

ME379M / ME397 / ORI397

Statistical Methods in Manufacturing

Fall 2014 Semester

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Class time: Tuesdays and Thursdays 12:30pm-2pm

Classroom: ETC 5.132

Office Hours:

Wednesdays 3pm-6pm

Course Contents:

Contemporary concepts and methods for statistical quality design and control will be presented. These include:

- Descriptive statistics
- Behavior of process over time
- Design and interpretation of control charts
- Process capability studies
- Measurement system analysis
- Correlation and regression analysis
- Design and analysis of two level factorial experiments
- Design and analysis of two level fractional factorial experiments
- Response surface methodology
- Taguchi approach to robust design

Textbook:

DeVor, Chang, and Sutherland

Statistical Quality Design and Control, Contemporary Concepts and Methods, Macmillan Publishing Company.

Grading:

Midterm Exam	35%
Final Exam	40%
Homeworks	20%
Attendance/Participation	5%