

**Department of Electrical and Instrumentation
Engineering**

**Report on Sustainable Development Goals (SDGs)
Initiatives**

January- May 2026

SDGs Selected:

SDG3 – Good Health and Well-being

SDG4 – Quality Education

SDG7 – Affordable and Clean Energy



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1. Introduction

What are the Sustainable Development Goals?

The Sustainable Development Goals (SDGs), adopted by the United Nations in 2015, comprise 17 global goals aimed at achieving sustainable development by 2030 through balanced economic growth, environmental protection, and social well-being. Educational institutions contribute significantly through quality education, research, innovation, and community engagement. The Department of Electrical and Instrumentation Engineering (DEIE) actively supports the UN SDGs through academic, research, outreach, and innovation-driven initiatives. Its major focus areas include **SDG 3 (Good Health and Well-being)**, **SDG 4 (Quality Education)**, and **SDG 7 (Affordable and Clean Energy)**, which are closely integrated with the department's academic programs, research activities, laboratories, student projects, and community initiatives.

2. Departmental Initiatives Aligned with SDGs (January-May 2026)

The Department of Electrical and Instrumentation Engineering contributes to SDGs 3, 4, and 7 through its academic and research activities. SDG 3 focuses on health and well-being via projects on biomedical instrumentation and healthcare technologies. Under SDG 4, the department emphasizes quality education with Outcome-Based Education and integration of IoT, AI, and automation. SDG 7 promotes clean energy through research on renewable energy, smart grids, and sustainable power management. The department integrates these themes into its curriculum, laboratory courses, Capstone projects, and experiential learning programs to foster practical learning and interdisciplinary research. The following sections present brief reports on the Department of Electrical and Instrumentation Engineering's initiatives focused on the SDGs. It is relevant to note that the SDGs beyond the above-selected three are also considered, where applicable, in the departmental SDG initiatives.

3. Awareness Activities

The Department of Electrical and Instrumentation Engineering at Thapar Institute of Engineering and Technology conducts numerous activities relevant to the SDGs, particularly SDGs 3, 4, and 7. These activities span academic, research, and community engagement domains and are designed to promote sustainable practices, technological innovation, and social responsibility. Faculty members, students, and research scholars collaborate on projects, workshops, outreach programs, and awareness campaigns that reflect the department's commitment to addressing real-world challenges. Through a multidisciplinary, inclusive approach, the department integrates sustainability into its core operations and contributes meaningfully to the global SDG framework. The posters and stickers below have been affixed in Blocks C, BC, CD, and H.

Some of the visual initiatives and awareness activities conducted by the department to promote Sustainable Development Goals (SDGs) 3 (Good Health and Well-Being), 4 (Quality Education), and 7 (Affordable and Clean Energy) are shown in Fig. 1. The departmental events/programs conducted and aligned with relevant Sustainable Development Goals (SDGs), from January to June 2026, are shown in Table 1. The online links to the photographs of the events are also given in the same table. However, some photos of departmental activities focused on social awareness and wellness initiatives, including a Cleanliness Drive, the Rise Beyond Drugs program, the Unity Stride Walkathon, the Nasha Mukti Bharat Pledge, International Yoga Day, and National Youth Day celebrations, are shown in Fig. 2.

The SDG initiatives of DEIE are also reflected in ELC activities, Capstone Projects, Sponsored Research Projects, and Project Semester Projects. For the January-June 2026 tenure, the mapping of their relationships with the corresponding SDGs is shown in Fig. 3 and Fig. 4, with Table 2 for reference.



Fig. 1 Visual initiatives and awareness activities conducted by the department to promote Sustainable Development Goals (SDGs) 3 (Good Health and Well-Being), 4 (Quality Education), and 7 (Affordable and Clean Energy)

4. Events/Programs Conducted

Table 1: Departmental events aligned with relevant Sustainable Development Goals (SDGs), 2026

S.No.	Event	Date	SDG	Event Photographs Link
1.	National Youth Day Celebration	12-01-2026	4	https://drive.google.com/open?id=1UCGJkij_i_Z3lo8KVjKFs4hiHjtRNVkd
2.	Unity Marathon National Youth Day Celebration	12-01-2026	3, 10	https://drive.google.com/open?id=1bbBKzgHXYNdEwwrrDg88BK67k02ke_-N
3.	Unity Stride-Walkathon	26-01-2026	3, 10	https://drive.google.com/open?id=1DfWpys4jfmLUQTP18SMJacaAEsgVEhE1
4.	Road Safety and Awareness Program	28-01-2026	3,11	https://drive.google.com/open?id=1ryOMyEljWWgYEIRcPGcxhLkgNfWu41y4
5.	Blood Donation Camp	05-02-2026	3,11	https://drive.google.com/open?id=1JC7-53TGT0nzlVdL7gQVdAgQmmxNhpME
6.	Nasha Mukti Abhiyaan	11-02-2026	3,11	https://drive.google.com/open?id=1ZMPKUexV7slqgSNEgkl1b6imHpQj7tc5
7.	System Level Design and Protection of Traction Power Supply	13-02-2026	3, 4, 6, 9, 11	https://drive.google.com/open?id=1_qurmAowui8Cd_wtW71rZq6zrRs_n6t9Z

8.	Umang	14-02-2026	3,11	https://drive.google.com/open?id=18S_8S9Sb4q33Egn8uzUz73tn0WJ0ItXb
9.	Rise Beyond Drugs_Skills Startups_Self-Reliance	26-02-2026	3,11	https://drive.google.com/open?id=14_WVZ0YB9H5cAbvR2T0pOcTB2Idlh7s8
10.	Mechatronics Developments in Automobiles	27-02-2026	3, 4, 6, 7, 9, 11	https://drive.google.com/open?id=1Y8RrPbzyGKBdY3huZJc4Gx_RB2fKnKen
11.	Food-Planet-Health Awareness	08-04-2026	3,6	https://drive.google.com/open?id=1TbkKjGIET9a8bhn_V_gmbhIor1Bjz0En
12.	Energy Conversion for Sustainable Future	10-04-2026	3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 16	https://drive.google.com/open?id=1YaHV3YFvhUPX3TXR7aaSoMwAAYLRzOzP
13.	Accelerating Your Technical Career	15-04-2026	3, 4, 5, 6, 7, 8, 9, 11, 13	https://drive.google.com/open?id=1ADC1kP6evM2tpvtsWf72Uye890UR2k1
14.	Concept to Consequence - Engineering for Sustainability	19-04-2026	3, 4, 6, 7, 9, 11	https://drive.google.com/open?id=1RVp7AskI9Rumg1blt8cMDPVq42D4B_pP
15.	Cleanliness Drive	22-04-2026	3,13	https://drive.google.com/open?id=1uH18JjMo71KpP8OSWV3N5nuYM3SRCFrd
16.	IEEE PES DL: Stability Modelling and Analysis of Converter Driven Power System	27-04-2026	4, 6, 7, 9, 11, 13	https://drive.google.com/open?id=1hulmuWnIYzeSfHaBh5C6zHTfCjFLB1Bh



Fig. 2 Departmental activities focused on social awareness and wellness initiatives, including a Cleanliness Drive, Rise Beyond Drugs program, Unity Stride Walkathon, Nasha Mukti Bharat Pledge, International Yoga Day, and National Youth Day celebrations

5. SDG Mapping corresponding to ELC Activities and Capstone Projects

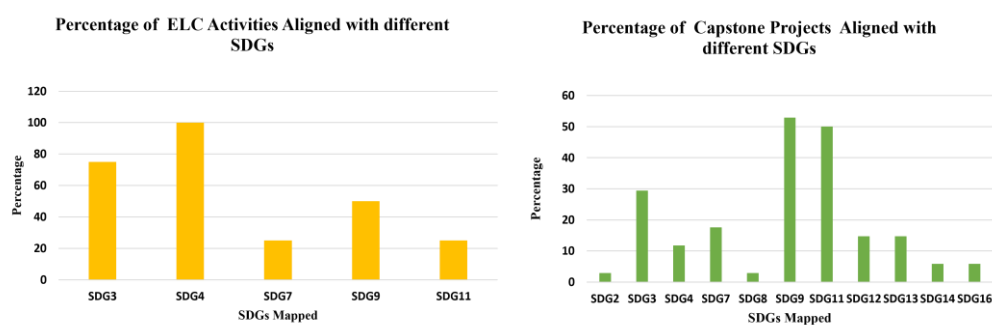


Fig. 3 SDG Mapping corresponding to ELC Activities and Capstone Projects, 2026

Table 2 SDG Mapping of ELC Activities Conducted for EE, EIC, BME, and EEC Students in 2026.

S. No.	EE/EIC/BME/EEC	1 st /2 nd /3 rd / 4 th Year	ELC Activities 2026	SDG Mapping
1	EE, EIC, BME and EEC	1 st	Arduino based Embedded system	SDG3, SDG4
2	EE, EIC, BME and EEC	2 nd	IoT based home automation	SDG3, SDG4
3	BME	2 nd	DC motor rewinding and Testing of performance Characteristics	SDG3, SDG4, SDG7
4	EE and EEC	3 rd	Robotic ARM Control	SDG3, SDG4

6. SDG Mapping corresponding to Sponsored Research Projects and Project Semester Projects

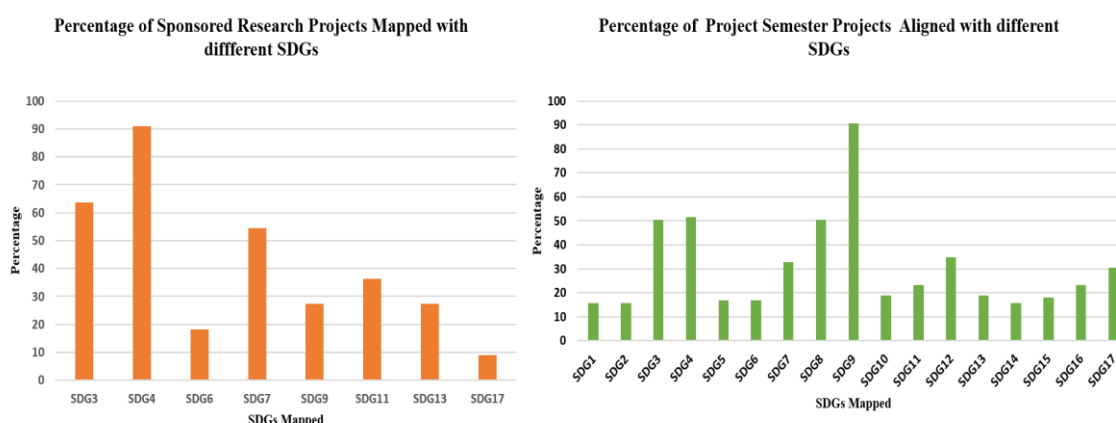


Fig. 4 SDG Mapping corresponding to Sponsored Research Projects and Project Semester Projects, 2026

7. Recognition

Institute Level: An event titled "Final Poster Presentation on how the academic and non-academic units performed in the year 2025" was held on Republic Day, 26th January 2026, organized by the office of the Dean of Sustainability, TIET. Among the Academic Units, the Department of Electrical and Instrumentation Engineering (DEIE) secured third place in the event through a poster presentation, as shown in Figure 5 below. Also, a certificate of appreciation, as shown in Figure 6, was conferred upon the Department at a meeting chaired by our VC, Prof. Nair, on the 6-monthly SDGs (January-June 2026) initiatives, held in the Committee room on May 26, 2026, at 9.30 A.M.

International Level: DEIE faculty members actively contributed to the BSIS Certification (refer to Figure 7) awarded by EFMD Global and FNEGE to TIET. This achievement reflects the department's SDG initiatives, from the Institute to the international level.

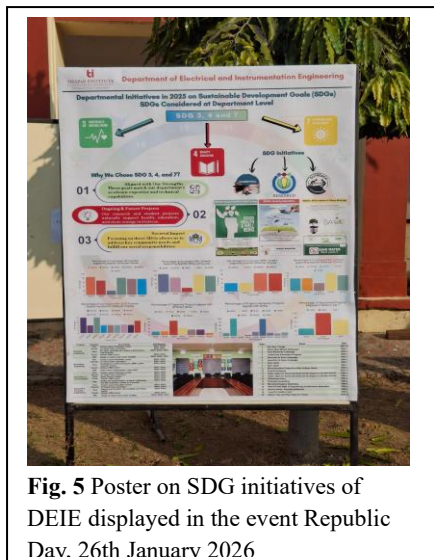


Fig. 5 Poster on SDG initiatives of DEIE displayed in the event Republic Day, 26th January 2026



Fig. 6 Photo of the certificate of appreciation for the SDG initiatives of DEIE



Fig. 7 BSIS Impact Certificate

8. Conclusion

The Department of Electrical and Instrumentation Engineering continues to strengthen its commitment toward sustainable development through responsible engineering education, innovation, and societal engagement. By integrating SDG-focused initiatives into academic, research, and outreach activities, the department contributes meaningfully to building a sustainable, technology-empowered future for society, in harmony with the TIET initiatives.