



Department of Electrical and Electronics Engineering Industrial Visit Report

1. Title of the Visit

Industrial Visit to Rakon India Pvt Ltd

2. Date and Time

Date: 05 March 2026

Time: 10:00 AM – 4:00 PM

3. Venue

Rakon India Pvt Ltd KIADB

Aerospace SEZ KIADB

Industrial Area

Devanahalli, Bengaluru, Karnataka

4. Participants

6th Semester B.E. EEE Section B

5. Organising Body

Department of Electrical and Electronics Engineering

New Horizon College of Engineering

In association with

IEEE DEIS – Dielectrics and Electrical Insulation Society Student Branch Chapter

6. Faculty Coordinators

- Prof. Vinod Kumar S
- Prof. Kavitha C H

7. Industrial Visit Coordinator

Dr. B. Gunapriya

8. Convenor

Dr. S. Sujitha

HoD – EEE

9. Institutional Authorities

- Dr. Revathi V – Dean R&D
- Dr. R. J. Anandhi – Dean - Academics
- Dr. Manjunatha – Principal

10. Objective of the Industrial Visit

The industrial visit was organised to provide students with exposure to advanced electronic manufacturing processes and high-precision frequency control devices used in

aerospace, defense, and communication systems.



Dielectrics and Electrical Insulation Society
New Horizon College of Engineering, DEI32 (SBC66131F)
Student Branch Chapter

Industrial Visit

Rakon India Pvt Ltd

KIADB Aerospace SEZ, KIADB Industrial Area,
Devanahalli, Bengaluru, Karnataka

 05 March 2026

 10:00 AM to 04:00 PM

 6th Semester, Section - B, EEE Students



Faculty Coordinators
Prof. Vinod Kumar S
Prof. Kavitha C H

Industrial Visit Coordinator
Dr. B. Gunapriya

Convenor
Dr. S. Sujitha
HoD-EEE

Dr. Revathi V
Dean - R&D

Dr.R.J.Anandhi
Dean-Academics

Dr. Manjunatha
Principal

Organised by
Department of Electrical and Electronics Engineering





The key objectives were:

- To understand the industrial manufacturing process of crystal oscillators and frequency control components
- To learn about high-reliability electronic systems used in aerospace applications
- To observe quality testing, calibration, and packaging processes
- To bridge the gap between academic learning and industrial practices

11. About the Industry

Rakon India Pvt Ltd is a leading global manufacturer of frequency control and timing solutions, including:

- Crystal oscillators
- Frequency synthesizers
- Quartz crystals
- Timing modules

These components are widely used in:

- Aerospace and defense systems
- Satellite communication
- Telecommunications
- GPS systems
- Industrial electronics

The company operates with high precision manufacturing standards and advanced cleanroom facilities.

12. Details of the Visit

The visit began with an introductory presentation by the industry experts explaining the history, products, and global presence of Rakon.

Students were taken through different sections of the facility including:

1. Crystal Manufacturing Unit

Students observed the fabrication of quartz crystals used for precise frequency generation.

2. Assembly Section

The process of assembling oscillators, resonators, and timing modules was demonstrated.

3. Testing and Calibration

Students learned about:

- Frequency stability testing
- Temperature testing
- Reliability testing

4. Quality Assurance

The engineers explained the importance of precision manufacturing, testing standards, and industrial quality control methods.

13. Key Learning Outcomes

Students gained knowledge about:

- Real-time applications of frequency control devices
- Industrial quality assurance procedures
- Manufacturing techniques used in microelectronics
- Industrial automation and precision instrumentation
- Importance of reliability in aerospace electronics

14. Student Feedback

Students provided positive feedback regarding the industrial visit.

Key responses included:

- The visit helped them understand real-world electronic manufacturing
- Exposure to advanced aerospace electronics increased their interest in research
- Students appreciated the interactive session with industry experts
- The visit helped them understand how theoretical electronics concepts are applied in industry

15. Conclusion

The industrial visit to Rakon India Pvt Ltd provided valuable exposure to advanced electronic component manufacturing and precision engineering techniques. Students gained insights into the practical applications of electronics and electrical engineering in aerospace and communication systems. The visit successfully enhanced students' understanding of industrial practices and technological innovations.

Summary of Industrial Visit to Rakon India Pvt Ltd – Day 2

Date: 05 March 2026

The Department of Electrical and Electronics Engineering at **New Horizon College of Engineering** organized an industrial visit to **Rakon India Pvt Ltd**, KIADB Aerospace SEZ, Devanahalli, Bengaluru, on **05 March 2026** for the **6th Semester EEE students of Section B**. The visit aimed to provide students with practical exposure to advanced **frequency control technologies and electronic component manufacturing** used in aerospace, defense, and telecommunications industries. The students were accompanied by **Prof. Vinod Kumar S** and **Prof. Kavitha C H**, and the visit was coordinated by **Dr. B. Gunapriya**, Professor, Department of EEE. During the visit, the industry experts provided a detailed presentation about Rakon's products and their applications in modern communication systems. Students were guided through various departments including the **crystal manufacturing unit, oscillator assembly section, and testing laboratories**, where they observed procedures such as **frequency stability testing, temperature reliability testing, and precision calibration**. The visit enabled students to gain insights into the manufacturing and quality assurance processes followed in high-precision electronic industries. It also helped them understand the importance of reliability, accuracy, and advanced instrumentation in aerospace electronics. The interaction with industry professionals allowed students to connect their classroom knowledge with real-world technological applications. The visit proved to be a valuable learning experience, enhancing students' awareness of industrial practices and emerging opportunities in the electronics and communication sector.

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5/3/26
I V - Co-ordinator

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5/3/2026
HOD / EEE

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