

**MARMARA ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ**  
**MÜHENDİSLİK YÖNETİMİ TEZSİZ YÜKSEK LİSANS PROGRAMI (İNGİLİZCE)**

**PROGRAM BİLGİSİ VE PROGRAM AMAÇLARI**

Mühendislik Yönetimi, Endüstri Mühendisliği ve İşletme alanlarındaki bilgi, teknik ve becerilerin birleştirilmesi ile oluşturulmuş, çevre, kalite ve etik değerleri de dikkate alan ve organizasyonların hedeflenen amaçlara ulaşabilmesi için insan, makine, para, zaman, bilgi ve enerji kaynaklı sistemlerin tasarlanması, üretilmesi, yönetilmesi ve sürekli iyileştirilmesi için gerekli yaklaşımları ve yöntemleri öğretmeyi amaçlayan bir eğitim programıdır.

Mühendislik Yönetimi Programı, değişik mühendislik, fen ve sosyal bilimleri disiplinlerinden gelen öğrencileri globalleşen dünyada modern ve rekabetçi yönetim bilgi, yaklaşım ve teknikleri ile donanmış yöneticiler olarak yetiştirmeyi hedefler.

Mühendislik Yönetimi Kapsamı: Mühendislik Yönetimi, mevcut ve gelişmekte olan teknolojilerin ve ilişkili sistemlerin yönetiminde en uygun kararların alınmasına ve uygulanmasına yönelik bir disiplindir. Gerek stratejik ve gerekse operasyonel düzeylerdeki konularla ilgilenir."

Mühendislik Yönetimi, bir ürünün, cihazın, yapının veya makinanın tasarımında, imalatında, yapımında, işletmesinde veya bakımında istenilen amaçları başarmak için mühendislerin, bilim adamlarının, tasarımcıların ve diğer teknik ve teknik olmayan personelin faaliyetlerini organize etmek, planlamak, yönetmek ve kontrol etmektir.

Mühendislik Yönetimi programlarının MBA programlarından farkı, mühendisleri mevcut teknik bilgi ve becerilerinden uzaklaştırmadan bu niteliklerini daha etkin ve verimli kullandırma bilgi becerilerini kazandırmasıdır.

Mühendislik Yönetimi, mühendislik ve uygulamalı bilimlerin kullanıldığı faaliyetlerin yönetimidir. Mühendislik Yönetimi mevcut ve gelecek teknolojilerle ilgili stratejik ve operasyonel kararlar verme durumundaki mühendislere yöneliktir. Mühendislik Yönetimi verimlilik, kaliteyi ve global anlamda rekabet gücünü artırmak, teknolojik düzeyi korumak, yeni iş alanları oluşturmak içindir. Mühendislik Yönetimi Endüstri Mühendisliği ve Sosyal Bilimler ve özellikle İşletme arasında ye alan bir disiplindir.

İletişim: Doç.Dr.Özalp Vayvay (Ph.D in Ind.Eng.)



Mühendislik Yönetimi Bölüm Başkanı  
Marmara Üniversitesi Müh.Fak. Endüstri Müh. Bölümü  
Göztepe Yerleşkesi -Kadıköy-İstanbul-34722-TURKEY  
Tel : +902163480292 / 328  
Faks: +902163480293  
Cep : +905333682286  
Web : <http://mimoza.marmara.edu.tr/~ozalp/>  
E-posta: [ozalp@marmara.edu.tr](mailto:ozalp@marmara.edu.tr), [ozalp.vayvay@gmail.com](mailto:ozalp.vayvay@gmail.com)

## PROGRAM ÖĞRETİM ÜYELERİ

Mühendislik Yönetimi Yüksek Lisans Programı alanında uzman ve özel sektör tecrübesine sahip akademisyenler ve özel sektörde halen aktif çalışan danışmanlar tarafından yürütülmektedir.

DOÇ.DR ÖZALP VAYVAY (BÖLÜM BAŞKANI)

PROF.DR. M.AKİF EYLER

PROF.DR. S.ÜMİT OKTAY FIRAT

PROF.DR. ERCAN ÖZTEMEL

DOÇ.DR ÇİĞDEM ALABAŞ USLU

DOÇ.DR BAHAR SENNAROĞLU

YRD. DOÇ.DR. SEROL BULKAN

YRD. DOÇ.DR. S.SERDAR YÖRÜK

YRD. DOÇ.DR. GÜLFEM TUZKAYA

PROF.DR. EMİN ARCA

PROF.DR. ARİF GÜLLÜOĞLU

PROF.DR. NEŞET KADIRGAN

PROF.DR. SELİM ZAİM

DOÇ.DR EMİNE ÇOBANOĞLU

PROF.DR. ŞÜKRAN ATADENİZ (YEDİTEPE UNIVERSITY)

PROF.DR. ERKAN BAYRAKTAR (BAHÇEŞEHİR UNIVERSITY)

DOÇ.DR TUNÇ BOZBURA (BAHÇEŞEHİR UNIVERSITY)

DOÇ.DR ERDAL NEBOL (YEDİTEPE UNIVERSITY)

DOÇ.DR HAKAN TOZAN (TURKISH NAVAL ACADEMY)

YRD. DOÇ.DR. ÇAĞLAR ÜÇLER ( ÖZYEĞİN UNIVERSITY)

DR. DENİZ TURHAN (ALBRIGHT STONEBRIDGE GROUP- SENIOR CONSULTANT)

DR. SERDAR ÇELİK (SIEMENS-REGIONAL DIRECTOR)

## MÜHENDİSLİK YÖNETİMİ Y.LİSANS MÜFREDAT PROGRAMI

### 1 . Semester > EM-C1,2-TZ Core - 1-2

No	Course Unit Code	Course Unit Title	Type of Course	T	P	ECTS
1	EM 701	Engineering Management Science	Compulsory	3	0	6
2	EM 702	Operations Research and Management Science	Compulsory	3	0	6
3	EM 704	Statistical Data Analysis and Management Science	Compulsory	3	0	6
4	EM705	Network Theory and Project Scheduling	Compulsory	3	0	6
5	EM706	Business Policy	Compulsory	3	0	6
6	EM708	Management Information Systems	Compulsory	3	0	6
7	EM709	Mathematical Programming	Compulsory	3	0	6
8	EM711	Advanced Production Planning and Control	Compulsory	3	0	6
9	EM713	Information Systems Analysis and Design	Compulsory	3	0	6
10	EM715	Design and Analysis of Manufacturing Systems	Compulsory	3	0	6
11	EM716	Service Operations Management	Compulsory	3	0	6
12	EM717	Special Topics in Engineering Management	Compulsory	3	0	6
13	EM719	Research Methodology	Compulsory	3	0	6
14	EM725	Advanced Manufacturing Systems	Compulsory	3	0	6
15	EM727	Current Topics in Engineering Management	Compulsory	3	0	6
16	EM730	Technology Management	Compulsory	3	0	6
17	EM732	Marketing Management	Compulsory	3	0	6
18	EM738	Games and Decision Making in Management Science	Compulsory	3	0	6
19	EM740	Financial Analysis for Engineering Management	Compulsory	3	0	6
20	EM741	Process Management	Compulsory	3	0	6

21	EM747	Cost Management	Compulsory	3	0	6
22	EM755	Logistics Management	Compulsory	3	0	6
23	EM760	Supply Chain Management	Compulsory	3	0	6
24	EM764	Risk, Disaster and Crisis Management	Compulsory	3	0	6
25	EM765	Managerial Economics	Compulsory	3	0	6
26	EM767	Ergonomics	Compulsory	3	0	6
27	EM770	Simulation Modeling of Production and Service Systems	Compulsory	3	0	6

**1 . Semester > EM-E1,2,3-TZ Elective - 1-2-3**

No	Course Unit Code	Course Unit Title	Type of Course	T	P	ECTS
1	EM703	Database Management Systems	Compulsory	3	0	6
2	EM705	Network Theory and Project Scheduling	Compulsory	3	0	6
3	EM706	Business Policy	Compulsory	3	0	6
4	EM707	Quality Planning and Engineering	Compulsory	3	0	6
5	EM708	Management Information Systems	Compulsory	3	0	6
6	EM709	Mathematical Programming	Compulsory	3	0	6
7	EM711	Advanced Production Planning and Control	Compulsory	3	0	6
8	EM713	Information Systems Analysis and Design	Compulsory	3	0	6
9	EM714	Engineering Law	Compulsory	3	0	6
10	EM715	Design and Analysis of Manufacturing Systems	Compulsory	3	0	6
11	EM716	Service Operations Management	Compulsory	3	0	6
12	EM717	Special Topics in Engineering Management	Compulsory	3	0	6
13	EM718	Foreign Expansion and Trade Techniques	Compulsory	3	0	6
14	EM719	Research Methodology	Compulsory	3	0	6
15	EM720	Data Communications and Computer Networks	Compulsory	3	0	6
16	EM721	Business Enterprises and Bank Credit Relations	Compulsory	3	0	6
17	EM722	Human Resources Management	Compulsory	3	0	6
18	EM724	Information Systems Management	Compulsory	3	0	6
19	EM725	Advanced Manufacturing Systems	Compulsory	3	0	6
20	EM726	Flexible Manufacturing Systems	Compulsory	3	0	6
21	EM727	Current Topics in Engineering Management	Compulsory	3	0	6
22	EM728	Strategic Management	Compulsory	3	0	6
23	EM729	Business Process Re-Engineering	Compulsory	3	0	6
24	EM730	Technology Management	Compulsory	3	0	6
25	EM731	Business Society and Government Regulations	Compulsory	3	0	6
26	EM732	Marketing Management	Compulsory	3	0	6
27	EM733	R&D Management	Compulsory	3	0	6
28	EM734	Techniques of Gaseous Fuel Technology	Compulsory	3	0	6

29	EM735	Transportation Engineering	Compulsory	3	0	6
30	EM736	Forecasting Techniques	Compulsory	3	0	6
31	EM737	Value Engineering and Change Management	Compulsory	3	0	6
32	EM738	Games and Decision Making in Management Science	Compulsory	3	0	6
33	EM739	Techniques, Economics and Organisation of Safety	Compulsory	3	0	6
34	EM740	Financial Analysis for Engineering Management	Compulsory	3	0	6
35	EM741	Process Management	Compulsory	3	0	6
36	EM742	Computer Applications in Engineering Management	Compulsory	3	0	6
37	EM743	Engineering for a Sustainable Biosphere	Compulsory	3	0	6
38	EM744	Expert Systems	Compulsory	3	0	6
39	EM745	Data Mining Techniques	Compulsory	3	0	6
40	EM747	Cost Management	Compulsory	3	0	6
41	EM751	Energy Technologies, Economics, Policies	Compulsory	3	0	6
42	EM753	Productivity Management	Compulsory	3	0	6
43	EM754	Portfolio Management	Compulsory	3	0	6
44	EM755	Logistics Management	Compulsory	3	0	6
45	EM757	Performance Analysis	Compulsory	3	0	6
46	EM759	Manufacturing Strategies	Compulsory	3	0	6
47	EM760	Supply Chain Management	Compulsory	3	0	6
48	EM761	Special Topics in Industrial Engineering	Compulsory	3	0	6
49	EM762	Computer Integrated Manufacturing	Compulsory	3	0	6
50	EM763	Forecasting and Time Series Analysis	Compulsory	3	0	6
51	EM764	Risk, Disaster and Crisis Management	Compulsory	3	0	6
52	EM765	Managerial Economics	Compulsory	3	0	6
53	EM766	Inventory Management	Compulsory	3	0	6
54	EM767	Ergonomics	Compulsory	3	0	6
55	EM768	Communication and Team Building	Compulsory	3	0	6
56	EM769	Principles of Marketing	Compulsory	3	0	6
57	EM770	Simulation Modeling of Production and Service Systems	Compulsory	3	0	6

## 2 . Semester > EM-C3,4-TZ Core - 3-4

No	Course Unit Code	Course Unit Title	Type of Course	T	P	ECTS
1	EM705	Network Theory and Project Scheduling	Compulsory	3	0	5
2	EM706	Business Policy	Compulsory	3	0	5
3	EM708	Management Information Systems	Compulsory	3	0	5

4	EM709	Mathematical Programming	Compulsory	3	0	5
5	EM711	Advanced Production Planning and Control	Compulsory	3	0	5
6	EM713	Information Systems Analysis and Design	Compulsory	3	0	5
7	EM715	Design and Analysis of Manufacturing Systems	Compulsory	3	0	5
8	EM716	Service Operations Management	Compulsory	3	0	5
9	EM717	Special Topics in Engineering Management	Compulsory	3	0	5
10	EM719	Research Methodology	Compulsory	3	0	5
11	EM725	Advanced Manufacturing Systems	Compulsory	3	0	5
12	EM727	Current Topics in Engineering Management	Compulsory	3	0	5
13	EM730	Technology Management	Compulsory	3	0	5
14	EM732	Marketing Management	Compulsory	3	0	5
15	EM738	Games and Decision Making in Management Science	Compulsory	3	0	5
16	EM740	Financial Analysis for Engineering Management	Compulsory	3	0	5
17	EM741	Process Management	Compulsory	3	0	5
18	EM747	Cost Management	Compulsory	3	0	5
19	EM755	Logistics Management	Compulsory	3	0	5
20	EM760	Supply Chain Management	Compulsory	3	0	5
21	EM764	Risk, Disaster and Crisis Management	Compulsory	3	0	5
22	EM765	Managerial Economics	Compulsory	3	0	5
23	EM767	Ergonomics	Compulsory	3	0	5
24	EM770	Simulation Modeling of Production and Service Systems	Compulsory	3	0	5

## 2 . Semester > EM-E4,5,6-TZ Elective - 4-5-6

No	Course Unit Code	Course Unit Title	Type of Course	T	P	ECTS
1	EM703	Database Management Systems	Compulsory	3	0	5
2	EM705	Network Theory and Project Scheduling	Compulsory	3	0	5
3	EM706	Business Policy	Compulsory	3	0	5
4	EM707	Quality Planning and Engineering	Compulsory	3	0	5
5	EM708	Management Information Systems	Compulsory	3	0	5
6	EM709	Mathematical Programming	Compulsory	3	0	5
7	EM711	Advanced Production Planning and Control	Compulsory	3	0	5
8	EM713	Information Systems Analysis and Design	Compulsory	3	0	5
9	EM714	Engineering Law	Compulsory	3	0	5
10	EM715	Design and Analysis of Manufacturing Systems	Compulsory	3	0	5
11	EM716	Service Operations Management	Compulsory	3	0	5
12	EM717	Special Topics in Engineering Management	Compulsory	3	0	5
13	EM718	Foreign Expansion and Trade Techniques	Compulsory	3	0	5

14	EM719	Research Methodology	Compulsory	3	0	5
15	EM720	Data Communications and Computer Networks	Compulsory	3	0	5
16	EM721	Business Enterprises and Bank Credit Relations	Compulsory	3	0	5
17	EM722	Human Resources Management	Compulsory	3	0	5
18	EM724	Information Systems Management	Compulsory	3	0	5
19	EM725	Advanced Manufacturing Systems	Compulsory	3	0	5
20	EM726	Flexible Manufacturing Systems	Compulsory	3	0	5
21	EM727	Current Topics in Engineering Management	Compulsory	3	0	5
22	EM728	Strategic Management	Compulsory	3	0	5
23	EM729	Business Process Re-Engineering	Compulsory	3	0	5
24	EM730	Technology Management	Compulsory	3	0	5
25	EM731	Business Society and Government Regulations	Compulsory	3	0	5
26	EM732	Marketing Management	Compulsory	3	0	5
27	EM733	R&D Management	Compulsory	3	0	5
28	EM734	Techniques of Gaseous Fuel Technology	Compulsory	3	0	5
29	EM735	Transportation Engineering	Compulsory	3	0	5
30	EM736	Forecasting Techniques	Compulsory	3	0	5
31	EM737	Value Engineering and Change Management	Compulsory	3	0	5
32	EM738	Games and Decision Making in Management Science	Compulsory	3	0	5
33	EM739	Techniques, Economics and Organisation of Safety	Compulsory	3	0	5
34	EM740	Financial Analysis for Engineering Management	Compulsory	3	0	5
35	EM741	Process Management	Compulsory	3	0	5
36	EM742	Computer Applications in Engineering Management	Compulsory	3	0	5
37	EM743	Engineering for a Sustainable Biosphere	Compulsory	3	0	5
38	EM744	Expert Systems	Compulsory	3	0	5
39	EM745	Data Mining Techniques	Compulsory	3	0	5
40	EM747	Cost Management	Compulsory	3	0	5
41	EM751	Energy Technologies, Economics, Policies	Compulsory	3	0	5
42	EM753	Productivity Management	Compulsory	3	0	5
43	EM754	Portfolio Management	Compulsory	3	0	5
44	EM755	Logistics Management	Compulsory	3	0	5
45	EM757	Performance Analysis	Compulsory	3	0	5
46	EM759	Manufacturing Strategies	Compulsory	3	0	5
47	EM760	Supply Chain Management	Compulsory	3	0	5
48	EM761	Special Topics in Industrial Engineering	Compulsory	3	0	5
49	EM762	Computer Integrated Manufacturing	Compulsory	3	0	5

50	EM763	Forecasting and Time Series Analysis	Compulsory	3	0	5
51	EM764	Risk, Disaster and Crisis Management	Compulsory	3	0	5
52	EM765	Managerial Economics	Compulsory	3	0	5
53	EM766	Inventory Management	Compulsory	3	0	5
54	EM767	Ergonomics	Compulsory	3	0	5
55	EM768	Communication and Team Building	Compulsory	3	0	5
56	EM769	Principles of Marketing	Compulsory	3	0	5
57	EM770	Simulation Modeling of Production and Service Systems	Compulsory	3	0	5