DEPARTMENT OF ELECTRICAL ENGINEERING
INDUSTRIAL POWER LABORATORY-2

EMBEDDED SYSTEMS APPLICATIONS LAB

List of Compulsory Experiments:

1. Energy Management in Centrifugal pumps by Variable Frequency Drive.

   (Used for EE6491-M.Tech Industrial Power and Automation, EE6291-M. Tech Power System)

2. DSP Programming Experiments.(Used for EE6491-M.Tech Industrial Power and Automation)

   a) Speed control of BLDC motor (2812/2407 kit).

   b) Speed control of Induction motor (2812/2407 kit).

   c) Speed control of DC motor (2812/2407 kit).

3. Stepper Motor speed control and step angle control using 8051 Microcontroller.

   (Used for EE6491-M.Tech Industrial Power and Automation)

4. Measuring Force and thrust of a Linear Induction Motor.

   (Used for EE6491-M.Tech Industrial Power and Automation)

5. Measurement of breaking Torque for Eddy Current Control drive.

   (Used for EE6491-M.Tech Industrial Power and Automation)

6. Simulation of Pick and Place Robot in robot studio software and implementation in ABB IRB 1200

   (Used for EE6491-M.Tech Industrial Power and Automation, EE6191-M.Tech Instrumentation and Control System)

7. Vector control drive for 3 phase Induction motor using FPGA.

   (Used for EE6491-M.Tech Industrial Power and Automation)

8. 1 HP Switched Reluctance Motor with Eddy Current loading arrangement

   (Used for EE6491-M.Tech Industrial Power and Automation, EE6391-M. Tech Power Electronics)

List of Desirable Experiments:

1. Effect of voltage control on a three phase Induction motor.
2. Speed control of three phase Induction motor by variable frequency method.