



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE
(Deemed to be University)

Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi
NAAC Accredited with A+ Grade, NIRF India Rankings 2024 - Band: 201-300 (Engg.)
NBA Accredited - B.Tech. (CIVIL, CSE, ECE, EEE, MECH, CST), MBA & MCA



A Report on One-day Industrial Visit to
"Government Tools and Training Centre, Bangalore"
Organized by Industry Relations

In Association with Department of Electronics & Communication Engineering
on 21.04.2026.



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Mode of Conduct: Offline

No. of Students: 47

Faculties Accompanied: Dr. Gajanan Kunde, Associate Professor, Department of Chemistry and Ms. Kavi Priya S, Assistant Professor, Department of Electronics & Communication Engineering, MITS.

Report Received on 28.04.2026

Introduction:

On 21st April 2026, the Department of Electronics and Communication Engineering organized an industrial visit for the I Year B. Tech students of MITS Deemed to be University, Madanapalle, Andhra Pradesh to the Government Tool Room & Training Centre (GTTC), Bangalore.

The primary objective of this visit was to provide students with practical exposure to modern industrial practices and advanced technologies. GTTC, started in 1972 and being a premier institution in tool engineering and manufacturing offered students valuable insights into various domains such as Computer-Aided Design (CAD), Computer-Aided Manufacturing (CAM), Internet of Things (IoT), Robotics and Supervisory Control and Data Acquisition (SCADA) systems.

The visit enabled students to understand how theoretical concepts are applied in real-time industrial environments, thereby enhancing their technical knowledge and awareness of industry standards.

Objectives of the Visit:

- To provide exposure to industrial working environments and advanced manufacturing processes.
- To understand the applications of CAD and CAM in product design and manufacturing.
- To gain knowledge about emerging technologies such as IoT and Robotics.
- To familiarize students with SCADA systems and their role in industrial automation.
- To bridge the gap between academic learning and industry practices.

Details of the Visit:

During the visit, the students were given an overview of GTTC's operations, infrastructure, and training facilities. Experts from GTTC, Mr. Nagendra, Head of Centre of Excellence, Mr. Rohit – Robotics expert, Mrs. Deepthi – SCADA and IoT expert conducted informative sessions explaining the working principles and applications of various technologies.

The students visited different sections including design labs, manufacturing units and automation labs. Demonstrations were provided on CAD modelling, CAM processes, robotic operations and IoT-based applications. The functioning of SCADA systems in monitoring and controlling industrial processes was also explained in detail.

The interactive sessions allowed students to clarify their doubts and gain deeper insights into real-world engineering applications.



Outcome of the Visit:

The industrial visit was highly informative and beneficial for the students. It helped them:

- Understand practical implementation of engineering concepts.
- Gain exposure to modern tools and technologies used in industries.
- Develop awareness about career opportunities in core engineering fields.
- Enhance their interest in emerging technologies and innovation.



Sustainable Development Goal (SDG) Mapping:

Focus Area	Description	Related SDG
Quality Education	Enhances practical learning, industry exposure, and skill development for engineering students through real-time applications of CAD, CAM, IoT, Robotics and SCADA.	SDG 4
Industry, Innovation and Infrastructure	Exposure to advanced manufacturing processes, R&D activities and modern industrial infrastructure at GTTC.	SDG 9
Clean Water and Sanitation	Awareness of industrial water usage, drainage systems and waste-water management practices followed in industries.	SDG 6
Affordable and Clean Energy	Observation of energy-efficient electrical systems and safe power utilization in industrial setups.	SDG 7
Climate Action	Understanding of environmental safety measures, sustainability practices and pollution control mechanisms in industries.	SDG 13

Conclusions:

The industrial visit to GTTC, Bangalore was a successful and enriching experience for the I Year ECE students. It provided a platform to connect theoretical knowledge with practical applications and motivated students to explore advanced technologies in their academic and professional journey.

Acknowledgments:

We thank our Chancellor, Pro Chancellor, Vice Chancellor, Registrar, Principal, Vice-Principal Administration, Dean (School of Engineering), the HoD of ECE and I Year HoD, IRC for giving us the permission to experience such an insightful Industrial visit to GTTC. We extend our sincere thanks to the management and staff of the GTTC for their hospitality and cooperation inorganizing this Industrial visit.