

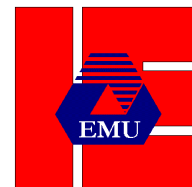


# EASTERN MEDITERRANEAN UNIVERSITY

## Department of Industrial Engineering

### IENG450 Industrial Management

#### COURSE OUTLINE



Course Code	IENG450	Course Level	Fourth year
Course Title	Industrial Management	Course Type	Area Core
Credit Value	(3, 0, 1) 3	ECTS Value	
Pre-requisites	-	Co-requisites	-
Prepared by:	Davood Forghani	Semester and Year	Spring 2025-26

<b>Course Schedule:</b> Wednesday: 08:30-11:20, Venue: IE-D101				
	<b>Name (group)</b>	<b>e-mail</b>	<b>Office</b>	<b>Telephone</b>
<b>Instructor</b>	Davood Forghani	<a href="mailto:davood.forghani@emu.edu.tr">davood.forghani@emu.edu.tr</a>	IE-B109	+(90) 392 630 3247
<b>Assistant</b>				-

#### COURSE DESCRIPTION

This is a service course offered to non-IE engineering students. The aim is to prepare the students to assume positions in industry as engineering managers. The topics covered include the historical development of industrial management, introductory operations management, functions of technology management, managing technological change, managing engineering projects, and managing the engineering career.

#### AIMS & OBJECTIVES

The main aim of this course is to provide students with the necessary modern managerial skills:

- Increase productivity in organization through employee empowerment and effective communication
- Develop plans that will put the organization ahead of the international marketing game.
- Overcome obstacles to professional and personal growth.
- Attain organizational strategic goals.
- Develop action plans for organizational change.

#### COURSE LEARNING OUTCOMES

On successful completion of this course, all students will have developed **knowledge** and **understanding** of:

- Concept of engineering management,
- Methods to motivate technical people,
- Basic concepts of planning.

On successful completion of this course, all students will have developed **their skills in**:

- Forecasting,
- Managing an organization,
- Being able to decide the validity of received data.

On successful completion of this course, all students will have developed their **appreciation** of, and respect for **values and attitudes** to:

- Human factors,
- Decision making,
- Well-organized systems.

#### CONTRIBUTION TO PROFESSIONAL PROGRAM COMPONENTS

This course contributes to engineering topics part including engineering science and creative application.

#### CONTRIBUTION OF THE COURSE TO PROGRAM EDUCATIONAL OBJECTIVES AND OUTCOMES:

**The course helps to achieve the following program educational objectives:**

- identify, define and solve contemporary and future problems in enterprises with a systems approach (i, ii, v, x, xi)
- develop skills in critical thinking, teamwork, problem solving and communicating with others (iv, vi)
- initiate and manage change in organizations and processes (iii, viii)
- understand their professional and ethical responsibilities (vi, ix)
- follow contemporary literature and technology, and employ information systems and technology (ix, xi)
- enable enterprises to make optimal decisions under conditions of uncertainty (ii, v, xi)
- ability to perform research to enlarge the boundaries of their knowledge (ii, iii, xi)

**The course makes significant contributions to the following program outcomes:**

- (i) an ability to apply knowledge of mathematics, science, and engineering
- (ii) an ability to design and conduct experiments, as well as to analyze and interpret data
- (iii) 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
- (iv) an ability to function on multidisciplinary teams
- (v) an ability to identify, formulate, and solve engineering problems

- (vi) an understanding of professional and ethical responsibility
- (vii) an ability to communicate effectively
- (viii) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- (ix) a recognition of the need for, and an ability to engage in life-long learning
- (x) a knowledge of contemporary issues
- (xi) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

#### TEXTBOOK/S

Lucy C. Morse and Daniel L. Babcock, *Managing Engineering and Technology, Sixth Edition*, Pearson, 2014.

#### METHODS OF ASSESSMENT

All Examinations will be based on lectures, discussions, textbook and assigned work.

**Participation & Class Activity:** Attendance and active participation in lectures will be essential. Completion of assigned tasks during lectures (such as presenting homework to the class) will be evaluated objectively, and grades will be awarded based on the instructor's assessment.

**Quizzes:** There will be **four** quizzes designed to test familiarity and basic understanding of various topics. There will be no quiz make-ups.

**Homework:** There will be several homework assigned to students throughout the semester. These HWs are designed to help students get familiar with real cases, challenges and successful people in industrial management.

**MT and Final Exams:** The topics included for the exams will be announced.

**Make-up Exams:** Students missing the Midterm or Final examination should provide a valid, evidencable excuse within three days following the examination they missed. On the basis of the confirmation of the evidence provided (e.g. valid medical report) for missing the exam, student may qualify for one make-up examination only.;

This only applies to the exams and not the quizzes. Thus, there will be no make-up examinations for the students that miss the quizzes, irrespective of the excuse provided.

**Any objection to the grade or mark should be made latest within a week following its announcement.**

**Grading Policy:** Although the student's overall grade will be based on the general assessment of the instructor, the following percentages may give an idea about the relative importance of various assessment tools.

Participation & Class Activity	20 %
Quizzes	20 % (4 quizzes, 5 % each)
Homework	15 %
MT Exam	20 %
Final Exam	25 %

#### NG (Nil-grade) Policy:

The following conditions **MAY** result in the student getting an NG grade from this course:

1. Not attending the MT or Final Exam without a valid excuse.
2. Cheating and/or plagiarism during the exams, quizzes and/or presentation assignments.
3. Not attending the project presentation without a valid excuse.

#### TEACHING AND LEARNING METHODS

The main learning and teaching method will be online lectures and application/discussion based online seminars. The students are advised to review in detail, each chapter identified in the weekly teaching plan articulated above. Furthermore, the students will deliver an authentic and application-based presentation on the course materials.

#### ATTENDANCE

Attendance will be taken every lecture hour. Note that university regulations allow the instructor to give a grade of NG to a student whose absenteeism is more than 25% of the total lecture hours or who do not complete sufficient work.

#### ACADEMIC HONESTY - PLAGIARISM

Cheating is copying from others or providing information, written or oral, to others. Plagiarism is copying without acknowledgement from other people's work. According to university by laws cheating and plagiarism are serious offences punishable with disciplinary action ranging from simple failure from the exam or presentation, to more serious action (letter of official warning suspension from the university for up to one semester). Disciplinary action is written in student records and may appear in student transcripts.

COURSE CONTENT (WEEKLY TEACHING PLAN)

<b>IENG450 - Industrial Management Spring 2025-26 Term Plan</b>					
Week	Week Commencing (Wednesday)	Module	Activity	Textbook Ref.*	Quiz
WK1	25-Feb	L0	Course Introduction		
WK2	4-Mar	L1 & L2	Engineering & Management , Historical Dev. of Engineering Management	Chaps. 1 & 2	
WK3	11-Mar	L3	Leading Technical People	Chapter 3	
WK4	18-Mar	L4	Planning and Forecasting	Chapter 4	Quiz 1
WK5	25-Mar	L4	Planning and Forecasting	Chapter 4	
WK6	1-Apr	L5	Decision Making	Chapter 5	
WK7	8-Apr	L5	Decision Making	Chapter 5	Quiz 2
MTW	15-Apr	<b>Midterm Exams: 10-25 April</b>			
MTW	22-Apr				
WK8	29-Apr	L6 & L7	Organizing, Some Human Aspects of Organizing	Chaps. 6 & 7	
WK9	6-May	L8	Controlling	Chapter 8	
WK10	13-May	L9	Managing R&D	Chapter 9	Quiz 3
WK11	20-May	L10	Managing Production Operations	Chapter 12	
WK12	27-May	<b>Holiday</b>			
WK13	3-Jun	L11 & L12	Project Planning and Acquisition	Chaps. 14 & 17	
WK14	10-Jun				Quiz 4
FW	17-Jun	<b>Final Exams: 15-27 June</b>			
FW	24-Jun				
*Textbook: Morse and Babcock, Managing Engineering and Technology, 6th Edition, Pearson, 2014.					