

**EC-453****DIGITAL SIGNAL PROCESSING LAB****L T P C**  
**- - 3 2****COURSE OBJECTIVES:**

1. To study and simulate ASK, FSK .
2. To study and simulate waveform using myDAQ.
3. To understand the design process of IIR & FIR filters.

**COURSE OUTCOMES:****After successful completion of the course, the students are able to**

1. analyze the basic operations of signal processing using LabView.
2. able to demonstrate the Digital modulation techniques.
3. build FIR and IIR filters for observing the responses of frequency selective filters.
4. Configure myDAQ for the purpose of acquisition and generation of signal, audio signal tone measurement and equalization.

**List of Experiments:****The following programs shall be implemented in software and myDAQ**

1. Generating a Waveform Signal and Acquiring a same Signal using myDAQ
2. Generating Multiple Waveforms and Acquiring a same using myDAQ
3. Audio Equalizer using myDAQ
4. Generating a signal and adding Noise to the Signal and removing the noise using Filters
5. Generating the audio signal and Finding Frequency of the Tone
6. Determination of Power spectrum of a signal(s)
7. Simulation of ASK and FSK
8. Simulation of AM generation
9. Correlation and Convolution
10. Implementation of FIR filter
11. Implementation of IIR filter

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