

MANIPAL UNIVERSITY JAIPUR

School of Electrical, Electronics & Communication Engineering

Department of Electrical Engineering

Lab & Equipment Details: Power System Lab (Room No 202, 1AB)

Name of Laboratory	Power System Lab
Lab Description	This Laboratory Course is offered by Dept. of Electrical Engineering, targeting students to pursue research & development in industries or higher studies in field of Electrical Engineering, including Economic Load Dispatch, Power Flow Management and Power System Protection. The Lab course familiarizes students with skills required for power system analysis in software environment. It deals with the practical understanding of various protection schemes required for motor, transformer and generator protection. Students are expected to have background knowledge on Power Systems Analysis and switch gear & protection for a better learning.
Lab Resources	<ol style="list-style-type: none"> 1. Overcurrent Relay Test Set Up 2. Overvoltage and Undervoltage Relay Test Set Up 3. Reverse Power Relay Test Set Up 4. AC Motor Protection Relay Test Setup 5. Transformer Protection Test Set Up 6. Three Phase Fault Analysis Study Trainer / Generator Protection Test Set Up 7. Electrical Power Transmission Line Simulator 8. Solar PV Standalone System 9. Grid -Tied Training System 10. Solar PV Emulator 11. DIgSILENT PowerFactory - 2019 Software (PF4E - 25 Users, PF4R - 1 User) 12. GAMS Software (Base Module, CONOPT, CPLEX, DICOPT) 5 Users