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(UGC AUTONOMOUS INSTITUTION)

School of Engineering

Department of Electronics and Communication Engineering

Date: 27th December, 2025

A Report on Industrial Visit

to

Indian Railways Institute for Signal Engineering & Telecommunication (IRISET) – Tarnaka, Secunderabad

Program Particulars:

Date Organized	Venue/Organization	Attendees
24th December 2025 (Wednesday)	Indian Railways Institute for Signal Engineering & Telecommunication (IRISET) – Tarnaka, Secunderabad	B. Tech. ECE selected students (60) & 4 faculty/staff.

Event Banner

Purpose of Visit:

The Department of Electronics and Communication Engineering, in association with the Industry Institute Interaction Cell (IIIC), the Institute of Electrical and Electronics Engineers (IETE) Student Forum (ISF), and e-SPARK organized an industrial visit for the B.Tech III Year ECE students. The visit was conducted on 24th December 2025 (Wednesday) to the, Indian Railways Institute for Signal Engineering & Telecommunication (IRISET) – Tarnaka, Secunderabad .

The 60 students were accompanied by Mr.Koustubh Kulkarni, Asst.Prof, Ms.Bindu Tushara, Asst.Prof., Mr.Abraham Thomas, Asst.Prof., Ms.Swapna, Lab Staff.

This visit was aimed at providing students with exposure to practical industry knowledge with railway engineering processes and operations related to their field.

NALLA NARASIMHA REDDY GROUP OF INSTITUTIONS

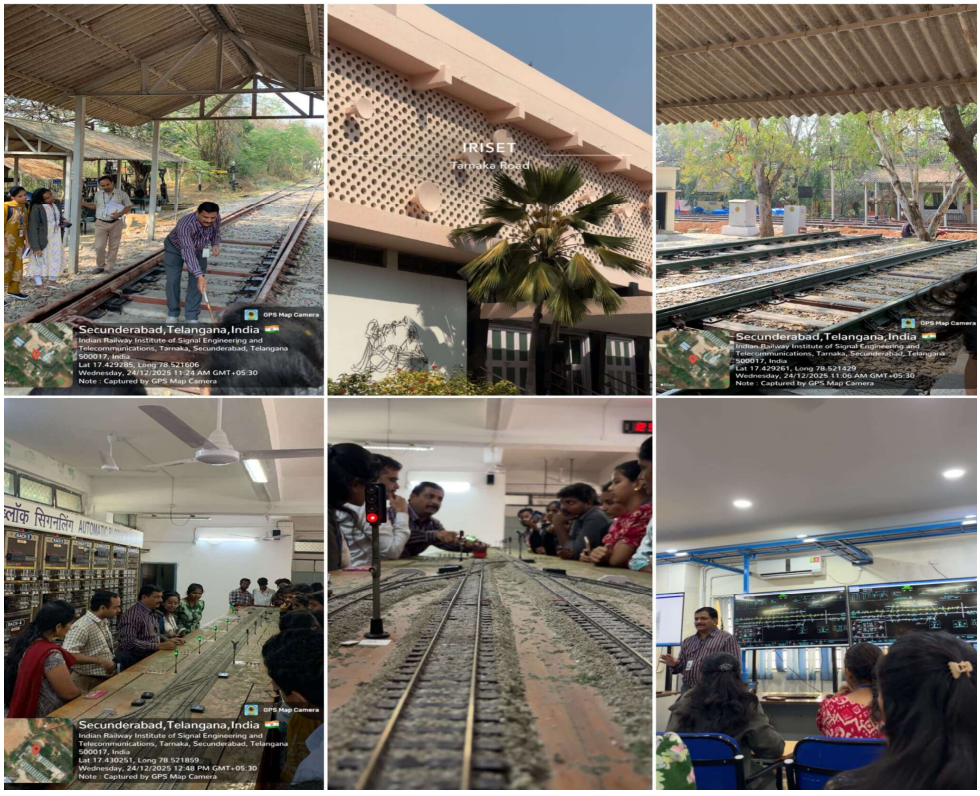
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Industrial Visit -24-12-2025

IRISET

(Indian Railways Institute Of Signal Engineering and Telecommunications)

SECUNDERABAD



Outdoor and Indoor Signalling Labs

As part of the industrial visit, the students of the Electronics & Communication Engineering department visited key sections related to Railway Signalling and Telecommunication systems. The visit effectively bridged the gap between theoretical concepts and real-world applications.

Kavach Unit Demonstration

During the visit to the Outdoor Signalling Lab (ODS), students gained practical understanding of trackside signalling equipment, interlocking mechanisms, and their role in ensuring safe train movements. The Indoor Telecommunication Lab provided insights into communication networks, control panels, and safety-critical communication systems used in railway operations.

The session on Kavach units and modules was highly informative, where students learned about the indigenous Train Collision Avoidance System, its architecture, functionality, and importance in enhancing railway safety.

Group Photo

Objectives of the Visit:

Objective 1:- To understand the real-world applications of Electronics & Communication Engineering in Railway Signalling and Telecommunication systems.

Objective 2:- To gain practical insight into safety-critical communication and control systems.

Objective 3:- To enhance career awareness and job-readiness in core engineering domains.

Sections Visited:

IRSIET has mainly 3 labs for engineering students visit explanation.

1.Outdoor Signalling Lab (ODS)

2. Indoor Signalling Lab (IDS)

3. Kavach Units and modules**.**

Track Operation and Mechanism Explanation

Outcome:

A individual overview report before the industrial visit was taken to analyze their interest and after the industrial visit the feedback was taken from every student who attended the visit, through a Google Form link and a consolidated feedback report was prepared to make the outcome of the industrial visit purposeful.

Overall, the visit helped students understand the real-time application of Electronics and Communication Engineering concepts, improved their awareness of safety-critical systems, and motivated them towards careers in core engineering domains. The industrial exposure significantly enhanced their technical knowledge, practical insight, and job readiness.

In-Charge

Koustubh Kulkarni
Assistant Professor

HoD-ECE

Dr. B.Ravi
Associate Professor