

## CUMBERLAND COUNTY COLLEGE

Course: EG 212 Intro to Engineering Lab II

Credits: 1 (1:0:2)

Prerequisite: EG-103

Description: EG-212 is the continuation of “Introduction to Engineering Lab I” course (EG-103) in which research-based experiments in basic engineering will be performed. Auto CADD will be used to design a project. A CNC machine and 3-D printer will be used to prototype students’ designs.

Learning Outcomes:

At the completion of this course, students will be able to:

- Effectively research an engineering problem
- Design the experimental procedure to perform an experiment
- Create a concise report
- Employ Cad program to design a simple system
- Operate CNC Machine and 3-D printer for prototyping

Topical Outline:

- Engineering problem research
- CAD
- Prototyping
- CNC Machine
- 3-D printer

Text:

Engineering Fundamentals and Problem Solving, Eide, Jenison, Mashaw and Northup,  
McGraw Hill Publication

Student Assessment:

Student evaluation in the subject will be based on written reports and oral final project as follows:

Written reports	60%
Final Project	25%

Academic Integrity:

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation.

Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense. As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

#### Tutoring & Project Assist:

If you are having difficulty with work in this class tutoring is available through the Center for Academic & Student Success. If you think that you might have a learning disability, contact Project Assist at 856.691.8600 x 1282 for information on assistance that can be provided to eligible students.

#### **Before Withdrawing From This Course:**

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA which can limit or eliminate future financial aid in addition to causing academic suspension.