

AME 2623 Circuits and Sensors

Instructor: Sesh Commuri

Spring 2004

Felgar Hall Room #304

MW 1:30 – 2:45 p.m.

Prerequisite: Mathematics 3113 or equivalent or concurrent enrollment; Physics 2524 or concurrent enrollment.

Course Objectives: To understand:

- the functioning of DC and AC electrical circuits, their analysis and practical applications;
- logic gates and their use in simple logic circuits;
- the different types of sensors and their use in common applications.

Course Outline:

- Formulation and solution of circuit equations, network theorems, sinusoidal steady-state analysis, simple transients.
- Introduction to digital logic circuits.
- Physical principles of sensing and actuation.
- Applications to engineered systems.

Course Schedule: 2 lectures per week of 75 minutes duration each.

Recommended Text Book:

Essentials of Circuit Analysis, Robert L. Boylestad, Pearson Education Inc., Prentice Hall, New Jersey, 2004.

Evaluation Criteria:

6 Assignments contributing to 10% of the overall grade in the course.

2 mid-term exams, each contributing to 30% of the overall grade in the course.

1 comprehensive final exam contributing to 30% of the overall grade in the course.

The scoring will be absolute, i.e. grades will not be “curved.”

<u>Score</u>	<u>Your Grade</u>
> 80 %	A
65% > score ≥ 80%	B
50% > score ≥ 65%	C
40% > score ≥ 50%	D
score ≤ 40%	F