

COURSE RECORD

Code	BA 438
Name	Modern Manufacturing System
Hour per week	3+0(Theory + Practice)
Credit	3
ECTS	5
Level/Year	Undergraduate/3-4
Semester	Spring/ Fall
Type	Elective
Prerequisites	BA 303
Description	This course provides students with concepts, techniques and tools to design, analyze and improve manufacturing system performance. This course considers the basic manufacturing techniques, modern manufacturing systems and the criteria used to evaluate system performance and combines all aspects of manufacturing enterprises using computer integrated manufacturing methods. Topics covered include assembly lines, transfer lines, flexible manufacturing systems, material handling and transmission systems, and cellular manufacturing
Objectives	This course aims to <ul style="list-style-type: none"> • endow the student with concepts, techniques and tools to design, analyze and improve manufacturing system. • endow students with the role of manufacturing system in the overall business strategy of the firm. • Improve the manufacturing system.
Learning Outcomes	<i>By the end of this course, students will be able to</i> LO1 Demonstrate the key dimensions of manufacturing system in the overall business strategy of the firm LO2 Describe the interdependence of the manufacturing system with other key functional areas of the firm. LO3 Identify current trends related to manufacturing system. LO4 Measure the performance of modern manufacturing systems LO5 Implement methods to improve / optimize performance.

CONTRIBUTION TO PROGRAMME OUTCOMES*

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010
LO1	5	5	5	5	0	0	0	4	4	5
LO2	5	5	3	5	5	5	5	4	4	5
LO3	5	5	3	5	0	0	5	5	5	5
LO4	5	5	3	5	0	0	5	5	4	5
LO5	5	5	5	5	5	5	5	5	5	5

* Contribution Level: 0: None, 1: Very Low, 2: Low, 3: Medium, 4: High, 5: Very High

COURSE CONTENT DETAILS

Topic	Outcomes
Introduction, Production Operations, Production Models and Automation	L01-L02
Manufacturing Systems	L01-L02
Assembly Lines	L03-L04-L05
Automatic Production Lines	L03-L04-L05
Cellular Production	L03-L04-L05
Flexible Manufacturing Systems	L03-L04-L05
Manufacturing Support Systems	L03-L04-L05

DERS BİLGİLERİ

Kodu	BA 438
İsmi	Modern İmalat Sistemi
Haftalık Saati	3 (3 + 0)
Kredi	3
AKTS	5
Seviye/Yıl	Lisans/3-4
Dönem	Güz, Bahar
Dersin Dili	İngilizce
Tip	Seçmeli
Ön Şart	BA303
İçerik	Bu ders öğrencilere üretim sistemi performansını tasarlamak, analiz etmek ve iyileştirmek için konseptler, teknikler ve araçlar sunar. Bu derste, temel imalat tekniklerini, farklı modern imalat sistemlerini ve imalat system performansını değerlendirmek için kullanılan kriterler ele alınır. İncelenen konular arasında montaj hatları, robotic üretim sistemleri, esnek üretim sistemleri, malzeme taşıma ve iletim sistemleri ve hücreli üretim yer almaktadır.