

Engineering Cost Analysis MFET 4200 FALL 2021 (3 credit hours)

PREPARED BY: Dr. Nourredine Boubekri Boubekri@unt.edu
940 565 2136

OFFICE Hours : Department of Mechanical Engineering -Discovery Park
F115P : Monday and Wednesday . From 10:00am to 11:30:00am

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:

Semester Exams (4) 30% each ;Lowest exam dropped
Homework 10%