

ME379M / ME397 / ORI397

# Statistical Methods in Manufacturing

Professor Dragan Djurdjanovic  
Office: ETC 5.122  
Phone (512)-232-0815  
Email: dragand@me.utexas.edu

Class times: Tuesdays and Thursdays 12:30pm-2pm  
Classroom: ETC 5.132

## 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, 2<sup>nd</sup> Edition, Pearson, 2006.*

<b>Grading:</b>	Midterm Exam	35%
	Final Exam	40%
	Homeworks	20%
	Attendance/Participation	5%