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 4100  
Crosslisted With*: ______

Course Title: Senior Project I

Check All That Apply:  
Required for Major: X  Required for Minor: ______  Specified Elective: ______

Required for Concentration: ______  Elective: ______  Service Course: ______

Credit Hours: 1 (0+2)

Total Contact Hours per semester (assuming 15-16 week semester):  
Lecture ____ Lab ____ Internship ____ Practicum ____ Other (please specify type and hours): 30

- Individual Research, Planning, Design  
- Consulting with Faculty Advisor and Industry Contacts  
- Presentation Preparation with Faculty Advisor  

20 hours  
5 hours  
5 hours

Schedule Type(s): Q  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): CET 3120 and COM 2610 with grades of “C” or better; completion of all Level I and Level II

General Studies course requirements with a cumulative GPA of 2.0, and senior standing

Corequisite(s): ______

Prerequisite(s) or Corequisite(s): CET 4120 and CET 4400

Banner Enforced:

Prerequisite(s): CET 3120, COM 2610, MTH 2420 and SPE 1010, all with grades of “C” or better, and senior standing

Corequisite(s): ______

Prerequisite(s) or Corequisite(s): CET 4120 and CET 4400

APPROVED:  

[Signature]

Date: 1/27/2010

Department Chair OR Program Director

[Signature]

Date: 2/1/2010

Dean OR Associate Dean

[Signature]

Date: 3/14/10

Associate VP, Academic Affairs

[Signature]

*If crosslisted, attach completed Course Crosslisting Agreement Form
Prefix and Course Number: CET 4100

**Catalog Course Description:**
This course requires the planning and designing of a team project in consultation with faculty advisors and industry contacts. (Senior Experience)

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

Handouts

**Specific, Measurable Student Behavioral Learning Objectives:**
Upon completion of this course the student should be able to:
1. Integrate and incorporate the knowledge gained in the CET curriculum in a culminating project.
2. Identify, formulate, analyze, design, and solve a technology-based project.
3. Form multidisciplinary teams and function as a valuable team-member by understanding professional, ethical, social, and contemporary issues.
4. Plan and deliver a formal presentation of the project technology, projected cost and implementation.

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

I. Orientation
   A. Goal of Course
      1. Research Available Technologies and Products
      2. Create Functional Specifications
      3. Develop a Preliminary Design and Divide it into Deliverables
      4. Develop a Plan for Completing the Project
      5. Conduct Financial Analysis of a Proposed Project
   B. Criteria in Project Selection
   C. Research Methods and References

II. Select a Project
   A. Submit Project for Faculty Approval
   B. Faculty Approval of Project

III. Develop a Project Plan
   A. Goals and Conceptional Block Diagram
   B. Tasks
   C. Milestones
   D. Materials
   E. Costs

IV. Preliminary Design Work on Project

V. Public Presentation of Preliminary Design involving Industry Members
   A. Project Proposal
   B. Project Plan

**Evaluation of Student Performance:**
1. Written Project Proposal in Terms of Technology, Plan, and Costs
2. Formal Presentation