

Electrical Machines Lab -I:

The Electrical Machines Lab - I is a specialized facility focused on providing students with hands-on experience in understanding and analyzing DC (direct current) machines. Equipped with state-of-the-art machinery including DC generators, DC motors, and measuring instruments, the lab offers a comprehensive platform for conducting experiments related to DC machines. Students study the construction, operation, and characteristics of DC generators and motors, exploring concepts such as electromagnetic induction, field excitation, armature reaction, torque production, and speed control methods. Through practical activities and measurements of parameters like voltage, current, speed, and torque, students gain insights into the performance and behavior of DC machines under different load conditions. The lab sessions are guided by experienced instructors who provide explanations, and demonstrations and foster collaborative discussions among students.

In the Electrical Machines Lab - I, students also have the opportunity to work with motor-generator sets, examining the principles of electrical power conversion and transmission of mechanical power. They analyze the efficiency and performance of motor-generator sets in various configurations, gaining a deeper understanding of power generation and conversion processes. The lab sessions encourage active student participation, teamwork, and problem-solving skills development. By bridging the gap between theory and practice, the lab equips students with practical knowledge, analytical thinking abilities, and a solid foundation in DC machines, preparing them for successful careers in electrical engineering and related fields.



ELECTRICAL MACHINES – I LAB