

Revised August 20, 2018

ENGR/CS 101 Fall 201 Syllabus Dr. Mitchell & Mr. Randall

Web sites:

Text: None. Reference material provided.

This course has two sessions dealing with computer science and computer/electrical engineering topics. Each session has 7 weeks of instruction. The EE/COE session meets in KC-137 (Mitchell), and CS in KC-267 (Randall).

The class is divided into two groups with mixed majors. See the web site for the group assignments.

Session 1		Session 2	
Randall (KC267)	Mitchell (KC137)	Randall (KC267)	Mitchell (KC137)
Group 1	Group 2	Group 2	Group 1

In addition, these dates have been set aside for special topics:

- August 22nd – First day of classes – organization and introduction
- Oct. 15th – ENGR/CS Freshman class lecture on Harlaxton from Harlaxton (room TBA)
- Oct. 10th Switch Sections
- November 2nd – ENGR/CS Freshman pre-registration for spring semester by major.

EE majors will meet in KC-136

CoE majors will meet in KC-137

CS majors will meet in KC-267

(Students who are not EECS majors are excused from this class.)

- Dec. 5th – Final Class mingle.

Grading: The most important component of the final grade in this course is participation and attendance. There is no final exam for this course.

Attendance: Each section will take attendance each day, at the beginning of class. If you are not in class when the role is taking you will be counted as absent. For each session students may miss one class

period without any effect on his/her grade. Any additional absences will render one letter grade per absence.

IE. You may miss one absence in each section, but if you miss two in a single section you will receive a B grade. If you miss two classes in two sections or three classes in a single class then you will receive a C...

Topics: Computer Engineering

1. Control systems
2. Embedded systems
3. PWM
4. Ports, digital I/O, and ADC
5. C++ and Keil
6. Loops and conditional statements
7. Functions and libraries
8. Autonomous robots; wall and line following.

Electrical Engineering session covers the following topics

1. Basic Circuits
2. Op Amps
3. Comparators
4. Photo Transistors
5. Analog Vs Digital Signals
6. Bread boards
7. O-Scope, Power Supplies, and Function Generator
8. Soldering
9. Trouble Shooting

The Computer Science session covers the following topics

1. Introduction to binary representation
2. Introduction to the software lifecycle. Introduction to Python. Types and variables, assignment and expressions, output
3. Functions, input, simple loops