Course Code: EIPS - 212

Course Title: Industrial Instruments Lab

Number of Credits: 03 Total Hours: 84 Total Marks: 75

Prerequisites for the course

Understanding of basic electronics and instrumentation

Objectives of Course

Students will be introduced to practical aspects of different sensors. They will also take some examples for understanding the PLC controller used in the industry.

Course Content 84 Hours

- **Expt. 1:** Understanding of pressure gauge
- Expt. 2: Working of Thermocouple
- **Expt. 3:** Demonstration of Level sensing
- Expt. 4: Humidity sensor
- Expt. 5: pH measurement
- Expt. 6: Understanding of PLC
- Expt. 7: Simple load such as relay and switches
- Expt. 8: Logic function implementation
- Expt. 9: Interfacing of PLC
- Expt. 10: Case study of PLC for industrial application

Pedagogy

Lab experiments

Course Outcome

In this course students will learn practical aspects of instrumentation by using sensors and controllers. After finishing this module they will get more exposure of the industrial instrumentation processes.