

COURSE INFORMATION

Course name	Engineering Management	
Course number	IE1035	
Section	01	
Class time	Tuesday 8:15-11:00	
Class location	120, Zone 1	
Prerequisites	IE junior status or instructor's permission	

INSTRUCTOR

Name	Yuanchen Fang		
Email	y.fang@scu.edu.cn	Office hour	Thursday 16:30 — 18:30
QQ	521029579	Office	3-319B

TEACHING ASSISTANTS

Name	Zihan Abel Zhuang	Name	Hanze Richard Qin
Email	1661594105@qq.com	Email	3300372719@qq.com
TAs will be working together for both sections.			

COURSE DESCRIPTION

This course focuses on the management theory which can be applied to engineering and technical organizations. Specific topics include: management process and functions (leading, planning, organizing, and controlling); technology management (research and development, design, production, and operation); project management; managing technical people; and other contemporary management concepts.

COURSE OBJECTIVES

- Understanding of what the importance of engineering management in technical organizations is and how the well-managed engineering organization will lead to competitive advantage of a company in the market.
- Familiarization of basic principles of engineering management.
- Development of skills and ability of applying management concepts and techniques to work and manage in an engineering environment.
- An ability to function on multi-disciplinary teams. An understanding of professional and ethical
 responsibility. The broad education necessary to understand the impact of engineering solutions
 in a global, economic, environmental, and social context. A recognition of the need for, and an
 ability to engage in life-long learning. A knowledge of contemporary issues.

COURSE MATERIALS

Textbook	HARNAGING ENGINEERING ND REFERENCE TECHNOLOGY	Morse, L.C. and Babcock, D.L. (6th Edition, 2014), Managing Engineering and Technology, Pearson Higher Education, Inc., New York.
Reference	Lecture slides and notes provided in class	

GRADING

		In-class discussion, exercises, group work, games, checking class
Class Participation	25%	preparation, etc.; For some tasks, get full mark for participation; For other
		tasks, grades are given based on the quality of the answers; Grading rules
		will be given before the participations start.
		Approximately 5 assignments; Individual work or group work; Due in one,
	25%	two, or three weeks depending on the difficulty; For problems, show all
Homowork		work and complete calculation steps for each problem; For case studies or
Homework		essay style assignments, must be typed and presented in a professional and
		readable format; Detailed requirements for homework submission will be
		posted on Bb by TAs.
		Work in groups; Submission includes a technical report, an in-class progress
Project	15%	presentation and discussion, and a PowerPoint slide show; Requirements
		will be given in separate handouts when assigned.
Midtama		90 minutes; One week after "Management Functions - Decision Making" is
Midterm	17%	introduced; Open paper-based materials, open scientific calculator, closed
Exam		electronics.
D' 1 D	23%	120 minutes; In final week; Open paper-based materials; open scientific
Final Exam		calculator; closed electronics.
Total	105%	5% for extra points; Total grade given will not exceed 100
 No makeup 	opportu	nity for any missing exam, homework or class participation except for
documented	l medica	l reasons

• Late homework or project will not be accepted

Students unable to attend classes are responsible for obtaining class announcements and lecture contents

Week	Date	Торіс	Reading	
1	Sep 5	Course Introduction; Introduction of Engineering Management	Textbook Chapter 1 & 13	
2	Sep 12	Management Functions Leading	Textbook Chapter 3	
3	Sep 19	Management Functions Leading	Textbook Chapter 3	
4	Sep 26	Management Functions – Planning	Textbook Chapter 4	
5	Oct 3	(Holiday)		
6	Oct 10	Management Functions – Planning	Textbook Chapter 4	
7	Oct 17	Management Functions – Decision Making	Textbook Chapter 5	
8	Oct 24	Management Functions – Decision Making	Textbook Chapter 5	
9	Oct 31	Midterm Exam (This is a tentative schedule. The midterm will be one week after the introduction of "Management Functions – Decision Making" is finished.)		
10	Nov 7	Management Functions – Organizing	Textbook Chapter 6 & 7	
11	Nov 14	Management Functions – Organizing	Textbook Chapter 6 & 7	
12	Nov 21	Management Functions Controlling	Textbook Chapter 8	
13	Nov 28	Management Functions Controlling	Textbook Chapter 8	
14	Dec 5	Managing Technology – R&D, Design	Textbook Chapter 9 & 10	
15	Dec 12	Project progress presentation Managing Technology –Planning Production	Textbook Chapter 11	
16	Dec 19	Managing Technology – Production Operations, Project Planning and Acquisition	Textbook Chapter 12 & 14	
17	Dec 26			
18, 19)	Final Exam		

TENTATIVE SCHEDULE

SPECIAL ACCOMMODATIONS

If you have specific physical, psychiatric, or learning disabilities that you believe may require accommodations for this course, please meet with me after class to discuss appropriate adaptations or modifications that might be helpful for you.