

METROPOLITAN STATE COLLEGE of DENVER
Office of Academic Affairs

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: 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): _____

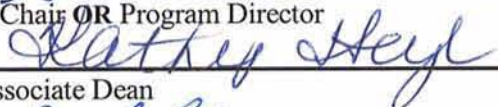
Catalog Course Description:

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.

APPROVED: 

Department Chair OR Program Director

3 Apr 08
Date



Dean OR Associate Dean

4/8/08
Date



Associate VP, Academic Affairs

5/19/08
Date

*If crosslisted, attach completed Course Crosslisting Agreement Form

Prefix and Course Number: CET 1100

Required Reading and Other Materials will be equivalent to:

Harold Zimbelman (2005). *Engineering Problem Solving*. Auraria Copy Center.

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.
3. Report on a structural experience, following given guidelines.
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):

- | | |
|---|---|
| <ol style="list-style-type: none"> I. Role of Civil Engineering Technology in Society <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> A. Use of algebra and trigonometry principles | <ol style="list-style-type: none"> 1. Section properties of plane areas 2. Simple beams and force systems B. Probability and statistics III. Use of computer software in Civil Engineering Problems <ol style="list-style-type: none"> A. Spreadsheets, graphical presentations, statistics using Excel B. Power Point <ol style="list-style-type: none"> 1. Presentation by student teams on civil engineering achievement C. Finite Element software demo IV. Unit systems and their applications <ol style="list-style-type: none"> 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