MFET 252C : Quality Control

A study of the techniques used to collect, organize, and analyze information that can be used in making decisions regarding quality. The course will begin with a review of the basic principles of statistics and probability and then develop such topics as process capability, process control, acceptance sampling, and reliability. The scope of quality will be expanded to include such topics as reliability, quality costs, product liability, 6-sigma, and quality systems. Activities will provide the student with the opportunity to apply the principles developed in the classroom through the use of computer examples and hands-on exercises.

Credits 4
Lab/Practicum/Clinical Hours 2
Lecture Hours 3
Prerequisite Courses
MATH 251C
Learning Outcomes
- Develop a working knowledge of statistical terminology and symbols.
- Demonstrate an understanding of the basic concepts underlying probability and statistics.
- Construct X, R, p, and C charts and demonstrate knowledge of chart interpretation.
- Use various sampling plans current in industry.
- Use computer software applicable to statistical quality control.
- Understand the relationship between quality and reliability.
- Determine the cost of quality.
- Understand quality systems such as ISO 9000, ISO 14000, and Six Sigma.