

## **Infrastructure and Learning Resources**



## Laboratory details along with their respective software

S. No.	Room No.	Lab Name	Software's
1	026 & 027 (1 AB)	Electrical Machine Laboratory	NA
2	202 (1 AB)	Power System Laboratory	> DIgSILENT Power Factory 2017 - Research Version (Unlimited Busbars) > MATLAB 2018
3	08 (2AB)	Control & Automation Laboratory	> NI LabVIEW 2014 (ASL pack) > MATLAB 2018
4	203 (1 AB)	Integrated Electronics Laboratory	> Supported Xilinx Software ISE Design Suite 13.4. > Vivado Software (1 user)
5	204 (1 AB)	Microcontroller & System Simulation Lab.	> NI LabVIEW 2014 (ASL pack) > KEIL > MATLAB 2018
6	213 (1 AB)	Power Electronics & Drives Laboratory	NA



## **Electrical Machinery Laboratory**



- Electrical Machine Laboratory is conducted for the undergraduate students in their second year. In this course students perform basic experiments on transformers, DC machines, inductions motors and synchronous machines.
- This laboratory is to expose the students to the concepts of different type of machines and analyze their performance. Also impart knowledge on construction and performance of salient and non salient type synchronous generator, synchronous motor, induction machines, & DC machines.

## Major Equipment

- 5 HP, 220 V DC shunt motor coupled to a 3 kVA synchronous generator with control panel for synchronization with grid supply.
- 5 HP, 220 V, 1500 rpm DC shunt motor coupled to a 3 kW, 415 V induction generator with control panel.
- 5 HP, 415 V, 1440 rpm, induction motor -squirrel cage type with mechanical loading arrangement and control panel.
- 5 HP, 220 V, 1500 rpm DC shunt motor coupled to a 3 kW DC compound generator with control panel.
- 5 HP, 220 V, 1500 rpm DC series motor coupled to a 3 kW, 220 V DC series generator with control panel.
- Rectifier 3 phase, 440 V AC / 220 V, 100 A DC with distribution panel.

