



北京理工大学学术学分课程

Beijing Institute of Technology Academic  
Credit Courses Program

## **ENGR9300-PROCESS AND PRODUCT QUALITY ENGINEERING**

### *Syllabus*

**Jan.3, 2019 – Jan.26, 2019**

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Term Duration: Jan. 3, 2019 – Jan. 26, 2019

Credit Points: 4 Level:

Postgraduate

Instructor Name: TBA

Home Institution: Beijing Institute of Technology

Lecture Hour: 15:40-18:30

Office Hour: TBA

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### ***Course Description***

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Quality engineering is a very broad area. It is the part of the backbone of what the company does. It aims to set quality control systems, proper quality standards, manuals, implementation and procedures, quality assurance, advanced quality management systems, manufacturing system, value-stream mapping, process flows, value added management, customer satisfaction, team management, process improvement, six-sigma approach, economics of reducing variation in industry.

This course will cover several quality engineering approaches, industrial cases, videos etc. Managing quality is critical in business and organizational governance. Quality management engineering may involve product designed and manufacture, computer software, retail contribution, logistic, and technical document.

## ***Required Textbook***

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*Managing Quality: Integrating the Supply Chain: International Edition (5e),*

Author: S. Thomas, Foster

Publisher: Pearson Higher Ed.

ISBN Number: 9780273768258

## ***Course Hours***

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The course has 14 class sessions and 1 field trip in total. Each lecture session is 180 minutes in length. The classes are from Monday to Friday.

## ***Course Schedule***

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Week	Day	Date	Chapter	Topic	Assignment/ Notes
Week 1	Thu.	Jan.3, 2019	Manufacturing systems and Process	Engineering and Issue analysis	
Week 2	Mon.	Jan.7, 2019	Total quality management	Total Quality Control Theory and KFS Analysis	Individual Research
	Tue.	Jan.8, 2019	Total quality management	Global Supply Chain and International Quality Standards	Team Work
	Wed.	Jan.9, 2019	Total quality management	Quality and Innovation in Product and Process Design	Case study
	Thu.	Jan.10, 2019	Statistical Method of Quality	Metrology and Inspection	Group Discuss: The Use of Metrology
Week 3	Mon.	Jan.14, 2019	Statistical Method of Quality	Strategic Quality Planning	Group Research
	Tue.	Jan.15, 2019	Design Theory	Quality System Design Project Software quality Engineering	Case study
	Wed.	Jan.16, 2019	Design Theory	Acceptance Sampling and Multi-Variety Data Analysis	Group Discuss: Multi-Variety Data Analysis
	Thu.	Jan.17, 2019	Customer Satisfaction	Voice of the Customer and Voice of the Market	Group Research
	Fri.	Jan.18, 2019	Field Trip	Site Visit at Fortune 500	

Week 4	Mon.	Jan.21, 2019	Implementing Quality	Corporation Tools of Quality	
	Tue.	Jan.22, 2019	Implementing Quality	Learn Six Sigma Decision Support System	Group Research: Six Sigma
	Wed.	Jan.23, 2019	Improving the Quality system	Applied Object Orientated Programming	Case study
	Thu.	Jan.24, 2019	Review	Review	
	Sat.	Jan.26, 2019	Final Exam		

### ***Grading Policy***

Items	Percentage
Attendance	10%
Case study and presentation	40%
Final Exam	50%
Total	100%

### ***Academic Honesty***

Academic honesty is not only a fundamental part of learning and teaching, but also a core value that this course embraces. Behaviors of academic dishonesty, as outlined hereinafter, are unacceptable and will be penalized:

- a) Plagiarism where students present work for assessment, publication or otherwise that is not their own, without appropriate attribution or reference to the original source. Plagiarism can include:
  - i) paraphrasing or copying published and unpublished work without a reference;
  - ii) adopting the ideas or concepts of others, including the structure of an existing analysis without due acknowledgement by way of reference to the original work or source.
- b) Collusion, where students present work as independent work when it has in fact been produced in whole or in part with others unless prior permission for joint or collaborative work has been given by the Course Coordinator. Collusion can include:
  - i) a student inappropriately assisting with or accepting assistance with the production of an assessment task;
  - ii) submitting work which is the same or substantially similar as another student's work for the same assessment task.

- c) Cheating, where a student acts in such a way as to seek to gain unfair advantage or assist another student to do so. Cheating can include:
  - i) submitting falsified, copied or improperly obtained data relating to results of practicum, field trips or other work as if they were genuine; submitting an assessment task with the intention of deceiving or misleading the instructor about the student's contribution to the work;
  - ii) submitting an assessment task written or answered for the student by another person or which the student has copied from another person;
  - iii) submitting the same or a substantially similar piece of work for assessment in two different courses (except in accordance with approved study and assessment schemes);
  - iv) a student falsely indicating that they have been present at an activity where attendance is required;
  - v) completing an assessment task outside the conditions specified for that task.
- d) Cheating in Examinations means engaging in dishonest practice or breaching the rules regarding examinations, which can include:
  - i) communicating in any way during an examination with any person who is not an examination supervisor inside or outside the examination venue;
  - ii) giving or accepting assistance from any person who is not an examination supervisor whilst in the examination venue;
  - iii) reading, copying from or otherwise using another student's work in an examination or knowingly allowing a student to do so;
  - iv) possessing, referring to or having access to any material or device containing information directly or indirectly related to the subject matter under examination, other than that explicitly approved by the Course Coordinator;
  - v) acquiring, or attempting to acquire, possess or distribute examination materials or information without approval;
  - vi) permitting another person to attend an examination on a student's behalf or attending an examination on behalf of another student;
- e) Other dishonest acts including but not limited to:
  - i) altering or falsifying any document or record for the purposes of gaining academic advantage;
  - ii) offering or giving money or any item or service to a University staff member or any other person to gain academic advantage for the student or another person;
  - iii) inventing references.