

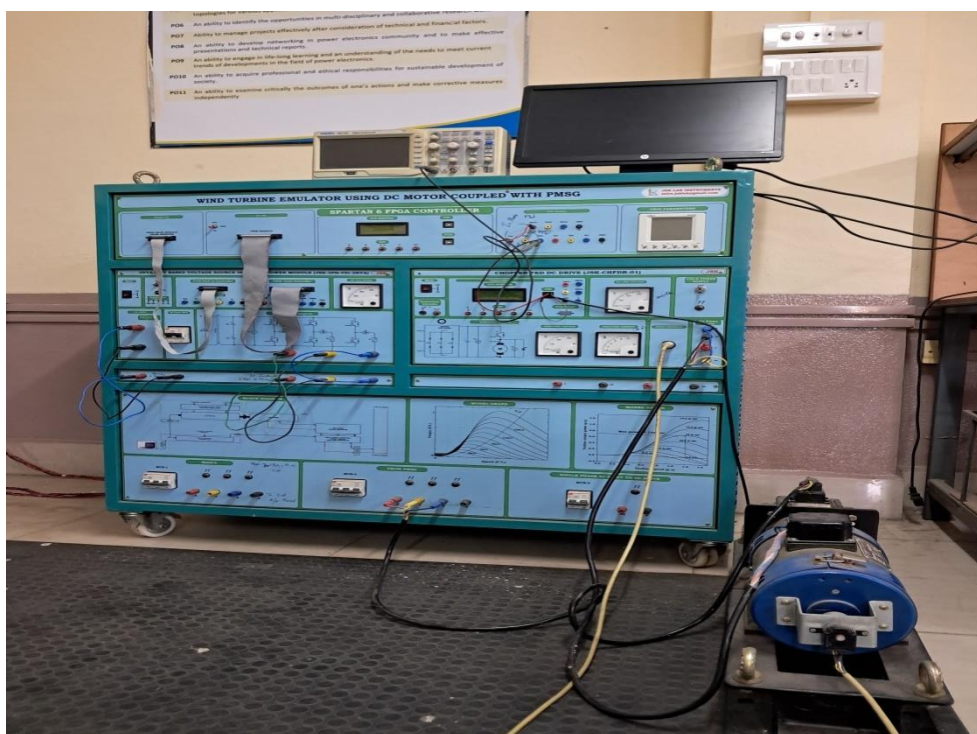
POWER SYSTEMS LABORATORY

Introduction

The power systems laboratory of the Department of Electrical Engineering, of Shri Vishnu Engineering College for Women, was established to contribute to the study and development in various areas of the power system.

Objective

The objective of this laboratory is to enable the students to strengthen their understanding of the Power system lab comprising of protection equipment such as overcurrent, under voltage, overvoltage relays, and renewable energy sources such as solar and wind energy. The purpose of this course is to able to design and analyse, Transmission line performance, understanding the characteristics of solar and wind energy two port parameter, sequence impedances of alternator, and different types of protection schemes.



The following list of experiments are conducted in Power Systems Lab

S.NO	Experiment
1	ABCD parameters using transmission line model
2	Surge impedance loading
3	Sequence impedance measurements of 3 phase alternator
4	Fault analysis of 3 phase alternator
5	Determination of positive, negative and zero sequence impedance of 3 phase transformers
6	CT & PT Characteristics
7	Characteristics of solar photovoltaic (PV) module/cell
8	Microcontroller based single phase differential relay
9	Microcontroller based over/under voltage relays
10	Electro mechanical over current relay