

Ref.:1177/Dean(Sol)/0525

Date:21.05.2025

SCHOOL OF INFRASTRUCTURE

DEPARTMENT OF CIVIL ENGINEERING

Guest Lecture on AutoCAD for Modern Civil Engineering Design

Date:07.05.2025

Time:01.40p.m.to04.00p.m.

I. PREAMBLE:

As part of the B.Tech (Civil Engineering) curriculum, a guest lecture was arranged for the course Civil Engineering Drawing [CED 1203] for II semester B.Tech Civil Engineering students on 07th May 2025 from 01.40 p.m.to 04.00 p.m. in U.G. Computer Laboratory, Civil Engineering Department. This programme was supported by the Institution's Innovation Council, B. S. Abdur Rahman Crescent Institute of Science and Technology.



The brochure is a vertical rectangular poster with a light blue and white background. At the top, there are four logos: A++ Accredited, NBA Accredited, Institution's Innovation Council, and Crescent Institute of Science & Technology. Below the logos, the text reads: 'SCHOOL OF INFRASTRUCTURE', 'DEPARTMENT OF CIVIL ENGINEERING', 'GUEST LECTURE ON', 'Auto CAD for Modern Civil Engineering Design', and 'As a part of course CED 1203 (Civil Engineering Drawing)'. In the center, a white box with a gold border contains the text: 'by Mr. Balamouragane, Structural Consultant, M/s. TechApps Consulting, Chennai-600073'. Below this, two white boxes with gold borders contain the 'DATE & TIME' (07.05.25 (Wednesday), 1.40 PM Onwards) and 'VENUE' (UG COMPUTER LABORATORY, DEPARTMENT OF CIVIL ENGINEERING, SCHOOL OF INFRASTRUCTURE). At the bottom, two white boxes with gold borders list the 'Coordinator' (Dr. M. Hazeen Fathima, Assistant Professor/Civil) and the 'Convenor' (Dr. M. S. Haji Sheik Mohamed, Dean, School of Infrastructure).

**SCHOOL OF INFRASTRUCTURE
DEPARTMENT OF CIVIL ENGINEERING**

**GUEST LECTURE
ON**

**Auto CAD for Modern Civil
Engineering Design**

As a part of course CED 1203 (Civil Engineering Drawing)

by
Mr. Balamouragane
Structural Consultant
M/s. TechApps Consulting
Chennai-600073

DATE & TIME
07.05.25 (Wednesday)
1.40 PM Onwards

VENUE
UG COMPUTER LABORATORY,
DEPARTMENT OF CIVIL ENGINEERING,
SCHOOL OF INFRASTRUCTURE

Coordinator
Dr. M. Hazeen Fathima
Assistant Professor/Civil

Convenor
Dr. M. S. Haji Sheik Mohamed,
Dean, School of Infrastructure

Technical Talk Brochure

II . ABOUT THE SPEAKER

Mr. Balamourgane is an experienced structural consultant associated with Techapps Consulting, Chennai. With a strong background in civil and structural engineering, he specializes in the preparation of detailed structural drawings and design documentation using AutoCAD. As a certified AutoCAD trainer, he has consistently demonstrated expertise in both the practical application of the software in engineering projects and in teaching its features to aspiring professionals. Over the years, Mr. Balamourgane has trained numerous students, graduates, and working professionals in civil engineering design software, equipping them with industry relevant skills.

III. ABOUT THE SESSION:

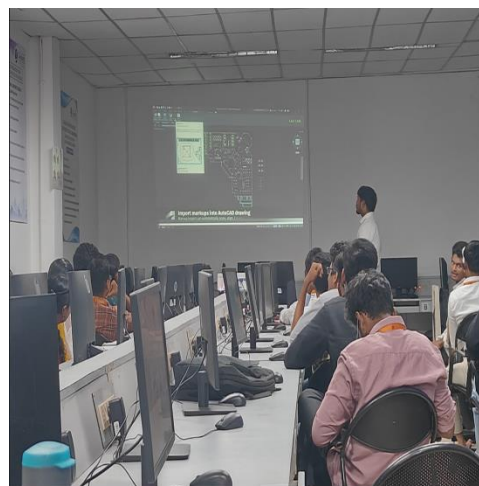
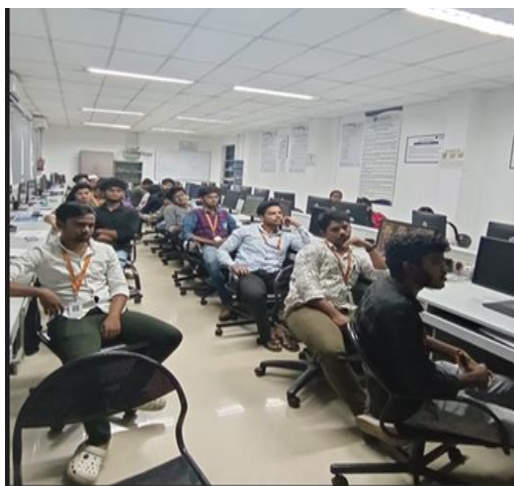
Dr. M. Hazeen Fathima, Assistant Professor, Department of Civil Engineering, extended a warm welcome to the guests & participants and introduced the guest speaker. The guest lecture is aimed to provide students with a comprehensive understanding of Auto CAD software, its key features, advantages and applications.

The session began with an insightful talk of the speaker on the relevance and impact of software applications in civil engineering, covering a wide range of tools used in the field. The speaker elaborated on how proficiency in software tools significantly enhances employability and productivity in the construction industry.

The core of the lecture focused on AutoCAD, starting with an introduction to the software, its evolution, and key applications in civil engineering such as in preparing construction drawings, plan layouts, elevations, sections, and working drawings.

A live demonstration of 2D drafting and 3D modeling using AutoCAD was presented, where students were shown how to create basic to advanced structural drawings. The speaker walked the participants through several essential AutoCAD commands, their usage, and how they are applied in real-world civil engineering projects. The advanced features in the latest versions of AutoCAD, such as enhanced 3D capabilities, dynamic blocks, annotation scaling, and cloud collaboration tools, were also explained. The lecture emphasized that AutoCAD proficiency is often a baseline requirement in many civil engineering roles and is considered a vital skill in drafting, structural detailing, and architectural design. The importance of continuous learning, and exposure to multiple tools for enhanced career prospects was strongly advocated.

Following the lecture, an interactive Q&A session was conducted, where students actively asked questions related to troubleshooting common AutoCAD drawing errors, best practices in 2D and 3D drafting, career opportunities and roles that require AutoCAD expertise, additional software tools recommended for structural design, planning, and visualization. The speaker responded with practical insights and shared real-world scenarios to help students understand the industry expectations and technical requirements. The session concluded with a heartfelt vote of thanks by Dr. M. Hazeen Fathima, who acknowledged the speaker's efforts in delivering a valuable and informative session that helped bridge the gap between academic learning and industry practices.



Lecture by the guest speaker

IV.DETAILS OF PARTICIPANTS:

The following were the participants of I-year, B.Tech (Civil Engineering) who attended the technical talk:

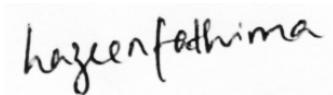
Sl.No.	Name	RRN
1	ABDUL AZEEZ W	240011601002
2	ABDUL HAMEED B	240011601003
3	ABUL FIRAZ UDUMAN R	240011601004
4	ARSHAD M	240011601005
5	DINESH S	240011601006

6	U K HEMAVARSHINI	240011601008
7	MARIA BALAN V	240011601009
8	MOHAMED AJMAL M	240011601010
9	MOHAMED ASIK N	240011601011
10	MOHAMED BILAL S	240011601012
11	MOHAMED MADHAR NAZIH H	240011601013
12	MOHAMMAD FAHAD	240011601014
13	MOHAMMAD SHAAMIL K Z	240011601015
14	MOHAMMAD TAYYIB F	240011601016
15	MOHAMMED ANAS C	240011601017
16	MOHITHA A	240011601019
17	SHAIK ASLAM	240011601021
18	SUTHARSAN V	240011601023
29	SYED SAMEER S A	240011601024
20	WASIM AKRAM H	240011601025
21	ABINAYABHARATHI A	240011601027
22	MOUDA MOHAMMED AZHAN SAAD	240011601028
23	MOUDA MOHAMMED ABUBAKKAR SIDDIQUE	240011601029
24	PEER MOHAMMED S	240011601030
25	KAVIYA G	240011601031
26	THASLIM ALI M	240011601032

V. OUTCOMES:

- The students gained knowledge about the fundamentals of AutoCAD software and its wide-ranging applications in civil engineering.
- The students understood the importance of software expertise in improving employability and bridging the gap between academic learning and industry requirements.
- The students were introduced to 2D and 3D drafting, key features, and commands in AutoCAD, enhancing their technical drawing and visualization skills.

- The students developed awareness of the latest tools and advanced features available in newer versions of AutoCAD.
- The workshop enabled students to understand the role of AutoCAD in preparing accurate construction and structural drawings, aiding in real-world civil engineering projects.



Dr. M. HazeenFathima
Assistant Professor



Dr. M.S. Haji Sheik Mohammed
Dean(School of Infrastructure)