE II
NEWSLETTER

CELEBRATED LAST DAY IN COLLEGE

Civil department has celebrated the end of an unforgettable journey with our final year students of 2025 who became like family. From clicking endless pictures to sharing our favorite memories, signing shirts, and reliving every moment that made these years so special — it was a day we'll carry in our hearts forever.

Though their paths will now diverge, the bonds we've formed with them and the experiences we've shared will always remain a part of us. The classrooms, corridors, and canteen will echo with their stories long after they have moved on.

As the final year of their incredible journey comes to a close, it's time to celebrate the memories, friendships, and achievements that have defined our time together.



April-June 2025

VOLUME XVII, ISSUE II
NEWSLETTER

Department Of Civil Engineering



CHIEF EDITOR

Prof. (Dr.) Tabassum Abbasi
HOD, Department of Civil Engineering



EDITOR

Mr. Dharendra kumar
Asth. Professor
Ms Mona Khosla
Asth. Professor



STUDENT EDITOR

Ardaman Gautam, B. Tech (CE)
4th Year

Muntazir Hussain, B. Tech (CE)
4th Year

Greater Noida Campus

Mob. : +91 9911009144 | +91 9717015300

Plot no. 19 & 20, Knowledge Park III, Greater Noida (U.P.)