



DYP DPU Dr. D. Y. Patil Unitech Society's Dr. D. Y. Patil Institute of Techn ology, Pimpri, Pune **Department of Electrical Engineering**

Activity: "Innovative Teaching Learning Pedagogy-Winding Race: Lap vs Wave

Date & Day: 17-03-2025, Monday

Activity Name: Fun activity: Winding Race: Lap vs Wave

Subject: CADEM

Venue: HVE lab, Electrical Engineering Department

Activity conducted by: Rutuja Warbhe

Objectives:

The objective of this pedagogy activity was to enhance students' conceptual clarity of lap and wave winding techniques used in DC machines by engaging them in a hands-on, team-based simulation. The aim was to move beyond theoretical understanding and promote experiential learning through creative model-making and peer collaboration.

Photographs:



Outcome:

Differentiate between lap and wave winding structures.

Understand the parallel path formation and its impact on current and voltage handling. Apply theoretical knowledge to build a working model.

Subject Teacher



Dr. D. Y. Patil Unitech Society's Dr. D. Y. Patil Institute of Technology, Pimpri, Pune Department of Electrical Engineering

Mapping of POs and PSOs with Justification:

POs and PSOs Mapped	Justification
PO 1 (a) Engineering Knowledge	Students apply knowledge of electrical engineering fundamentals to understand and implement windings.
PO 2 (b) Problem Analysis	Teams analyze the structure and function of lap vs wave winding to solve the challenge effectively.
PO 9 (i) Individual and Team Work	Activity is team-based, encouraging collaboration and leadership.
PO 10 (j) Communication	Students explain and present their work clearly to peers and faculty
PO 11 (k) Project Management & Finance	Some aspects of teamwork and time management are exercised in the competitive format.
PO 12 (I) Lifelong Learning	The activity promotes learning beyond textbooks through experiential practice and critical thinking.
PSO 1	Apply technical and logical skills for modeling, simulating as well as analyzing electrical systems.
PSO 3	Apply the concepts of electrical engineering in a multidisciplinary

Subject Teacher

DAC

H.O.D