

ECE112 - An Introduction to Electrical Engineering

About this class

An introduction to electrical engineering concepts in a practical context

“Hands-on” experience for those “tinkering deprived”

“Intuition first” approach

Topics covered

- Electrons, Current, Voltage, basic definitions

- Circuit Elements and Schematics

- Resistors and Ohms Law

- Modeling circuits with Voltage and Current Sources

- Power calculations

- Circuit analysis with KVL and KCL

- Circuit analysis with Spice

- Resistors in Parallel and Series

- Diode and Transistor Operation

- Analyzing transistor and diode circuits

- Digital logic

Tests/Grading

Sometimes challenging material, but not real hard

Tests should look like homework

2 Midterm tests, 1 Final Exam

Lab is a major part of your grade

Don't cheat. See: <http://osu.orst.edu/admin/stucon/achon.htm>