#### EC-452

### **GRAPHICAL SYSTEM DESIGN LAB**

L T P C

#### **COURSE OBJECTIVES:**

- 1. To implement experiments based on myDAQ
- 2. To implement multisim on myDAQ
- 3. To implement experiments on myRIO

### **COURSE OUTCOMES:**

## After successful completion of the course, the students are able to

- 1. demonstrate MY DAQ hardware interfacing with LabVIEW.
- 2. demonstrate the real time applications using MY RIO..
- 3. simulate the analog circuits using NI Multisim.
- 4. design basic engineering problems and real time applications using MY DAQ.

## **List of Experiments:**

# List of Experiments using myDAQ and myRIO

- 1. Measuring Voltage of myDAQ
- 2. Number to Boolean Conversion using myDAQ
- 3. Intensity Variation using Potentiometer and LED
- 4. Design an Inverting Amplifier usingOp-Amp(Simulation and Real Time)
- 5. Design of Low Pass Filter using RC(Simulation and Real Time)
- 6. Logic Gates Operation(Simulation and Real Time)
- 7. Four Way Traffic Light
- 8. Displaying Accelerometer and Button Values in LCD
- 9. Quiz using myRIO and displaying Score in 7-Segment Display
- 10. Acquiring Potentiometer value and Displaying in 7-Segment
- 11. FPGA Programming in myRIO
- 12. Fan Controlling using Motor

**Note:** A minimum of 10(Ten) experiments have to be Performed and recorded by the candidate to attain eligibility for Semester End Practical Examination.