

Biomedical Electronic Laboratories

1. Introduction. Laboratories content concerns Biomedical Signal and Image Processing, Biomedical Data Acquisition, Hybrid Programming, Instrumental Amplifier, Software and Hardware Filtering, Electrocardiograph
2. Biomedical Signal Processing and Medical Image Processing in Matlab
3. Biomedical Signal Processing in LabVIEW
4. Simulation of Dynamic Responses of the First and Second Order Linear Systems
5. a) Data Acquisition Using NI-DAQmx
b) Signal Generation Using NI-DAQmx
6. a) FAST Fourier Transform (FFT) and Digital Filtering Using LabVIEW
b) Instrumentation Amplifier
c) Low-Pass and High-Pass Filters
d) Electrocardiograph
7. Test and Laboratories Presentation