

ENS 203 Electronic Circuits I

Fall 2020-2021

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Catalog Data: ENS 203 Electronic Circuits I (3 cr.) Prerequisites: MATH 102. Passive components, basic circuit analysis, first order circuits, transient and steady state analysis, second order RLC circuits, resonance, amplifier fundamentals, operational amplifiers, introduction to diodes and transistors.

Textbook:

- Allan R. Hambley, *Electrical Engineering: Principles & Applications, 7th Edition*, Pearson, 2018.

Computer Usage: Circuit simulation using LTspice®.

Course Objective: Learn and apply principles of circuit theory to the analysis and design of basic electronic circuits.

Weekly Schedule:

01	05/10–09/19	1. Introduction	1.1–1.7
02	12/10–16/10	2. Resistive Circuits	2.1–2.4
03	19/10–23/10	2. Resistive Circuits (cont'd)	2.5–2.8
04	26/10–27/10	2. Resistive Circuits (cont'd)	2.5–2.8
05	02/11–06/11	3. Inductance and Capacitance	3.1–3.5
06	09/11–13/11	4. Transients	4.1–4.4
07	16/11–20/11	5. SS Sinusoidal Analysis	5.1–5.6
08	23/11–27/12	5. SS Sinusoidal Analysis	5.1–5.6
09	30/11–04/12	6. Freq. Response	6.1–6.3
10	07/12–11/12	6. Freq. Response	6.1–6.3
11	14/12–18/12	9. Diodes	9.1–9.5
12	21/12–25/12	10. Amplifiers	10.1–10.3
13	28/12–31/12	13. Operational Amplifiers	13.1–13.5
14	04/01–08/01	13. Operational Amplifiers	13.1–13.5

Zoom Link: <https://zoom.us/j/6850874194>

General Rules

- Homework and simulation assignments are weekly announced.
- Submission deadlines and exams are never postponed.
- Cheating and late submissions are severely penalized.
- All classes and recitation sessions will be synchronously held.
- No midterms or final. Quizzes will be held every week at the end of the last class hour.
- All quizzes to be attended. Make-ups for up to 4 quizzes to be held during the final week.
- Official medical report required to attend a make-up. Make-ups substantially harder than weekly quizzes.

Grading: Quizzes 70%; Homework & Assignments 30%.