Engineering Cost Analysis

PREPARED BY: Dr. Nourredine Boubekri

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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

University of North Texas Engineering Technology

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%