

DEPARTMENT OF INDUSTRIAL ENGINEERING
COURSE SYLLABUS
IE 256: Engineering Management

COURSE TITLE	ENGLISH CODE/NO	ARABIC CODE/NO.	CREDITS			
			Th.	Pr.	Tr.	Total
Engineering Management	IE 256	256 هـ ص				3
<i>Pre-requisites:</i>	IE 202 and IE 255					
<i>Course Role in Curriculum</i>	<i>Required or Elective:</i>		Elective			
	<i>A pre-requisite for:</i>					
<i>Catalogue Description:</i> Role of engineers in management of organizations. Managerial functions related to production, inventory and human resources. Project planning and control. Case studies pertaining to engineering problems.						

Textbooks:

Chuck Williams, MGMT, Sixth Edition, South-Western, Cengage Learning, OH, USA, 2014

Supplemental Materials:

Course Notes, Case Studies, Handouts

Course Learning Outcomes:

By the completion of the course the students should be able to:

1. Apply knowledge of math, science and engineering in engineering management.
2. Work efficiently in teams
3. Use the techniques, skills, and modern engineering tools necessary for basic engineering management practices
4. Work on and understand case studies
5. Communicate effectively in written/oral communication skills
6. Use managerial skills in engineering

Topics to be Covered:

1. Management – Ch1
2. History of Management – Ch2
3. Forms of Business - Handouts
4. Ethics & Social responsibility – Ch4

5. Planning & Decision Making – Ch5
6. Designing Adoptive organization – Ch9
7. Motivation – Ch13
8. Finance – Handouts
9. Project Management - Handouts

Student Outcomes addressed by the course: (Put a √ sign)

(a) an ability to apply knowledge of mathematics, science, and engineering	√
(b) an ability to design and conduct experiments, as well as to analyze and interpret data	
(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	
(d) an ability to function on multidisciplinary teams	
(e) an ability to identify, formulate, and solve engineering problems	√
(f) an understanding of professional and ethical responsibility	
(g) an ability to communicate effectively	
(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	
(i) a recognition of the need for, and an ability to engage in life-long learning	
(j) a knowledge of contemporary issues	
(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	√

Key Student Outcomes assessed in the course: (a) and (e)

Instructor or course coordinator: Dr. Ayman A Hashem

Last updated: December 2013