Summer 5-15-2020

MNET 414-450: Industrial Cost Analysis

Christopher Zeiner

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New Jersey Institute of Technology
Department of Engineering Technology
MNET 414 Industrial Cost Analysis

**Course Number**  
MNET 414

**Course Description**  
Industrial Cost Analysis

**Course Structure**  
3-0-3 (lecture hr/wk - lab hr/wk – course credits)

**Course Coordinator/Instructor**  
Dr. S. Lieber / C. Zeiner

**Course Description**  
An introduction to general costing techniques. Time value of money concepts are introduced to decision-making matters such as equipment justification, design selection and fabrication costs.

**Prerequisite(s)**  
None

**Corequisite(s)**  
None

**Required Materials**  

**Computer Usage**  
Spreadsheets

**Course Learning Outcomes**  
By the end of the course students should be able to:

1. Calculate industrial costs and benefits using a variety of techniques
2. Understand the importance of time-value of money in economic analyses and calculate its effects on investments and loans
3. Analyze realistic cost:benefit scenarios in typical industry problems
4. Evaluate economic alternatives considering the effects of depreciation and taxes
5. Parse complex real-world technical cost issues, identify and analyze cost reduction alternatives, and make an oral and written presentation to “management”
6. Demonstrated ability to read-ahead course materials in advance of class lecture, and report both key learnings and issues to instructor before class
7. Understand and practice how to recognize and analyze ethical issues

**Class Topics**  

**Student Outcomes**  
The Course Learning Outcomes support the achievement of the following MET Student Outcomes and TAC of ABET Criterion 9 requirements:

**Student Outcome a** - an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;

**Related CLO – 1-4**
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Student Outcome f - an ability to identify, analyze, and solve broadly-defined engineering technology problems;
Related CLO – 5

Student Outcome h - an understanding of the need for and an ability to engage in self-directed continuing professional development.
Related CLO – 6

Student Outcome i –an understanding of and commitment to address professional and ethical responsibilities including a respect for diversity.
Related CLO – 7

Grading Policy

<table>
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<tr>
<th>Exams (each)</th>
<th>25%</th>
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<tr>
<td>Quizzes</td>
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Academic Integrity

NJIT has a zero-tolerance policy regarding cheating of any kind. Student behavior that is disruptive to the learning environment will not be tolerated. Incidents will be reported to the Dean of Students. Honor Code violations may result in failure in the course, disciplinary probation, and/or expulsion from NJIT. Refer to http://www.njit.edu/academics/honorcode.php

Student Behavior

Will be discussed in class

Modification to Course

The Course Outline may be modified at the discretion of the instructor or in the event of extenuating circumstances. Students will be consulted if any changes occur.

Prepared by

C. Zeiner

Course Coordinated by

Dr. S. Lieber

Class Hours

Monday, 6:00 PM to 9:00 PM   Instructor Scheduled
Wednesday,                   Webex Meeting
Thursday

Office Hours

By Appointment:
Phone (848) 480-5361   Email  zeiner@njit.edu
SYNCHRONOUS ONLINE INFORMATION
The instructor will discuss these requirements on the first day of the course and/or post on their Learning Management System (LMS). Please become familiar

- Webex: http://ist.njit.edu/webex
- Online Proctoring: https://ist.njit.edu/online-proctoring/

GRADING LEGEND

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<td>90 to 100</td>
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<td>B+</td>
<td>85 to 89</td>
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<td>B</td>
<td>80 to 84</td>
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<td>C+</td>
<td>75 to 79</td>
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<td>C</td>
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<tr>
<td>D</td>
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<td>F</td>
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## Course Outline

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