REGULAR COURSE SYLLABUS

School of: Professional Studies
Department: Engineering Technology
CIP Code: 15.0201
Prefix & Course Number: CET 3100 Crosslisted With*: ____
Course Title: Construction Methods
Check All That Apply: Required for Major: ____ Required for Minor: ____ Specified Elective: X
Required for Concentration: X Elective: X Service Course: ____
Credit Hours: 3 (3+0)
Total Contact Hours per semester (assuming 15-16 week semester):
   Lecture 45 Lab 0 Internship 0 Practicum 0 Other (please specify type and hours): _____
Schedule Type(s): L Grading Mode(s): L
Variable Topics Courses (list restrictions, including the maximum number of hours that can be earned**):
   ____

** NOTE: This information must be included in the course description.
Restrictions (Variable Topics Course): ____
Prerequisite(s): At least junior standing, or permission of instructor.
Corequisite(s): None
Prerequisite(s) or Corequisite(s): ____
Banner Enforced:
   Prerequisite(s): ____
   Corequisite(s): ____
   Prerequisite(s) or Corequisite(s): ____

Catalog Course Description:
This course provides a basic understanding of the methods used by a general contractor to determine earthwork costs. The student is introduced to the application of engineering fundamentals for the analysis of heavy earth-moving equipment, as well as to the basic concepts of CPM.

APPROVED:  
Department Chair OR Program Director:  
Dean OR Associate Dean:  
Associate VP, Academic Affairs:  

*If crosslisted, attach completed Course Crosslisting Agreement Form
Prefix and Course Number: CET 3100

**Required Reading and Other Materials will be equivalent to:**

**Specific, Measurable Student Behavioral Learning Objectives:**
Upon completion of this course the student should be able to:
1. Apply the principles of the Critical Path Method as they apply to construction.
2. Distinguish standard types of heavy equipment used in construction.
3. Evaluate the construction equipment productivity.

**Detailed Outline of Course Content** (Major Topics and Subtopics) or Outline of Field Experience/Internship (experience, responsibilities and supervision):

I. The Critical Path Method (CPM)
   A. Fundamentals of the CPM
   B. Application of the CPM to construction methods

II. Applied Construction Methods
    A. Construction equipment
    B. Job site application

III. Earth Moving Equipment and Production Rates

IV. Other Construction Equipment and Production Rates

V. Concrete Batch Plants
   A. Concrete mix design
   B. Material handling and batching

VI. Planning for Building Construction

**Evaluation of Student Performance:**
1. Assigned homework problems
2. Written exams and quizzes
3. Group project and presentation