

METROPOLITAN STATE UNIVERSITY OF DENVER
Office of Academic and Student Affairs

REGULAR COURSE SYLLABUS

School of: Professional Studies

Department: Engineering Technology

Prefix & Course Number: CET 1215 Crosslisted With*: _____

Course Title: Engineering Graphics

Banner course title (30 characters): Engineering Graphics

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

To receive Title IV financial aid funds, all institutions of higher education must comply with the federal definition of a credit hour. The Higher Learning Commission requires institutions to maintain policies and procedures for verifying compliance with this definition.

Federal Credit Hour Definition: A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than:
(1) one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or (2) at least an equivalent amount of work as required in paragraph (1) of this definition for other activities as established by an institution, including laboratory work, internships, practica, studio work, and other academic work leading toward to the award of credit hours. 34CFR 600.2 (11/1/2010)

Credit Hours: 3 (2+2)

Face-to-Face or Equivalent Hours per course:

Lecture 30 Lab 30 Internship _____ Practicum _____ Other (please specify type and hours): _____

Additional Student Work Hours per course: 90

Schedule Type: B Grade Mode: L

Variable topics umbrella course: No Yes _____ If Yes, number of credit hours allowed _____

Specified repeatable course: No Yes _____

APPROVED:

Juzha Balogh
Department Chair OR Program Director _____ Date Jan. 28, 2014

Dean OR Associate Dean _____ Date 1-30-14

Associate VP, Academic and Student Affairs _____ Date 03/13/14

*If crosslisted, attach completed Course Crosslisting Agreement Form

Prefix and Course Number: CET 1215

Prerequisite(s):

Corequisite(s):

Prerequisite(s) or Corequisite(s):

Banner Enforced:

Prerequisite(s):

Corequisite(s):

Prerequisite(s) or Corequisite(s):

Registration restrictions: Level _____ Class _____ Program/Major _____ Student attribute _____

Catalog Course Description:

Students will be introduced to CAD software to perform geometric constructions, multi-view projections, section views, dimensioning, and solid modeling.

Specific Variable Topics Course Description (if applicable, umbrella course description included above):

Required Reading and Other Materials will be equivalent to:

Lang, Kevin, *AutoCAD® Tutor for Engineering Graphics: 2013 and Beyond*, Clifton Park, NY, Autodesk Press
Thompson Delmar Learning

Specific, Measurable Student Behavioral Learning Objectives:

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

1. Construct multi-view drawings and section views of a given object using CAD software.
2. Apply dimensions to technical drawings in compliance with conventional dimensioning practices using CAD software.
3. Model the geometry of any given object using solid modeling using CAD software.

Detailed Outline of Course Content:

- I. Fundamental concepts of engineering graphics
- II. Drawing concepts:
 - a. Introduction to the drawing, setup and organization
 - b. Display, selection, and basic editing of drawings
 - c. Performing geometric constructions
 - d. Layouts and plotting
 - e. Dimensioning
- III. Multi-view drawings
 - a. Projection views
 - b. Section views
- IV. Solid modeling fundamentals
- V. Creating 2D multi-view drawings from a solid model

Evaluation of Student Performance:

1. Written examinations
2. Assigned laboratory problems