



MAHARAJA AGRASEN INSTITUTE OF TECHNOLOGY, DELHI

Department of Mechanical Engineering

EVENT REPORT

Date: 24 March 2026

Department: Mechanical Engineering

Activity Category: Workshop

Title of the Activity:

Workshop on Precision Measurement & Metrology Instruments

Theme/Focus Area:

Hands-on training and practical exposure to modern metrology instruments for industrial inspection

1. Basic Details

Date: 23rd & 24th March 2026

Day: Monday & Tuesday

Time:

23rd March: 10 AM–12 PM, 2 PM–4 PM

24th March: 10 AM–12 PM, 2 PM–4 PM

Venue: Centre of Excellence for Precision Measurement (Room No. 211)

Organized by: Department of Mechanical Engineering

Coordinators: Mr. Rakesh C. Saini, Dr. Piu Jain, Mr. Atul Kaushik

Participants: Students (61)

2. Resource Person Details

1. Mr. Rakesh C Saini, Asst. Prof.
2. Dr, Piu Jain, Asst. Prof.
3. Mr. Atul Kaushik, Asst. Prof.
4. Mr. B. R. Saini, Lab Assistant
5. Mr. Vinod Babu, Lab Assistant

3. Objectives

- Understanding dimensional measurement using 2D Height Gauge
- Hands-on training on surface roughness testing
- Exposure to CMM operations
- Instrument selection for industrial inspection
- Bridging curriculum gap

4. Description of the Activity

A two-day workshop was conducted for 6th semester students focusing on practical exposure to precision measurement tools. Students performed hands-on measurements using 2D height gauge, surface roughness tester, and CMM. The sessions were interactive and industry-oriented, helping students understand real-world applications.

5. Learning Outcomes / Impact

- Improved understanding of measurement techniques
- Enhanced practical skills
- Exposure to advanced tools
- Better instrument selection ability
- Increased awareness of metrology practices

6. Photographs & Documentation



7. Feedback Summary

Average Ratings:

S. No.	Question	PO/PSO Mapping	Average Ratings (5)
1	The workshop enhanced my understanding of dimensional measurement using the 2D Height Gauge.	PO1,PO2,PSO2	4.7
2	The hands-on training improved my ability to measure and interpret surface roughness parameters of machined components.	PO2,PO4,PSO2	4.8
3	The workshop provided practical exposure to Coordinate Measuring Machine (CMM) operation and dimensional inspection methods.	PO4,PO5,PSO3	4.8
4	The workshop improved my ability to select appropriate measuring instruments for industrial inspection tasks.	PO3,PO5,PSO1	4.7
5	The workshop increased my awareness of modern metrology tools used in manufacturing quality control.	PO5,PO11,PSO3	4.7

- Students appreciated the hands-on sessions and suggested more detailed and longer workshops.

8. Recommendations / Future Scope

- Include industry experts

9. Annexures

Annexure I – Attendance Sheet

Annexure II – Notice

Annexure III – Impact Analysis from Student Feedback Survey

Report Prepared By:

Rakesh C. Saini, Asst. Prof.

Verified By:

Dr. Vaibhav Jain (HOD-ME)

Approved By:

Prof. (Dr.) Vikram Bali, Director