

Gyanmanjari Innovative University

Bridge Course Activity Report

Gyanmanjari Diploma Engineering College

A.Y. – 2025-26



The **Bridge Course or Student Induction Program** was conducted for 4 weeks at **Gyanmanjari Innovative University** from **June 13, 2025, to July 11, 2025**, specifically for the students of **Diploma in Electrical Engineering** and **Diploma in Electronics and Communication Engineering**.

This Bridge Course plays a crucial role in ensuring a smooth transition from school to diploma-level technical education. While stepping into college is an exciting milestone for every student, it also brings along new challenges and responsibilities. Students need to understand the value of higher education and adapt to new learning styles and environments.

For diploma students in these engineering streams, the Bridge Course is carefully designed to reinforce the fundamentals of science and mathematics while providing an introductory understanding of core engineering concepts. It provides students with a comprehensive overview of their chosen field, highlighting the scope, real-world applications, and future career opportunities in the electrical and communication domains.

In addition to academic sessions, the program included interactive workshops, practical activities, and technical demonstrations designed to enhance critical thinking, problem-solving skills, and collaborative abilities. These activities help students gain not only technical knowledge but also the confidence to integrate into the academic and social environment of college life. The course forms a foundation that bridges the gap between school education and the technical expectations of a diploma program.

The **Orientation Program** was held on **July 12, 2024**, where **Dr. H.M. Nimbark**, Provost and CEO of Gyanmanjari Innovative University, addressed the newly admitted students and their parents. He shared valuable insights on career opportunities in the technical field and emphasized the critical role that parents play in supporting students through their higher education journey.

From **June 13, 2025, to July 11, 2025**, a variety of creative activities, industrial visits, motivational lectures, and technical sessions were thoughtfully planned and executed. Some of the key highlights are listed below:

Following is the list of Major Bridge Course Activities.

Sr. No	List of Major Activities
1	Introduction to Digital Electronics
2	Robotics
3	Circuit making with component game
4	Introduction to Electrical and Electronic Components
5	Resistor Color Coding
6	Journey of Electricity: From Generation to Load
7	Electrical Vehicle
8	Digital circuit
9	Combinational Circuit Design
11	Industrial Visit
12	Explore Nature
13	Expert Talk
14	Research
15	Training and Placement Activity
16	And Many more

Orientation Program

Photo of Orientation Program



Photo of Orientation Program



Photo of Orientation Program



Photo of Orientation Program



Bridge Course Activities:

Introduction to Digital Electronics

Digital electronics deals with circuits that operate using binary signals (0 and 1). It forms the basis of modern devices like computers and smartphones, using logic gates and digital circuits for fast, reliable data processing.



Robotics

Robotics is the branch of technology that deals with the design, construction, and operation of robots. It combines electronics, mechanics, and programming to create machines that can perform tasks automatically or with human guidance.



Circuit making with component game

This interactive game involves creating simple electronic circuits using real or virtual components like resistors, LEDs, batteries, and switches. It helps learners understand circuit design, component functions, and connectivity in a fun, hands-on way.



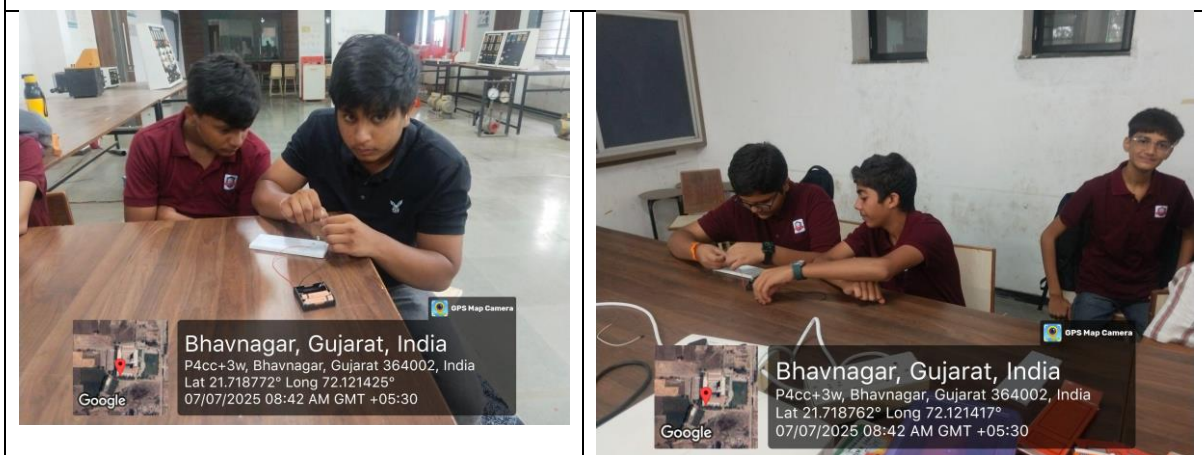
Introduction to Electrical and Electronic Components

This topic covers the basic components used in electrical and electronic circuits, such as resistors, capacitors, diodes, transistors, and switches. Understanding these components is essential for building, analyzing, and troubleshooting circuits in various applications.



Resistor Color Coding

Resistor color coding is a method used to indicate the resistance value of a resistor using colored bands. Each color represents a number, and the position of the bands determines the resistance, tolerance, and sometimes reliability. It helps in quickly identifying resistor values without measuring instruments.



Journey of Electricity: From Generation to Load

The journey of electricity begins at power plants where it is generated, then transmitted over high-voltage lines to substations. From there, it is distributed through lower-voltage lines to homes, industries, and other loads where it is used to power devices and appliances.



Industrial Visit - Railway Workshop

An industrial visit to the **Railway Workshop** provided students with practical exposure to the maintenance, repair, and overhauling of railway coaches and locomotives. They observed various sections such as mechanical fitting, wheel and axle assembly, brake systems, and electrical wiring. The visit helped bridge theoretical concepts with real-world railway operations, enhancing their technical knowledge and understanding of large-scale transportation systems.

(Class-A)

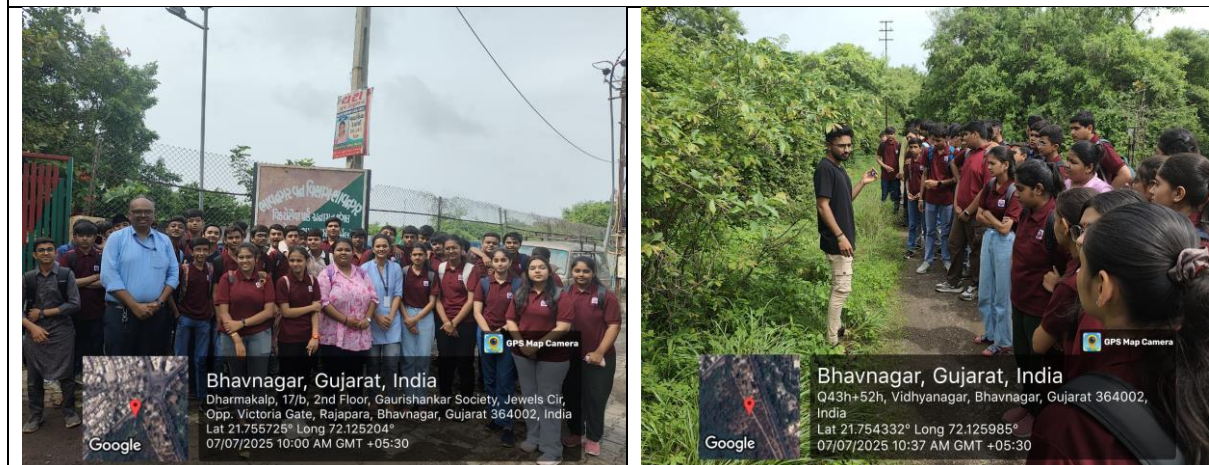


(Class-B)



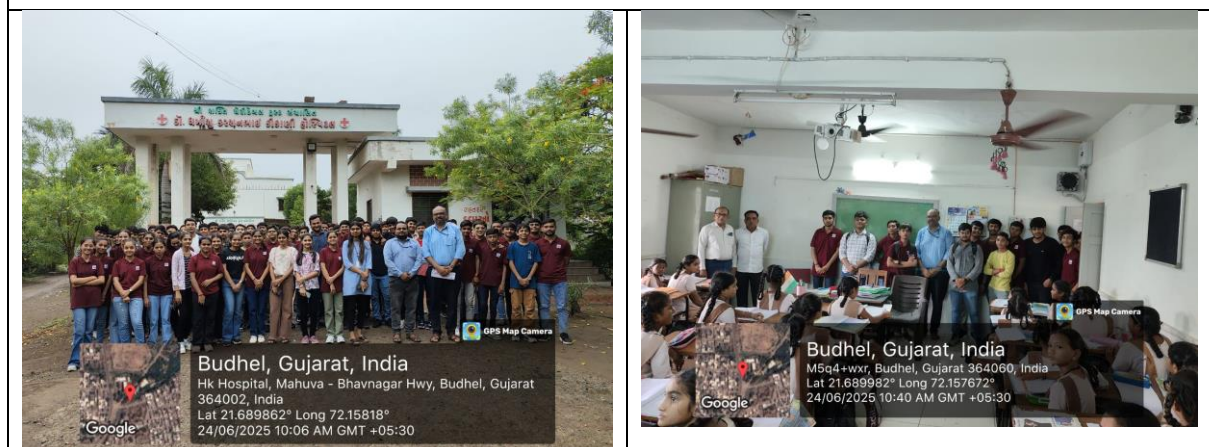
Explore Nature - Victoria Park

A nature visit to **Victoria Park** offered students an opportunity to explore local biodiversity, observe various plant and bird species, and understand the importance of environmental conservation. The visit encouraged awareness about ecological balance and provided a refreshing outdoor learning experience.



Village Visit - Budhel

The visit to Budhel village offers an opportunity to observe the rural lifestyle, local economy, and infrastructure, thereby fostering awareness of community needs, traditions, and development practices.



Research

Research is a systematic process of investigating and analyzing information to discover new facts, develop solutions, or gain a deeper understanding of a subject.



Expert Talk

An expert talk is a session where a specialist shares knowledge, experiences, and insights on a specific topic, helping students gain a deeper understanding and practical perspectives beyond textbook knowledge.



Training and Placement Activity

Training and placement activities prepare students for employment by enhancing technical skills, soft skills, and industry readiness, while connecting them with potential employers through campus recruitment drives.



Essential Details

Name of Activity: Bridge Course

Orientation Date: June 12, 2025

Duration: June 13, 2025, to July 11, 2025

Programs: Diploma in Electrical Engineering & Diploma in Electronics and Communication Engineering

Thank You