Electric Circuits Laboratory

In this lab, students learn through experiments the fundamental of electric circuit theory. This lab is equipped with state-of-the-art equipment. It also features ready-to-use modules from Feedback Group. Students build circuits using the modules as well as discrete components such as resistors, capacitors, inductors, etc. Students also learn to simulate electric circuits using MultiSim.

Major Equipment

- TEKLAB Workstations with the following equipment:
  - MOTECH 3 MHz Function Generators – FG503
  - Tektronix TDS1012B 100 MHz 1GS/s 2-channel Oscilloscopes
  - FLUKE 8845 6-1/2 Digit Precision Multimeter
- Escort EDM-169S Handheld Digital Multimeter
- Feedback Teknikit Console 92-300
- Feedback Experiment Modules
  - EEC470 : Electricity & Electronics Constructor
  - EEC471-2 : Basic Electricity & Electronics
  - EEC473 -4 : Amplifiers and Electronic Circuits
  - OAT 343 : Op-Amp Tutor
- PCs running MultiSim and pSpice

TEKLAB Workstation

Experiments

- Resistor Color Codes
- Ohm's Law
- Series Resistance & Series DC Circuits
- Parallel Resistance & Parallel DC Circuits
- Series-Parallel DC Circuits
- Superposition Theorem
- Thevenin's Theorem & Maximum Power Transfer
- Resistor-Capacitor Circuits
- Resistor-Inductor Circuits

Teknikit Console 92-300