



## Engineering Applications II Course

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### Objective

These 10 experiments are part of a complete Basic Circuits II course. Students will be introduced to fundamental electrical engineering theory and tools, as well as gain more familiarity with basic state-of-the-art test and measurement instruments.

### Equipment

- Agilent 54622A Deep memory Oscilloscope or Agilent 54600B Oscilloscope
- Agilent 33120A Function Generator
- Agilent 34401A Digital Multimeter
- Agilent E3631A DC Power Supply
- A protoboard
- Various passive and active elements

### Experiments

- Recommended Course Sequence
- Exponential Waveforms
- Step Response Analysis
- Step Response Design
- Transfer Functions
- First Order Filters
- Impedance
- Sinusoidal Steady State
- AC Power Analysis and Design
- Multiple Pole Filters
- Fourier Series