

EC-452

GRAPHICAL SYSTEM DESIGN LAB

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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 using Op-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.