

Metrology Laboratory

About the Laboratory

The **Metrology Lab** at NIT Kurukshetra provides advanced facilities for precision measurement, inspection, and material characterization. The laboratory is equipped with modern instruments such as **the ZEISS Duramax Coordinate Measuring Machine (CMM), ZEISS COMET Blue Light 3D Scanner, Digital Toolmaker's Microscope, and Digital Metallurgical Inverted Microscope**. These instruments enable students and researchers to perform accurate dimensional and geometrical measurements, 3D scanning, reverse engineering, surface and profile inspection, and microstructural analysis of engineering materials. The lab plays an important role in developing practical knowledge of precision metrology, quality control, manufacturing inspection, and advanced engineering measurement techniques.

Faculty In-Charge

Dr. Manoj Kumar Sinha

Technical Staff

- **Mr. Gautam Kumar** – Technician

Laboratory Courses

Course Code	Course Name	Programme
PIPC-414	Production & Industrial Engineering	B.Tech./M.Tech.
MEIC-426	Metrology & Measurements	B.Tech./M.Tech.

Major Equipment and Software

Equipment / Software	Quantity	Utilization
Dexel Imaging Software	01	B.Tech., M.Tech., Ph.D.
MSU3D-PRO Software	01	B.Tech., M.Tech., Ph.D.
Double Disc Polishing Machine	01	B.Tech., M.Tech., Ph.D.
Digital Metallurgical Inverted Microscope	01	B.Tech., M.Tech., Ph.D.
Digital Tool Maker Microscope	01	B.Tech., M.Tech., Ph.D.
Coordinate Measuring Machine (CMM)	01	B.Tech., M.Tech., Ph.D.
ZEISS COMET Blue Light 3D Scanner	01	B.Tech., M.Tech., Ph.D.

Laboratory Photographs

