

Faculty Name:	
	ELECTRIC CIRCUIT ANALYSIS I: ELT 125
Course Information:	
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 125 Electric Circuit Analysis I

The first course offered in both the Electrical and Computer Technology curriculums. The course investigates the fundamental concepts of voltage, current, and power, as applied to both DC and AC circuits, and introduces superposition and Thevenin's Theorem. The course investigates the nature of resistance, inductance, capacitance, magnetism, and electromagnetism. The course also develops competencies in electronic tests, measurement methods, and troubleshooting techniques.

### **Course Learning Outcomes:**

The student will:

- 1. Learn fundamental concepts of voltage, current, resistance and power.
- 2. Learn and understand DC and AC series & parallel circuit concepts.
- 3. Understand the structure and characteristics of capacitors and inductors.
- 4. Learn basic principles of magnetism and electromagnetism.
- 5. The student will 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:

0	
Letter	Grade Range
Α	Enter range for A.
A-	Enter range for A
B+	Enter range for B+
В	Enter range for B.
В-	Enter range for B-
C+	Enter range for C+.
С	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: <u>https://www.credly.com/organizations/fulton-montgomery-community-college/badges</u>