Quality Assurance

PREPARED BY: Dr. Nouredine Boubekri Boubekri@unt.edu
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OFFICE : Department of Mechanical Engineering -Discovery Park
Tuesday and Thursday by appointment

COURSE NUMBER, TITLE, CREDIT HOURS:
MFET 4190, 3 credit hours

DESCRIPTION:
Review of statistics and discussion of statistical process control (SPC). The study of quality management, including preproduction suppliers, in-process and finished, product quality, methods of statistical analysis and quality audits, costs, and employee training.

COURSE LEARNING OBJECTIVES:
1-Demonstrate an understanding of statistical process control and techniques 2-Demonstrate an understanding of Quality Management principles

COURSE LEARNING OUTCOMES
The course demonstrates that graduates have:
e. an ability to identify, formulate and solve engineering problems.

PREREQUISITES:
MFET 3110 or consent of department

TEXTBOOKS:
Quality Management; Fourth Edition; by Howard Gitlow, Rosa Oppenheim, Alan Oppenheim, and David Levine.Hercherpublishing.com

COURSE OUTLINE:
1 Review of probability and statistics
2 Defining and Documenting a Process
3 Fundamentals of Quality
4 Statistical Process Control
5 Attribute Control Charts
6 Variables Control Charts
7 Stabilizing and Improving a Process with Control Charts

8 Costs of Quality

**GRADING ELEMENTS AND WEIGHTS:**

Semester Exams (3) 30%, 30%, 30%  Homework 10%