

HUDSON COUNTY COMMUNITY COLLEGE
Science, Technology, Engineering & Mathematics
Electronics Engineering Technology

Course Title: EET 211-01, Electric Circuits II

Credits: 4

Schedule:

Faculty:

Office Hours:

This Kit includes a detailed Syllabus for the **Electric Circuits II** course as well as the schedule of examinations and laboratory assignments for semester.

Text: Principle of Electric Circuits; Ninth Edition; Author “Floyd”, Prentice Hall
ISBN-13: **978-0135073094**

“An earlier edition of the textbook may be used as well”

Course Objectives: *This course continues the integrated approach of Electric Circuits I. Topics covered include: power in AC systems, transformers, network theorems; network analysis; resonance; and filters. The associated laboratory introduces the use of additional test instruments such as signal generators, frequency counters, and AC measuring instruments. The experiments cover Thevenin’s Theorem; RC transient; Lissajous figures for phase shift measurement; AC series circuits; AC parallel circuits; and series and parallel resonance.*

Attendance Policy: Attendance is obligatory for all students. Students are responsible for the material covered in the class session for which they have missed. Three or more absence may result in failure of the course. Students are expected to arrive to class on time.

Homework: Homework will be assigned regularly and discussed in the class in the following session.

Exams: There will be six scheduled quizzes, midterm a comprehensive Final Exam.

Lab Work: There will be a series of laboratory experiments to be performed on a timely basis. A technical laboratory report is required for each of the experiments. Each group will be required to make an oral presentation for one of the experiments.

Grading Policy: The final grade on the course will based on the following components
Quizzes 25%, Midterm Exam 10%, Lab work 15%, Lab reports 20%,
Final Exam 15%, Homework 10%, and Class Participation 5%

Grading Scale: 92-100 = A, 88-91 = A-, 85-87 = B+, 81-84 = B, 78-80 = B-, 74-77 = C+, 64-73 = C, 57-63 = D, 0-56 = F.

Make Up Exams: In case the student is absent for a test due an emergency. It is the student’s responsibility to contact me as soon he/she returns to school and supply me with a legitimate excuse.

Disability Support

Students with disabilities who believe that they might need accommodations in this class are encouraged to contact the office of Disability Support Services at (201) 360-4157, as soon as possible to better ensure that such accommodations are implemented in a timely fashion. All disabilities must be documented by a qualified professional such as a Physician, Licensed Learning Disabilities Teacher Consultant (LDTC), Psychiatrist, Psychologist, Psychiatric Nurse, Licensed Social Worker or Licensed Professional Counselor, who is qualified to assess the disability that the student claims to have and make recommendations on accommodations for the student. All information provided to the Disability Support Services Program will be confidential between the program, professors involved with the student and individual student.

Academic Integrity

Academic integrity is central to the pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students *earn* college credits by their honest efforts. When they are awarded a certificate or degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

Violations of the principle of academic integrity include:

- Cheating on exams.
- Reporting false research data or experimental results.
- Allowing other students to copy one's work to submit to instructors.
- Communicating the contents of an exam to other students who will be taking the same test.
- Submitting the same project in more than one course, without discussing this first with instructors.
- Submitting *plagiarized* work. *Plagiarism* is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work.

Violations of Academic Integrity

When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Students who violate the college's policy on academic integrity are subject to failing grades on exams or projects, or for the entire course. In some cases, serious or repeated instances of academic integrity violations may warrant further disciplinary action.

Violations reported to the Division Dean or Vice President of Student Affairs

Depending on the severity of the violation(s), the division dean will determine whether further disciplinary action is warranted. The Vice President of Student Affairs assists Academic Affairs in maintaining a high level of academic integrity on the campus. The Dean works with the faculty and division deans to educate students about academic dishonesty and to adjudicate disciplinary cases in which there are suspected violations of College policies. Should a violation(s) of HCCC academic integrity standards warrant a disciplinary hearing with the Vice President of Student affairs, sanctions may include suspension, expulsion, or other measures deemed appropriate.

HUDSON COUNTY COMMUNITY COLLEGE

Electronics Engineering Technology Program Electric Circuits II



Week #1:

Lecture: DC Review

Lab: Experiment #1, Thevenin's Theorem

Complete report is due week #2

Week #2:

Lecture: Chapter 16, RC Circuits "Series and Parallel"

Lab: Experiment #1A, Programming in PSPICE and PROBE

Program is due week #3

Week #3:

Lecture: Chapter 16 continued, "Series-Parallel RC Circuits, Power in RC Circuits" & PSPICE Analysis of RC Circuits"

Experiment #2 RC Transient Part I;

Complete report is due week #5

Week #4:

Lecture: Chapter 17, RL Circuits, "Series and Parallel"

Lab Experiment #2, RC Transient Part II

Complete report is due week #5

Week #5:

Lecture: Chapter 17 continued, "Series-Parallel RL Circuits, Power in RL Circuits" & PSPICE Analysis of RL Circuits"

Experiment #3, Transformer

Abridged report is due week #6

Week #6:

Lecture: Chapter 18, RLC Circuits "Series, Parallel Circuits & PSPICE AC Analysis"

Lab: Experiment #4 Lissajous Figures for Phase Measurement

Abridged report is due week #7

Week #7:

Lecture: **Midterm Exam**

Lab: **Oral Presentations**

Week #8:

Lecture: Chapter 18 continued, Resonance and Bandwidth of Resonant Circuits

Lab: Experiment #5, AC "RC, RL & RLC Series Circuits" Part I

Abridged report is due week #10

Week #9:

Lecture: Chapter 19, RC & RL Filters "Low-Pass, High-Pass, Band-Pass, Band-Pass"

Lab: Experiment #5, AC "RC, RL & RLC Series Circuits" Part II

Abridged report is due week #10

Week #10:

Lecture: Chapter 19 Continued, Filter Analysis with PSPICE and PROBE

Experiment #6 AC "RC, RL & RLC Parallel Circuits" Part I

Abridged report is due week #12

Week #11:

Lecture: Chapter 21, Pulse Response of Reactive Circuits

Lab: Experiment #6, AC "RC, RL & RLC Parallel Circuits" Part II

Abridged report is due week #12

Week #12:

Lecture: Chapter 21 continued, Pulse Response of RC Integrators & Differentiators

Lab: Experiment #7-A Series Resonance

Complete report is due week #13

Week #13:

Lecture: Chapter 21 continued, Pulse Response of RL Integrators & Differentiators

Experiment #7-B, Parallel Resonance

Complete Report is due week 14

Week # 14:

Lecture: Make-Up Session and Review for the Final Exam

Lab: Make-Up Session and Review for the Final Exam

Week #15:

Lecture: Comprehensive Final Exam

Lab: Oral Presentations

