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

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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:

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%