

DEPARTMENT OF ELECTRICAL ENGINEERING INDUSTRIAL POWER LABORATORY-1

PROCESS AUTOMATION LAB

List of Compulsory Experiments:

1. SCADA Experiments (EE6491-M.Tech Industrial Power and Automation, EE6291-M. Tech Power System)
 - a) SCADA- Transmission Module RTU in Local and Remote Mode.
 - a. Ferranti Effect
 - b. VAR Compensation (Series and Shunt)
 - c. Transmission Line Modelling
 - b) SCADA- Distribution Module RTU in Local and Remote Mode.
 - a. Load Shedding
 - b. Transformer Loading
 - c. Study of Communication Link
2. PLC Programming Experiments (EE6491-M.Tech Industrial Power and Automation, EE6191-M. Tech Instrumentation and Control System)
 - a) Control of Batch Process Reactor
 - b) Lift Control
 - c) Speed Control of AC Servo Motor
 - d) Automatic Star Delta Starter of Three Phase Induction Motor
 - e) Water Level Control
3. AC Servo Motor Control using dSPACE (EE6491-M.Tech Industrial Power and Automation, EE6391-M. Tech Power Electronics)

List of Desirable Experiments:

1. Testing of Numerical Overload Relay
2. Study of Common Industrial Communication Protocols