

10610IEEM303000 Quality Control , Fall 2018

National Tsing Hua University
Tuesday 10:10 - 12:00 ; Thursday 11:10 - 12:00

Depart. of IEEM

1. **Instructor:**

Professor Wheyming Song 桑慧敏
Office: 815, Engineering Building No.1; Phone: 5742659(office)
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Office Hour: Wednesday 10:00 - 12:00

2. **TA:**

Office: 706-1, Engineering Building No.1
Office Hour: Wednesday 10:00 - 12:00

3. **Goal:**

The goal is to provide a sound understanding of the principles and the basis for modern statistical methods for quality control and improvement.

4. **Textbook:**

Statistical Quality Control, A modern Introduction by Douglas C. Montgomery, seven edi. John Wiley and Sons, Inc. 2013.

5. **Reference:**

機率與推論統計原理, 桑慧敏, Mc Graw Hill 出版, 高立圖書代理, 2007 年。

6. **Grading:**

Homework	20%
Quiz	20%
Midterm	25%
Final	25%
Final Project	10%

7. **Syllabus:**

- (a) Review Probability and Statistics (Chapters 1-4)
- (b) Statistical Control Charts (Chapters 5-7, 9, 10.4)
- (c) Determining Performance Measures (process and measurement systems capability) (Chapter 8)
- (d) Design of Experiments (DOE) (Chapter 13)
- (e) Acceptance Planing (Chapter 13, optional)

8. **Computer Softwares:**

R and Minitab