Clackamas Community College

Online Course/Outline Submission System

☑ Show changes since last approval in red | Print | | Edit | | Delete | | Back |

| Reject | | Publish |

Section #1 General Course Information

Department: Manufacturing

Submitter

First Name: Jim
Last Name: Stager
Phone: 3855
Email: jims

Course Prefix and Number: EET - 157

 # Credits: 3

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 66
Lab (# of hours):
Total course hours: 66

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Digital Logic I

Course Description:

An introduction to digital logic principles, numbering systems & conversions and gate operations. Using principles, circuit analysis will be used to minimize logic networks. Industry standard devices will be used.

Type of Course: Career Technical Preparatory

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Electronics Engineering Technology programs

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: EET-137 & MTH-050

Requirements: None

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ Winter

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. describe basic Boolean Operations, computer number systems and encoding;
2. use Logic gates and Truth Tables, recognizing basic gate operations;
3. use datasheets to interpret basic operating parameters for TTL, C-MOS devices, Asynchronous Logic, Flip-Flops & Latches, Counters and Shift Registers;
4. assemble (protoboard)and test basic digital circuits using power supplies, multimeters and oscilloscopes;
5. write a technical report.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Language of logic.
2. Numbering systems, operations and codes.
3. Basic Gate operations and levels.
4. Boolean Algebra and Logic simplification.
5. Combinatorial logic.
6. Clocked, Sequential, Asynchronous, and Synchronous logic.
7. Programmable logic circuits.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval

: