REGULAR COURSE SYLLABUS

School of: Professional Studies
Department: Engineering Technology

CIP Code: 15.0201
Prefix & Course Number: CET 1100  Crosslisted With*: ___
Course Title: Introduction to Civil Engineering Technology

Check All That Apply: Required for Major: X  Required for Minor:  Specified Elective: ___
                                           Required for Concentration:  Elective: ___  Service Course: ___

Credit Hours: 3 (3+0)

Total Contact Hours per semester (assuming 15-16 week semester):
          Lecture 45  Lab 0  Internship ___  Practicum ___  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): ___
Corequisite(s): ___
Prerequisite(s) or Corequisite(s): ___

Banner Enforced:
  Prerequisite(s): ___
  Corequisite(s): ___
  Prerequisite(s) or Corequisite(s): ___

Catalog Course Description:

Course Description: This course is a cross section of topics in contemporary civil engineering disciplines, with emphasis on the tools of engineering problem solving. Students are taught to work in teams and introduced to the design process and to several tools necessary in a civil engineering career. In this course they develop an appreciation of professional topics to include: ethics, respecting others, and professional societies.
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**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. Relate to Civil Engineering areas through their professional society.
2. Apply algebra and trigonometry principles to civil engineering related problems and calculate section properties of plane areas.
4. Relate to historical civil engineering achievements.

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

I. Role of Civil Engineering Technology in Society
   A. Differences between the Bachelor degree in Civil Engineering Technology and Civil Engineering
   B. Job opportunities with the Bachelor of Science degree in Civil Engineering Technology
   C. Importance of being a professional including passing the Fundamentals of Engineering and Professional Engineering examinations
   D. Code of Ethics-American Society of Civil Engineers
   E. Diversity-respecting others
   F. Other Professional Societies in the Civil Engineering field

II. Solution of Engineering Problems
   A. Use of algebra and trigonometry principles

III. Use of computer software in Civil Engineering Problems
   A. Spreadsheets, graphical presentations, statistics using Excel
   B. Power Point
      1. Presentation by student teams on civil engineering achievement
   C. Finite Element software demo

IV. Unit systems and their applications
   A. Dimensional analysis
   B. US customary units
   C. SI system of units

**Evaluation of Student Performance:**
1. Written examinations
2. Performance of assigned homework problems
3. Oral presentations in teams on instructor-assigned topic
4. Written reports
5. Project