



Faculty Name:	
Course Information:	DIGITAL ELECTRONICS: ELT 132
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 132 Digital Electronics

3-3-4

The course introduces Boolean logic and the devices that are necessary to produce digital computing circuitry. This course covers such fundamentals as AND, OR, NOT, NAND, and NOR logic through more complex devices, such as flip-flops and one-shots. Digital circuits studied include ALUs, counters, shift registers, and state machines. The course uses analytical techniques and software to design efficient combinational and sequential circuits and places strong emphasis on design skills. Standard logic and FPGAs are used to construct circuitry.

Course Learning Outcomes:

The student will:

1. Learn the function of discrete and programmable digital devices.
2. Learn and apply techniques to design and analyze digital circuitry.
3. Learn and apply techniques to efficiently troubleshoot digital circuitry.
4. Understand the differences between combinatorial and sequential logic.

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>