

Department of Electrical and Computer Engineering
The Johns Hopkins University

520.137 Introduction to Electrical and Computer Engineering

Fall 2018

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Office Hour: Tuesday 10-12 or Thurs 12:30-2:30 or by appointment.

Course Web Page <http://thanglong.ece.jhu.edu/Course/137/>

Lectures Monday Wednesday Friday 12:00 - 12:50 PM, Shaffer 304.
Lab Sessions, TBA, Barton 123.

Textbooks

- R. Kuc, *The Digital Information Age: An Introduction to Electrical Engineering*, CL Engineering, 2014. ISBN: 1305077717. (Required).
- D. V. Kerns and J. D. Irwin, *Essentials of Electrical and Computer Engineering*, Prentice Hall, 2004. ISBN: 0139239707. (Required).

Course Description

- An introductory course covering the principles of electrical and computer engineering including sinusoidal wave forms, electrical measurements, digital circuits, and applications of electrical and computer engineering. Laboratory exercises and a final design project are included in the course. Open to freshman Engineering majors and any Arts and Sciences majors. 3 credits. Computer Usage: Matlab for data analysis, plotting, and simulations.
- Prerequisites: high-school mathematics and physics; familiarity with Calculus will be very helpful. Corequisites: none.

Exams

- Exam I: Wednesday, 10/10/2018, Shaffer 304.
One 8.5" × 11" cheat sheet allowed.
- Exam II: Wednesday, 11/07/2018, Shaffer 304.
One 8.5" × 11" cheat sheet allowed.
- Final Exam: comprehensive, 10 AM – 1 PM, Saturday 12/15/2018, Shaffer 304.
Three 8.5" × 11" cheat sheets allowed.

Homework and Lab Assignments

- Nine homework assignments.
- Six lab assignments, approximately once every two weeks, held in Barton 123.

Final Project

- Last week of class.
- Students are expected to work in teams of 3-4 on a specific topic that will be announced later.
- A final project report is required from each team.

Grading

- Exam I: 20%
- Exam II: 20%
- Final Exam: 30%
- Laboratory Assignments: 10%
- Homework Assignments: 10%
- Final Project: 10%