

Master Syllabus

CAT 1401 - Construction Estimating

Division: Science, Mathematics and Engineering

Department: Civil Engineering Technology

Credit Hour Total: 3.0

Lecture Hrs: 2.0 **Lab Hrs:** 2.0

Prerequisite(s): MET 1101 OR CAT 1101 OR CAT 1201

Date Revised: January 2016

Course Description:

Construction estimating, beginning with an understanding of the costs of labor equipment and materials, as well as profit and overhead. Quantity measurements of basic construction materials will be used to develop bidding packages. Two classroom, two lab hours per week. Traditional testing (proctored or in Testing Center) is used in all online sections.

General Education Outcomes:

- ▣ Written Communication
- ▣ Critical Thinking/Problem Solving
- ▣ Values/Citizenship/Community
- ▣ Computer Literacy
- ▣ Information Literacy

Course Outcomes:

Common Building Materials

Identify common building materials and demonstrate familiarity with generally accepted formats.

Assessment Method: Locally developed exams

Performance Criteria: 70% or more of available points

Labor and Equipment Costs

Apply costs for labor and equipment to an estimate.

Assessment Method: Locally developed exams

Performance Criteria: 70% or more of available points

Bid Package

Create a bid package using an estimating software tool.

Assessment Method: Portfolios

Performance Criteria: 70% or more of available points

Bid Quantities

Calculate quantities of materials used in construction.

Assessment Method: Locally developed exams

Performance Criteria: 70% or more of available points

Overhead and Profit

Apply overhead and profit to an estimate.

Assessment Method: Locally developed exams

Performance Criteria: 70% or more of available points

Outline:

Estimating Concepts Material Costs Labor Costs Overhead and Profit Final Bid Project