The mission of the Department of Industrial and Information Management is to Cultivate quality professionals with enthusiasm and global perspectives.

General Program Learning Goals (goals covered by this course are indicated):

- 1 Graduates should be able to communicate effectively verbally and in writing.
- 2 Graduates should solve strategic problems with a creative and innovative approach.
- 3 Graduates should demonstrate leadership skills demanded of a person in authority.
- 4 Graduates should possess a global economic and management perspective.
- 5 Graduates should possess the necessary skills and values demanded of a true professional.

Instructor: 呂執中 (JrJung Lyu, jlyu@mail.ncku.edu.tw)
Class time: Thursday 10:10-12:40 at 61304
Office hours: Tuesday morning
Web site: http://qi.iim.ncku.edu.tw/SPC09

Course objective:
One of the fundamental shifts in the technical and business worlds in the past few years is the way we view and approach the issue of quality relative to customers, products, and processes. To make customer satisfaction becoming a primary business goal of the world class manufacturers. Statistical thinking and statistical methods have been recognized as the necessary knowledge and tools to the continual improvement. The objective of this course is to introduce problem prevention driven quality engineering and control, from a system point of view. Emphasis will be placed on using advanced methods regarding the issue of design process quality and the creative thinking for lean production. Topics to be covered include:

1. Overview of the quality concept;
2. Process improvement cycle;
3. CTQ;
4. Process control and capability analysis;
5. Process improving – designed experiments;
6. Lean production; and
7. Case studies.

Texts:
1. Class notes.

References:

**Grading:**
Class Participation: 30%
Homeworks: 30%
Test: 20%
Project Report and Presentation: 20%

**Grading Policy/評量方式:**
(配分與選項自行調配，本項目須與 Learning Goals 相符)

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