Engineering Cost Analysis

PREPARED BY: Dr. Nourredine Boubekri  
Boubekri@unt.edu  
940 565 2136  
OFFICE: Department of Engineering Technology-Discovery Park  
F115P :Monday and Wednesday From 1:00pm to 2:00pm by appointment

COURSE NUMBER, TITLE, CREDIT and CONTACT HOURS:

MFET 4200, 3 credit /contact hours

DESCRIPTION:

Principles and techniques for cost evaluation of engineering design including: labor, materials and business accounting analysis, forecasting tools and techniques; operations, product, project and system estimation; and contract considerations.

COURSE LEARNING OBJECTIVES:

1-Demonstrate an understanding of application of cost estimation techniques and principles

2-Demonstrate an understanding of concepts of time value of money

COURSE LEARNING OUTCOMES

The course demonstrates that graduates have:

1. An ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, or technology to solve broadly-defined engineering problems

PREREQUISITES:

MFET 4190 (or equivalent) or consent of department

TEXTBOOK:

Engineering Economy, 16th Edition

William G. Sullivan, Virginia Polytechnic Institute and State University  
Elin M. Wicks  
C. Patrick Koelling ; ©2015 ; Pearson ; ISBN13: 9780133439274
COURSE OUTLINE:

The course covers the following topics:

1. Introduction to Engineering Economy
2. Cost Concepts and Design Economics
3. Cost-Estimation Techniques
4. The Time Value of Money
5. Comparison among Alternatives
6. Depreciation methods
7. Breakeven Analysis
8. Decision Making Considerations

GRADING ELEMENTS AND WEIGHTS:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Exams (3)</td>
<td>30% each</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
</tbody>
</table>