
MIDDLESEX COUNTY COLLEGE

COURSE SYLLABUS

Department:	Engineering Technologies
Program:	Civil Engineering Technology
Course Number:	CIT 260
Title of Course:	Civil Design Project
Curriculum Coordinator:	Daniel Grek
Designation:	Required Course

Course Description:

Students working in teams, integrate their knowledge of theoretical concepts and practical applications of estimating, surveying, hydrology, hydraulics, and structural design to complete a comprehensive design project. Oral presentation and a technical report are required.

Prerequisites:

CIT 203 Strength of Materials
CIT 205 Construction Surveying II
CIT 125 Construction Estimating

Co-requisites:

CIT 212 Water Resources Technology
CIT 218 Design of Steel Structures
CIT 219 Design of Concrete Structures

Textbooks and /or other required material:

No text required

Course Learning Outcomes and their relationships to Student Outcomes:

1. Students will create a written proposal of their design project.
2. Students will create a work schedule using common construction practices. **(SO i)**
3. Students will generate design sketches using AutoCAD of their proposed and final project design. **(SO j)**
4. Students will submit weekly progress reports during the development and construction of their projects. **(SO i)**
5. Students will provide calculations in Excel or comparable software relating to the design of their project. Hand calculations will be submitted to verify computer calculations. **(SO b)**
6. Students will demonstrate leadership and teamwork skills throughout their projects. **(SO d)**
7. Students will demonstrate proficiency with common software used in industry. **(SO j)**
8. Students will submit a final report and detail their projects in an oral presentation to their classmates and members of industry. These will include examples of practical applications for their project. **(SO f)**

9. Students will recognize the need for engaging in lifelong learning. (SO g)
10. Students will demonstrate an understanding of professional and ethical responsibilities. (SO h)

Topics Covered:

- Water Treatment Design
- Hydraulic System Design
- Structural Design
- Estimate quantities and material costs
- Technical report and oral presentation

Class/Laboratory schedule. Number of sessions each week and duration of each session:

1 hour of lecture per week for 14 weeks
 2 hours of laboratory per week for 14 weeks

Criterion 5 Contribution:

Technical Content

Prepared By:	Jay R. Edelson	Date:	March 20, 2008
Updated By:	T. Sabol	Date:	4-1-2010
Updated By:	T. Sabol	Date:	11/4/10
Rev 3:	Edelson Update mapping of course outcomes to 2014-2015 ABET student outcomes	Date:	4/7/14
Rev 4:	General Update	Date:	3/15/21