

Engineering Cost Analysis MFET 4200

FALL 2020

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OFFICE : Department of Mechanical Engineering -Discovery Park

F115P : Tuesday and Thursday Remote (by Appointment only). From 3:00pm to 4:00pm

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:

Semester Exams (3) 30% each Homework 10%

NOTE

Synchronous (live) sessions in this course will be recorded for students enrolled in this class section to refer to throughout the semester. Class recordings are the intellectual property of the university or instructor and are reserved for use only by students in this class and only for educational purposes. Students may not post or otherwise share the recordings outside the class, or outside the Canvas Learning Management System, in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action.