Common Course Outline
EGNT 226
Engineering Process and Methods
3 Semester Hours

The Community College of Baltimore County

Description

EGNT 226 — 3 credits — Engineering Process and Methods

covers tasks and elements involved in basic engineering problem solving. This course focuses on

the aspects of field information collection and documentation and identification of available and

necessary testing to resolve technical and engineering issues. Emphasis is placed on problem

solving and method application.

3 credits; 3 lecture hours per week; 0 laboratory hours per week. Prerequisite: EGNT 101

Overall Course Objectives

Upon completion of this course the student will be able to:

1. Define, explain, and associate the terminology used in testing;

2. Select and identify objectives for a variety of tests;

3. Investigate record documentation;

4. Observe the field condition;

5. Develop a cost checklist based on test criteria;

6. Develop a cost estimate based on checklist and test criteria;

7. Identify specifications for a part, end item, or system;

8. Select appropriate sample sizes;

9. Develop a logical and comprehensive test matrix;

10. Identify critical review steps;

11. Develop a daily test schedule and checklist;

12. Analyze data and accept, reject, or retest based on preliminary findings;

13. Process and organize data; and

14. Determine acceptability or rejectability of data and make recommendations.

Major Topics

   I. Introduction to engineering documentation

  II. Identification of scope of work

 III. Preparation of cost estimate

 IV. Preparation of test plan

  V. Administration of tests

 VI. Evaluation of test results and performance standards

 VII. Preparation of test report

VIII. Presentation of test findings and recommendations

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

A mid-term and final written exam.
Fieldwork
A written assignment.
An oral presentation

Writing: The individual faculty member will determine specific writing assignments.

Other Course Information

This course is a required course in the Engineering Technology degree.

Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in the Common Course Outline.