

**A Report on One day Industrial Visit to
FANUC India Private Limited, Bangalore
Organised by Department of EEE
On 27-11-2024**



Submitted by: Mr. R. Ramesh Kumar, Asst. Professor and Mrs. Revathi K. Asst. Professor, EEE Dept.

Participants: B. Tech II Year EEE Students

Venue: FANUC India Private Limited, Bangalore

Date & Time of Event: 27-11-2024, 10:30 AM to 2:00 PM

Total no. of Participants: 47 Students + 2 Teaching Faculty + 1 Non-Teaching Staff

Organizer: Dr. T S Balaji Damodhar, Assistant Professor, EEE Dept.

Faculty Accompanied: Mr. R. Ramesh Kumar and Mrs. Revathi K and Mr. Syed Shanenshah

Report Submitted on: 02.12.2024

Company Profile:

FANUC started the development of NCs (numerical controls) in 1955, and ever since, has devoted itself to focusing on factory automation. FANUC is active in the fields of FA, which encompasses basic technologies, consisting of NCs, servos and lasers, and Robots to which such basic technologies are applied, as well as Robo machines. Through the diligent efforts of FANUC to apply IoT/AI technologies to all fields, consisting of FA, Robots and Robo machines, customers are able to use FANUC products more efficiently. FANUC also offers service, with a policy for not terminating support of FANUC products as long as they are used by customers. Through such activities, FANUC contributes to the development of manufacturing industries in Japan and overseas, by promoting automation and efficiency in customers' factories.

Objective of the Industrial Visit:

1. **Understanding Automation and Robotics:** Gain insights into FANUC's cutting-edge robotic systems and automation solutions, understanding their role in enhancing manufacturing efficiency and productivity.
2. **Exploring CNC Technologies:** Learn about FANUC's CNC (Computer Numerical Control) systems, their applications in machining, and their importance in modern industrial operations.
3. **Learning About Industry 4.0:** Explore FANUC's contributions to Industry 4.0, including smart manufacturing practices, IoT-enabled systems, and digital transformation in industrial settings.
4. **Operational Insights:** Observe FANUC's production processes, quality control mechanisms, and operational workflows to understand real-world manufacturing and engineering practices.
5. **Technological Advancements:** Familiarize students with the latest advancements in robotics, automation, and CNC technologies and how they align with global industrial trends.
6. **Career and Industry Perspectives:** Interact with industry professionals to understand potential career paths in automation, robotics, and CNC machining, and gain insights into the required skillsets.
7. **Case Studies and Applications:** Analyze real-world applications of FANUC's products in various industries, including automotive, electronics, and heavy machinery, to understand their impact on efficiency and innovation.
8. **Sustainability and Efficiency:** Learn about FANUC's approach to energy-efficient and sustainable manufacturing solutions and their relevance to achieving green manufacturing goals.
9. **Hands-on Demonstrations:** Experience live demonstrations of FANUC robots and CNC machines to understand their functionality, programming, and practical applications.

The Details of the Industrial visit are as follows:

The Department of Electrical and Electronics Engineering, MITS, Madanapalle organized a one-day Industrial Visit to “**FANUC India Private Limited, Bangalore**”, on 27th November 2024 for Second year EEE students. The visit was organized with the prior permission and guidance of **Dr. C. Yuvaraj** Professor & Principal and **Dr. A.V. Pavan Kumar** Professor & Head of the Department.

A total of 47 students along with 2 Teaching Faculty and 1 Non-Teaching Staff have joined the visit.

1. We started from our college premises sharply at 5.45 AM on 27th November 2024.
2. We reached “**FANUC India Private Limited, Bangalore**”, by 10:30 AM
3. Upon arrival, participants were warmly welcomed by the company representative **Mr. Jaiker Neil Fernandez**, Deputy Manager – Industry Institute Relations.
4. At 11.00 AM to 2 PM, students learned about various robotic applications such as Thin Wall Moulding (Packaging), Optical Moulding, Orthopaedic Implant Machining, Heavy Machining using High Torque Spindle, High Accuracy Laser Cutting System and etc.
5. Some of our students also had a hands-on practice in Robotic Operations in Virtual Reality (VR).
6. The company provided snacks to all the student and faculty participants.
7. At 3.00 PM we headed back to our college and reached at about 8.00 PM.

Outcome of the Industrial Visit:

1. **Enhanced Knowledge of Automation and Robotics:** Participants gained an understanding of FANUC’s advanced robotics and automation technologies, including their design, functioning, and applications in various industries.
2. **Familiarity with CNC Systems:** Students were able to develop a practical understanding of FANUC’s CNC systems and their significance in precision machining and modern manufacturing processes.
3. **Insight into Industry 4.0 Practices:** The visit has provided an exposure to smart manufacturing practices and the integration of IoT and AI in industrial operations, equipping participants with knowledge of contemporary technological trends.
4. **Exposure to Real-world Applications:** Participants observed real-life applications of FANUC products in industries like automotive, electronics, and heavy machinery, enhancing their understanding of how automation impacts operational efficiency.
5. **Understanding Quality and Safety Standards:** Students learned about the stringent quality control and safety standards followed in FANUC’s manufacturing processes, which are crucial for maintaining global industrial benchmarks.
6. **Practical Experience with Robotics:** Hands-on exposure to robotic systems and CNC machinery during live demonstrations helped participants understand their programming, maintenance, and operational capabilities.
7. **Improved Awareness of Career Opportunities:** The visit provided insights into potential career paths in automation, robotics, and CNC technologies, as well as the skills required to succeed in these fields.
8. **Knowledge of Sustainable Manufacturing:** Students understood FANUC’s commitment to energy-efficient and sustainable production methods and their role in achieving environmentally friendly manufacturing.
9. **Networking and Professional Engagement:** Interaction with industry professionals allowed participants to build networks and gain first-hand advice about the industry, fostering a better connection to real-world engineering and automation sectors.
10. **Inspiration for Innovation and Research:** Exposure to FANUC’s R&D efforts inspired students to pursue innovative projects and research in robotics, automation, and CNC technologies.
11. **Improved Problem-Solving Skills:** Observing how FANUC addresses manufacturing challenges using automation and advanced technologies will encourage critical thinking and problem-solving skills among participants
12. **Internship Opportunity:** Students have the opportunity to undertake internships to enhance their industry-relevant skills.

Sample Photos:



Sample Feedback from Industry and Students:

Madanapalle Institute of Technology and Science,
Department of Electrical and Electronics Engineering
FEEDBACK REPORT ON INDUSTRIAL VISIT

CLASS: B. Tech II Year I semester

ACADEMIC YEAR : 2024-25

Name and Address of Industry Visited: Fanuc India Limited, Bommasandra Bengaluru.

Date : 27.11.2024

Duration : 10.00 to 2.00Pm

Beneficiary Dept. : EEE

Year/Semester: II / I

Total No. of Students: 47

Industrial Visit organized by: Dr T S Balaji Damodhar, Assistant Professor, Dept. of EEE

Name of Industrial Visit in-charge and other Faculty who accompanied the students:

Site In charge:

Other Faculty Names:

1. Mr. R. Ramesh Kumar
2. Mr. Syed Shanenshah
3. Mrs. Revathi K

Contact Person at Industry: Mr. Jaiker Neil Fernandez

Deputy Manager | Industry Institute Relations

Visit related to the subject:

During visit the students were taken to following Departments in the Industry.

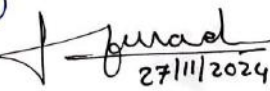
1. Robotics
2. FA (CNC)
3. Robo machines
4. Service

Names of Student who offered feedback (Feedback enclosed)


1. K. Arif (23691A0206)
2. S. Reddy Neeraja (23691A0238)
3. P. Usha (23691A0256)
4. T. Yugendra (24695A0207)

Sign. of Industrial Visit in-charge with Seal:

1. R. Ramesh Kumar
 2. K. Revathi
- Sign of Faculty In-charge


27/11/2024
T. S. Balaji Damodhar
Sign of Faculty Organizer




Signature of HoD

Head of the Department
Electrical & Electronics Engineering
Madanapalle Institute of Technology & Science
MADANAPALLE - 517 325

Encl:

3. Industrial Visit report with photographs,
4. Permission letter

Madanapalle Institute of Technology & Science
Department of Electrical & Electronics Engineering

INDUSTRIAL VISIT FEEDBACK FORM

Name of the Student: *K. Arif*

Course, Branch & Semester: **II Year I Semester-EEE**

Roll Number: *23691A0206*

Name of the Industry: **Fanuc India Pvt. Ltd, Bengaluru.** Date: **27.11.2024**

Type of Interaction: **Industrial Visit**

Questions	Response of Students
Relevance of the industrial visits (or input received) w.r.t your curriculum	<input checked="" type="radio"/> Excellent <input type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
Whether any specific official was assigned for you during the training (or visits)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Willingness to share information & details by the officials of the organization	<input checked="" type="radio"/> Excellent <input type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
Access to different facilities of interest to you - for observation, gather knowledge and get your clarifications cleared	<input checked="" type="radio"/> Excellent <input type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
Whether any relevant technical literature explained by the Industry person	<input checked="" type="radio"/> Yes <input type="radio"/> No
Was the whole training based on a well-defined schedule and adherence to the schedule?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Was the opportunity given for you to work on real time problem or practical problem or on the day to day activities of the organization?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Do the people in the organization encourage interaction with them or extended support in clarifying your doubts or providing information you have sought for?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Hospitality of the industry (willingness to help you for any problems faced during the period where it is agreed upon etc.)	<input type="radio"/> Excellent <input checked="" type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
Overall usefulness of the interaction with the industry	<input type="radio"/> Excellent <input checked="" type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
Your recommendation for considering this organization for Industrial visit (or industry institute interaction) in future	<input type="radio"/> Strong <input checked="" type="radio"/> Can be considered <input type="radio"/> Not

K. Arif
Signature

Madanapalle Institute of Technology & Science
Department of Electrical & Electronics Engineering

INDUSTRIAL VISIT FEEDBACK FORM

Name of the Student: *P. Usha*

Course, Branch & Semester: II Year I Semester-EEE

Roll Number: *23691A0256*

Name of the Industry: *Fanuc India Pvt. Ltd, Bengaluru.*

Date: *27.11.2024*

Type of Interaction: *Industrial Visit*

Questions	Response of Students
Relevance of the industrial visits (or input received) w.r.t your curriculum	<input type="radio"/> Excellent <input checked="" type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
Whether any specific official was assigned for you during the training (or visits)	<input checked="" type="radio"/> Yes <input type="radio"/> No
Willingness to share information & details by the officials of the organization	<input checked="" type="radio"/> Excellent <input type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
Access to different facilities of interest to you - for observation, gather knowledge and get your clarifications cleared	<input checked="" type="radio"/> Excellent <input type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
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Do the people in the organization encourage interaction with them or extended support in clarifying your doubts or providing information you have sought for?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Hospitality of the industry (willingness to help you for any problems faced during the period where it is agreed upon etc.)	<input type="radio"/> Excellent <input checked="" type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
Overall usefulness of the interaction with the industry	<input type="radio"/> Excellent <input checked="" type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor
Your recommendation for considering this organization for Industrial visit (or industry institute interaction) in future	<input checked="" type="radio"/> Strong <input type="radio"/> Can be considered <input type="radio"/> Not

P. Usha
Signature

Acknowledgments:

We express our sincere gratitude to the Management, Principal, Dean-Administration, Vice Principal (Academics and Administration), Associate Dean-IIIC, Head of the Department-EEE and Academic Head (EEE) for their unwavering support and encouragement. Their continuous backing was instrumental in organizing and facilitating this insightful industrial visit, providing our students with a platform to bridge theoretical learning with practical exposure.