



Department of Electrical and Control Eng.



Lab 042-B

Electric Drives

Capacity: 20 Students



The electrical drives laboratory offers a great chance for undergraduate as well as postgraduate students to experience and be familiar with conventional electrical drives systems as well as modern advanced drives systems by experimenting AC and DC machine drive systems.



LABORATORY EQUIPMENTS

- Repulsion start motor with MGB-100-DG.
- Injection Brake with HPT-100.
- Variable Frequency Driver.
- Data Acquisition Motor Interface.
- Universal Laboratory Machine.
- Four Quadrant DC speed Controller.
- Stepper Motor.
- Vector Drive System.
- AC and DC Power supply.
- Series Field Rheostat.
- Dynamometer.
- Digital-Load Cell.
- Digital Taco generator.
- AC Taco generator.
- DC Taco generator.
- LabView Software.



MAJOR EXPERIMENTS

- ✓ Four-Quadrant DC Speed Controller.
- ✓ Stepper Motor Operation and Characteristics.
- ✓ AC Vector Drive operation and programming.
- ✓ Variable Frequency AC Motor Drive operation.



The Laboratory Serves the Following Courses

Course No.	Course Title	Semester
EE424	Electrical Drives 1	8
EE522	Electrical Drives 2	9
EE521	Special Electrical Machines	9