



Course Syllabus Electric Circuit Analysis II: ELT 126

Faculty Name:	
Course Information:	ELECTRIC CIRCUIT ANALYSIS II: ELT 126
Course Section, Term and Year:	
Course Meeting Times & Location:	

Contact:

Phone Number:	
Office Location:	
Email address:	
Enter days/time you are available to meet with students.	

Netiquette

Respect the diversity of opinions among the instructor and classmates and engage with them in a courteous, respectful, and professional manner. All posts and classroom communication must be conducted in accordance with the student code of conduct. Think before you push the Send button. Did you say just what you meant? How will the person on the other end interpret the words?

Communication:

Faculty Communication with Students:

Discuss how faculty will contact students.

Student Communication with Faculty:

Discuss how students will contact faculty when they have questions or concerns.

Course Description:

ELT 126 Electric Circuit Analysis II

2-2-3

A continuation of ELT 125, where transient circuits containing inductors, capacitors, and resistors are studied. Complex numbers are applied to AC circuit analysis. The course studies concepts of power factor, power factor correction, and maximum power transfer. It uses computer simulation, using software to model circuits and understand circuit transient response and to measure the effects of component tolerance variation and frequency change. Mesh and nodal analysis and Thevenin's and Norton's theorems are applied to DC circuits. It presents many laboratory investigations into resonant circuits and basic filter circuits. *Prerequisites: ELT 125 or permission of Instructor.*

Course Learning Outcomes:

The student will:

1. Learn fundamental concepts of voltage, current, resistance and power as applied to AC circuits.
2. Learn and understand the relationships between frequency and characteristics of various electronic components.
3. Understand how to apply the use of complex numbers to AC circuit analysis.
4. Learn how to build, test, and troubleshoot electric circuits.

Program Learning Outcomes: - (Outcomes Relevant to Course are Shaded)

ELECTRICAL TECHNOLOGY A.A.S.

The student will be able to:

1. Demonstrate fundamental knowledge and hands-on competence in the areas of electricity, electronics, digital electronics, industrial electronics, microprocessors, fiber optics, semiconductor fabrication, telecommunications and computer aided design.
2. Conduct experiments and then analyze, interpret and report results.
3. Demonstrate troubleshooting proficiency and the proper use of electrical diagnostic test instruments.
4. Demonstrate an ability to work independently and in teams.

Course Resources:

Textbook:	Enter title, edition, author, ISBN for required text.
Materials:	Enter all additional required materials and tools needed to complete course here.
Access:	List access codes needed for websites or other software. .

Course Policies:

Click here to describe how students will participate in your class. Include policies regarding missed exams, makeup exams, extra credit assignments, late assignments, missed assignments, etc.

Course Delivery:

Course Content:

Lecture Format:

Student Expectations specific to this course:

Course Outline and Schedule

Grading Method:

Click here to enter a clear explanation of how students will be evaluated, including a description of course assessments and a statement of the assessment process and measurements. Include weight/percentages for quizzes, exams, papers, projects, homework, attendance, participation, etc.

Grading Scale:

Letter	Grade Range
A	Enter range for A.
A-	Enter range for A-.
B+	Enter range for B+.
B	Enter range for B.
B-	Enter range for B-.
C+	Enter range for C+.
C	Enter range for C.
D	Enter range for D.
F	Enter range for F.

Earn an FMCC Micro-credential Badge:

Check this link to see if this course meets a requirement for an FM Micro-credential Badge:

<https://www.credly.com/organizations/fulton-montgomery-community-college/badges>