

Renewables Energy Lab







The Renewable Energy Laboratory is designed for third-year and final-year students, providing hands-on experience in renewable energy technologies. This lab supports both undergraduate and postgraduate research, offering essential resources for project work and advanced experimentation.

The laboratory features a wind energy simulator and a solar PV MPPT simulator, enabling students to conduct four to five key experiments related to renewable energy generation and optimization.

In 2024, a state-of-the-art Solar Laboratory was developed, further strengthening the institution's focus on sustainable energy research. This facility includes a 33 kW solar power plant installed on the rooftop of the SPCE building, serving as a dedicated resource for UG, PG, and PhD students. The 33 kW system comprises:

- 11 kW fixed-tilt system
- 11 kW HSAT (Horizontal Single-Axis Tracking) system
- 11 kW TSAT (Tilted Single-Axis Tracking) system

By integrating theoretical learning with practical applications, the Renewable Energy Laboratory plays a crucial role in equipping students with the skills and knowledge required for future advancements in the field of sustainable energy.