

# **Krannert TQM-related Courses: An Overview**

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**Quantitative Methods Area**

# Courses

- **MGMT 671/671** Quantitative Methods I & II
- **MGMT 672** Quantitative Methods III
- **MGMT 690N** TQM-Tools and Methods
- **MGMT 690Y** Projects in Manufacturing
- **MGMT 405** TQM-Tools and Method

# Course Objectives and Contents

- **Managerial concepts and strategies for continuous improvement**
  - **Measurements**
  - **Variance and cost reduction**
  - **Process-oriented approach**
  - **Various companys' and gurus' approaches**
  - **Process capability: 6-sigma**
  - **Learning**

# Course Objectives and Contents (cont'd)

- **Tools and methods**
  - **Process development: QFD**
  - **Process planning tools**
  - **Design of experiments**
  - **Process monitoring and control**
  - **Inspection**
  - **Problem-solving tools**
  - **Response surface method**

# Who Took the Elective Courses

- MS students with an operations option
- Undergraduates with an IM major
- Some general management students
- Industrial engineers from IE Department

# Learning Methods

- **Lecture**
- **Guest speakers**
- **Exercises**
- **Assignments**
- **Case studies/discussions**
- **Projects**

# What is Next?

- **New courses on application of the concepts and tools to general or e-business**
- **New courses on other tools: Tool box**
- **Your suggestions?**