



K.S. INSTITUTE OF TECHNOLOGY, BANGALORE



INDUSTRY INSTITUTE INTERACTION CELL

&

DEPARTMENT OF MECHANICAL ENGINEERING

INDUSTRY VISIT TO

“GOVERNMENT TOOL ROOM & TRAINING CENTRE (GTTC), BENGALURU”

Date of Visit: 12th December 2023

Industry address: GTTC, Rajajinagar Industrial Estate, Bengaluru-560010

Time: 9.00AM – 4.00PM

Duration: 6 Hours

Sponsoring Bodies / Associating Organization: NA

Brief about the Industry:

GTTC was established in 1972 at Bangalore with the participation of the Karnataka State Government, in collaboration with the Government of Denmark under the Bilateral Development Co-operation Agreement. The excellent performance of GTTC Bangalore, proactive Government of Karnataka which saw the need for expansion, got second unit of GTTC started in 1992 with DANIDA assistance. GTTC is an autonomous society, and a recognized Scientific and Research Organization by the Government of India. Govt. Tool Room and Training Centre (GTTC), is serving industry by way of precision tooling and providing in well trained craftsmen the area of tool and die making. GTTC is concentrating on the Integrated Development of the related segments of industries by way of providing international quality tools, trained personnel and consultancy in tooling and related areas. In future, the focus would be more on turnkey projects in Tooling, Aerospace components & their assemblies, and also to support the development of small and medium scale enterprises.

Description of the Event:

As per the directions of Dr. Girish T.R, Head - MED, 3rd & 5th Semester ME students assembled in parking area at 8.45AM. The journey towards industry started at 9.00AM with students and faculty in-charge & chief coordinator, IIIC – KSIT, Mr. Rajesh G.L; and reached GTTC, Rajajinagar centre at 10.00AM. Shri. Nagendra J, Head – CoE, GTTC welcomed us and outlined about the agenda of visit. Initially students are informed to visit “Robotics Lab” to understand the working of robots in various applications like pick and place operation, MIG & TIG Welding, plasma welding etc. Students were then taken to CNC Machine lab where they explored on turning and milling center and their operation. Mrs. Jayaram, Lecturer, Department of Tool Engineering, demonstrated 3D printing technology and interacted with students on 3D manufacturing methods and applications. Further, students had the opportunity to visit Autodesk training centre, IoT lab, mechatronics lab and metrology lab. The visit ended with vote of thanks by Mr. Rajesh G.L at 3.00PM.

Objectives / Key Highlights:

- Explore the applications of advanced manufacturing technology like 3D printing.
- Understand the importance of automation tools and techniques.

Participant details - No. of Participants: 36

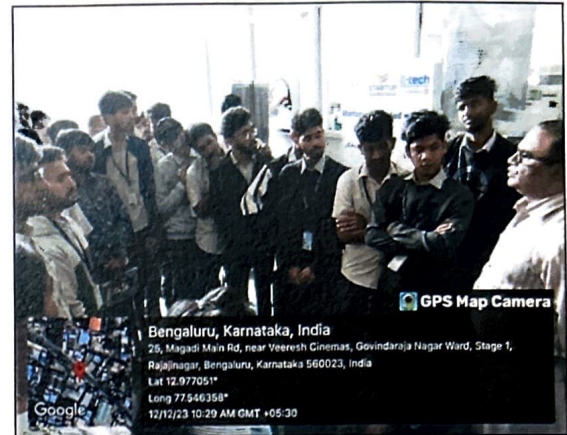
Students (internal/external): Internal (3rd & 5th Semester – ME) - 36

Faculty: Mr. Rajesh G.L, Asst. Prof, MED

Photos (Geo Tagged):



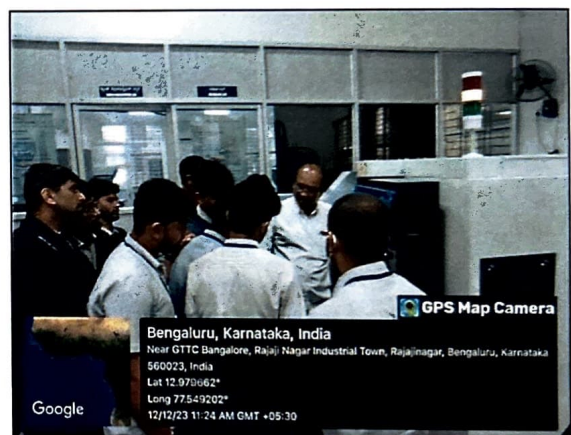
Technical visit to GTTC



Mr. Nagendra J briefing about schedule of visit



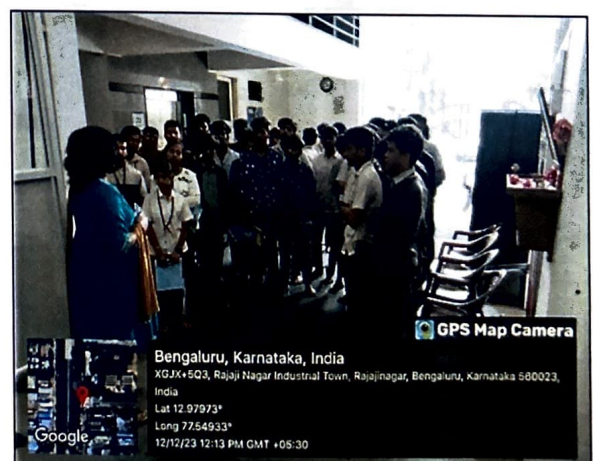
Robotics Lab – Pick & Place Robot operation



CNC machine lab – Turning center



3D Printing Machine with fabricated models



Visit ended at 3.00PM

Outcomes / Benefits:

- Students explored the operation of different types of industrial robots
- Understood working principle of 3D printing, concept of machining centers and automation tools

Attachments:

1. Communication with Industry
2. Industry visit circular and transport arrangement request letter
3. Feedback

CO/PO&PSO mapping

CO/PO&PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
Industry visit	-	-	-	-	01	-	-	-	-	-	-	01	-	-
Average	-	-	-	-	01	-	-	-	-	-	-	01	-	-

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Mr. Rajesh G.L

Chief Coordinator - IIIC

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