

2023-2024 AKADEMİK
YILI / Academic Year

EĞİTİMDE KALİTE GÜVENCESİ YILLIK RAPORU

*QUALITY ASSURANCE IN
EDUCATION ANNUAL REPORT*

MÜHENDİSLİK FAKÜLTESİ
FACULTY OF ENGINEERING

**MAKİNE MÜHENDİSLİĞİ LİSANS
PROGRAMI (ME)**
*MECHANICAL ENGINEERING
UNDERGRADUATE PROGRAM (ME)*



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MÜHENDİSLİK FAKÜLTESİ / FACULTY OF ENGINEERING

MAKİNE MÜHENDİSLİĞİ LİSANS PROGRAMI - ME / MECHANICAL ENGINEERING UNDERGRADUATE PROGRAM - ME

1. BÖLÜM HAKKINDA / ABOUT THE DEPARTMENT

1.1. EĞİTİM AMAÇLARI / EDUCATIONAL OBJECTIVES

Bilkent Üniversitesi Makine Mühendisliği lisans programının eğitim amaçları şunlardır: / *The objectives of the Mechanical Engineering undergraduate program at Bilkent University are:*

- Öğrencileri bireysel kariyer yollarına hazırlamak ve mühendislerin karşılaştığı hızla değişen teknolojilere uyum sağlama yeteneğini geliştirmek, / *To prepare students for their individual career paths and to foster the ability to adapt to the rapidly changing technologies faced by engineers.*
- Esnek bir müfredat ve disiplinler arası araştırma fırsatlarıyla zenginleştirilmiş yüksek kaliteli ve titiz bir makine mühendisliği eğitimi vererek, öğrencilerin kendilerini çok disiplinli ortamlarda yenilikçi problem çözümler ve liderler olarak ayırt etmelerine yardımcı olmak, / *To assist the students to distinguish themselves as innovative problem solvers and leaders in multidisciplinary settings, through a high quality and rigorous mechanical engineering education that is enriched by a flexible curriculum and interdisciplinary research opportunities.*
- Öğrencilere kişisel ilgi alanları, tasarım ve ekip çalışması deneyimlerini takip etme ve önemli uygulamalı deneyime sahip olma fırsatları sağlamaktır. / *To provide the students opportunities to pursue directions of personal interest, design and teamwork experiences, and to have significant hands-on experience.*

1.1.1. DANIŞMA KURULU / ADVISORY BOARD

- Ümit Arda Karabey, Kurucu / Mezun, Argoritma Teknoloji / *Ümit Arda Karabey, Founder / Graduated, Argoritma Technology*
- Ceren Yıldız, Lider Termal Tasarım Mühendisi / Mezun, Aselsan / *Ceren Yıldız, Leading Thermal Design Engineer / Graduated, Aselsan*
- Muhammed Aybars Yalçın, Tasarım Mühendisi / Mezun, TUSAŞ / *Muhammed Aybars Yalçın, Design Engineer / Graduated, TUSAŞ*
- Cem Tüfekçi, Grup Lideri, Türk Traktör / *Cem Tüfekçi, Group Leader, Türk Traktör*
- Dr. Önder Balioğlu, Bulaşık Makinesi Ar&Ge Direktörü, Arçelik / *Dr. Önder Balioğlu, Dishwasher R&D Director, Arçelik*
- Tahir Fidan, Platform Entegrasyon Mühendislik Direktörü, Aselsan / *Tahir Fidan, Platform Integration Engineering Director, Aselsan*
- Dr. Levent Subaşı, Proses Geliştirme Başmühendisi, TEI / *Dr. Levent Subaşı, Process Development Chief Engineer, TEI*
- Uğur Susuz, Mekanik Tasarım Müdürü, Meteksan / *Uğur Susuz, Mechanical Design Manager, Meteksan*
- Prof. Dr. Erhan Budak, Öğretim Üyesi, Sabancı Üniversitesi / *Prof. Dr. Erhan Budak, Faculty Member, Sabancı University*

- Prof. Dr. Erdem Alaca, Öğretim Üyesi, Koç Üniversitesi / Prof. Dr. Erdem Alaca, Faculty Member, Koç University
- Prof. Dr. Zafer Dursunkaya, Öğretim Üyesi, ODTÜ / Prof. Dr. Zafer Dursunkaya, Faculty Member, METU

1.2. LİSANS PROGRAMI / UNDERGRADUATE PROGRAM

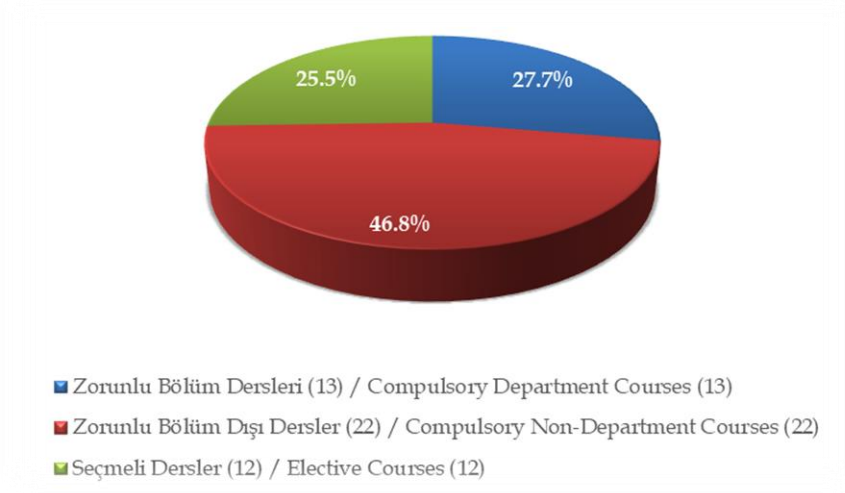
1.2.1. MÜFREDAT / CURRICULUM

Birinci Yıl / First Year					
Güz Dönemi / Fall Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
ENG 101	İngilizce ve Kompozisyon I / English and Composition I	5	0	3	5
GE 100	Üniversite Hayatına Giriş / Orientation	0	0	1	2
MATH 101	Matematik I / Calculus I	4	0	4	6,5
ME 101	Makine Mühendisliğinin Temelleri / Fundamentals of Mechanical Engineering	2	2	2	3,5
PHYS 101	Genel Fizik I / General Physics I	3	3	4	6,5
TURK 101	Türkçe I / Turkish I	0	0	2	3,5
Bahar Dönemi / Spring Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
ENG 102	İngilizce ve Kompozisyon II / English and Composition II	5	0	3	5
MATH 102	Matematik II / Calculus II	4	0	4	6,5
ME 102	Sistem Mühendisliğine Giriş / Introduction to Systems Engineering	2	2	3	5
PHYS 102	Genel Fizik II / General Physics II	3	3	4	6,5
TURK 102	Türkçe II / Turkish II	0	0	2	3,5
İkinci Yıl / Second Year					
Güz Dönemi / Fall Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
CS 115	Python ile Programlamaya Giriş / Introduction to Programming in Python	3	4	4	6,5
GE 250	Üniversite Etkinlik Programı I / Collegiate Activities Program I	0	0	0	1
HUM 111	Kültürler, Medeniyetler ve Düşünceler I / Cultures Civilizations and Ideas I	3	0	3	5
MATH 220	Doğrusal Cebir / Linear Algebra	3	0	3	5
ME 211	Termoakışkanlar Mühendisliği I / Thermo-Fluids Engineering I	4	2	4	6,5
ME 231	Mekanik ve Malzeme I / Mechanics and Materials I	4	2	4	6,5
Bahar Dönemi / Spring Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
GE 251	Üniversite Etkinlik Programı II / Collegiate Activities Program II	0	0	1	2
HUM 112	Kültürler, Medeniyetler ve Düşünceler II / Cultures Civilizations and Ideas II	3	0	3	5
MATH 240	Türevsel Denklemler / Differential Equations	3	0	3	5
ME 212	Termoakışkanlar Mühendisliği II / Thermo-Fluids Engineering II	4	2	4	6,5
ME 232	Mekanik ve Malzeme II / Mechanics and Materials II	4	2	4	6,5

Üçüncü Yıl / Third Year					
Güz Dönemi / Fall Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
CHEM 201	Malzeme Bilimi ve Teknolojisi / <i>Materials Science and Technology</i>	3	0	3	5
ENG 401	Teknik Rapor Yazma ve Sunum / <i>Technical Report Writing and Presentation</i>	3	0	3	5
MATH 230	Mühendisler İçin Olasılık ve İstatistik / <i>Probability and Statistics for Engineers</i>	3	0	3	5
ME 299	Yaz Stajı I / <i>Summer Practice I</i>	0	0	0	7
ME 341	Dinamik ve Kontrol I / <i>Dynamics and Control I</i>	4	0	4	6,5
ME 371	Ölçme ve Değerlendirme / <i>Measurement and Instrumentation</i>	2	2	3	5
	Makine Mühendisliği Seçmeli Dersi / <i>Mechanical Engineering Elective</i>			3	
Bahar Dönemi / Spring Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
IST 200	Türkiye Tarihi / <i>History of Turkey</i>	3	0	4	6,5
MBG 110	Modern Biyolojiye Giriş / <i>Introduction to Modern Biology</i>	3	0	3	5
ME 342	Dinamik ve Kontrol II / <i>Dynamics and Control II</i>	4	0	4	6,5
ME 381	Tasarım ve İmalat / <i>Design and Manufacturing</i>	3	0	3	5
ME 384	Mekatronik Sistemler / <i>Mechatronic Systems</i>	3	0	3	5

Dördüncü Yıl / Fourth Year					
Güz Dönemi / Fall Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
GE 301	Bilim, Teknoloji ve Toplum / <i>Science Technology and Society</i>	2	0	2	3,5
ME 399	Yaz Stajı II / <i>Summer Practice II</i>	0	0	0	7
	Temel Sanat Seçmeli Dersi / <i>Arts Core Elective</i>			3	
	Mühendislik Seçmeli Dersi / <i>Engineering Elective</i>			3	
	Makine Mühendisliği Seçmeli Dersi (2) / <i>Mechanical Engineering Elective (2)</i>			6	
	Proje Seçmeli Dersi I / <i>Project Elective I</i>			3	
Bahar Dönemi / Spring Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
	Seçmeli Ders / <i>Elective</i>			3	
	Matematik/Fen Bilimleri Seçmeli Dersi / <i>Mathematics/Science Elective</i>			3	
	Makine Mühendisliği Geniş Seçmeli Dersi / <i>Mechanical Engineering Breadth Elective</i>			3	
	Makine Mühendisliği Seçmeli Dersi / <i>Mechanical Engineering Elective</i>			3	
	Proje Seçmeli Dersi II / <i>Project Elective II</i>			3	
	Temel Sosyal Bilimler Seçmeli Dersi / <i>Social Science Core Elective</i>			3	

1.2.2. DERSLERİN DAĞILIMI / DISTRIBUTION COURSES



Grafik.1.2.2. Makine Mühendisliği Lisans Programı Müfredatındaki Derslerin Dağılımı / **Graphic.1.2.2.** Distribution of Courses in the Mechanical Engineering Undergraduate Program Curriculum

1.3. ÖĞRENCİLER / STUDENTS

1.3.1. ÖĞRENCİ SAYILARI / NUMBER OF STUDENTS

Öğrenci Sayıları / Number of Students	
Hazırlık / Prep	33
1. Sınıf / 1. Class	117
2. Sınıf / 2. Class	107
3. Sınıf / 3. Class	91
4. Sınıf / 4. Class	102
Toplam Öğrenci Sayısı / Total Number of Students	450

Tablo.1.3.1. 2023-2024 Akademik Yılı Makine Mühendisliği Lisans Programı Öğrenci Sayıları / **Table.1.3.1.** Number of Students in Mechanical Engineering Undergraduate Program for the 2023-2024 Academic Year

1.3.2. YABANCI ÖĞRENCİ SAYILARI / NUMBER OF FOREIGN STUDENTS

Yabancı Öğrenci Sayıları / Number of Foreign Students	
Hazırlık / Prep	1
1. Sınıf / 1. Class	4
2. Sınıf / 2. Class	3
3. Sınıf / 3. Class	1
Toplam Yabancı Öğrenci Sayısı / Total Number of Foreign Students	9

Tablo.1.3.2. 2023-2024 Akademik Yılı Makine Mühendisliği Lisans Programı Yabancı Öğrenci Sayıları / *Table.1.3.2. Number of Foreign Students in Mechanical Engineering Undergraduate Program for the 2023-2024 Academic Year*

1.4. ÖĞRETİM ELEMANLARI / FACULTY MEMBERS

1.4.1. ÖĞRETİM ELEMANI SAYILARI / NUMBER OF FACULTY MEMBERS

Öğretim Elemanı Sayıları / Number of Faculty Members	
Profesör Doktor / Professor Doctor	5
Doçent Doktor / Associate Professor	9
Doktor Öğretim Üyesi / Assistant Professor	2
Öğretim Görevlisi / Instructor	2
Toplam Öğretim Elemanı Sayısı / Total Number of Faculty Members	18

Tablo.1.4.1. 2023-2024 Akademik Yılında Makine Mühendisliği Lisans Programı Kadrolu ve Yarı Zamanlı Öğretim Elemanı Sayıları / *Table.1.4.1. Number of Full-Time and Part-Time Faculty Members in the Mechanical Engineering Undergraduate Program in the 2023-2024 Academic Year*

1.4.2. ÖĞRETİM ELEMANLARININ LİSTESİ / LIST OF FACULTY MEMBERS

Öğretim Elemanının Unvanı / Title of Faculty Member	Öğretim Elemanının Çalışma Şekli / Work-mode of Faculty Member	Öğretim Elemanının Adı - Soyadı / Name-Surname of Faculty Member
Doçent Doktor / Associate Professor	Tam Zamanlı / Full Time	Barbaros Çetin
Doçent Doktor / Associate Professor	Tam Zamanlı / Full Time	Emine Yegan Erdem
Doçent Doktor / Associate Professor	Tam Zamanlı / Full Time	Mehmet Selim Hanay
Doçent Doktor / Associate Professor	Tam Zamanlı / Full Time	Yıldıray Yıldız
Doçent Doktor / Associate Professor	Tam Zamanlı / Full Time	Onur Özcan
Doçent Doktor / Associate Professor	Tam Zamanlı / Full Time	Luca Biancofiore
Doçent Doktor / Associate Professor	Tam Zamanlı / Full Time	Ali Javili
Doçent Doktor / Associate Professor	Yarı Zamanlı / Part Time	Mazhar Müjdat Tohumcu
Doçent Doktor / Associate Professor	Yarı Zamanlı / Part Time	Daniel Mc Connell Aukes
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Gökberk Kabacaoğlu
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Ahmet Alperen Günay
Öğretim Görevlisi / Instructor	Yarı Zamanlı / Part Time	Mustafa Özgür Ateşoğlu
Öğretim Görevlisi / Instructor	Yarı Zamanlı / Part Time	Levent Subaşı
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	İlker Temizer
Profesör Doktor / Professor Doctor	Yarı Zamanlı / Part Time	Ömer Aka Anlağan
Profesör Doktor / Professor Doctor	Yarı Zamanlı / Part Time	Yavuz Samim Ünlüsoy
Profesör Doktor / Professor Doctor	Yarı Zamanlı / Part Time	Sami Turgut Tümer
Profesör Doktor / Professor Doctor	Yarı Zamanlı / Part Time	Murat Efe

Tablo.1.4.2. 2023-2024 Akademik Yılında Makine Mühendisliği Lisans Programı Kadrolu ve Yarı Zamanlı Öğretim Elemanı Listesi / *Table.1.4.2. List of Full-Time and Part-Time Faculty Members in the Mechanical Engineering Undergraduate Program in the 2023-2024 Academic Year*

1.5. EĐİTİMDE KALİTE KOMİTESİ / COMMITTEE OF QUALITY IN EDUCATION

- ❖ Barbaros Çetin
- ❖ Onur Özcan
- ❖ İlker Temizer

2. TÜRKİYE YÜKSEKÖĞRETİM YETERLİLİKLER ÇERÇEVESİ - ULUSAL YETERLİLİKLER / TURKISH HIGHER EDUCATION QUALIFICATIONS FRAMEWORK - NATIONAL QUALIFICATIONS

Basic Field Qualifications for Engineering (Academic - Weighted) - 6th Level - Bachelor's						
LEVEL OF THEQF	KNOWLEDGE SKILLS -Theoretical -Factual	SKILLS -Cognitive -Practical	COMPETENCIES			
			Ability to Work Independently and Take Responsibility	Learning Competence	Communication and Social Competence	Field-Specific Competence
6th Level Bachelor's	K1. Have sufficient background in mathematics, sciences and their own field of study.	S1. Make use of theoretical and practical knowledge on mathematics, sciences and their own field concurrently for engineering solutions. S2. Identify, define, formulate and solve engineering problems; select and apply analytical methods and modeling techniques appropriate for this purpose.	W1. Assume active responsibility in individual work or multi-disciplinary team work. W2. Accesses information and makes source research for this purpose, uses databases and other information sources.	L1. Know how to access information and do literature survey; and make use of databases and other information resources. L2. Be aware of the need for lifelong learning; keep up with the developments in science and technology and renew themselves continuously. L3. Make use of theoretical and practical knowledge on mathematics, sciences and their own field concurrently for engineering solutions.	C1. Uses information and communication technologies together with computer software required by the field at least Advanced Level of European Computer Driving License. C2. Communicate in oral and written form in a foreign language at minimum B1 level, as defined by the European Language Portfolio. C3. Communicates using technical drawing. C4. Accesses information and makes source research for this purpose, uses databases and other information sources. C5. Becomes aware of the universal and social effects of engineering solutions and applications; become aware of entrepreneurship and innovation and have knowledge about the problems of the age.	F1. Have sense of professional and ethical responsibility. F2. Have consciousness about project management, workplace practices, workers' health, environmental risk evaluation, environmental and work safety; and have awareness about legal consequences of engineering applications. F3. Becomes aware of the universal and social effects of engineering solutions and applications; become aware of entrepreneurship and innovation and have knowledge about the problems of the age.
EQF-LLL: 6th Level		S3. Analyze a system, a system component or a process; make a design in consideration of realistic constraints in order to meet the needs expected; and apply modern design methods. S4. Select and use modern techniques and devices required for engineering applications.	L4. Identify, define, formulate and solve engineering problems; select and apply analytical methods and modeling techniques appropriate for this purpose. L5. Analyze a system, a system component or a process; make a design in consideration of realistic constraints in order to meet the needs expected; and apply modern design methods.			
QF-EHEA: 1st Cycle						

		S5. Design and conduct experiments, collect data, analyze and interpret results.		L6. Select and use modern techniques and devices required for engineering applications. L7. Assume active responsibility in individual work or multi-disciplinary team work.		
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3. PROGRAM ÇIKTILARI / PROGRAM OUTCOMES

3.1. PROGRAM ÇIKTILARININ LİSTESİ / LIST OF PROGRAM OUTCOMES

- a. Mühendislik, fen bilimleri ve matematik ilkelerini uygulayarak karmaşık mühendislik problemlerini tanımlama, formüle etme ve çözme becerisine sahiptir. / *An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.*
- b. Kamu sağlığı, güvenliği ve refahının yanı sıra küresel, kültürel, sosyal, çevresel ve ekonomik faktörleri de dikkate alarak belirlenen ihtiyaçları karşılayacak çözümler üretmek için mühendislik tasarımını uygulama becerisine sahiptir. / *An ability to identify engineering design to produce solutions that meet specified needs with consideration of public health, safety and welfare, as well as global, cultural, social, environmental, and economic factors.*
- c. Çeşitli kitlelerle etkili bir şekilde iletişim kurabilme becerisine sahiptir. / *An ability to communicate effectively with a range of audiences.*
- d. Mühendislik pozisyonlarında etik ve profesyonel sorumlulukları tanıma ve mühendislik çözümlerinin küresel, ekonomik, çevresel ve toplumsal bağlamlardaki etkisini dikkate alması gereken bilinçli kararlar verme becerisine sahiptir. / *An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.*
- e. Tüm üyeleri ile birlikte, liderlik sağlayan, işbirlikçi ve kapsayıcı bir ortam yaratan, hedefler belirleyen, görevleri planlayan ve hedeflere ulaşan bir ekipte etkili bir şekilde çalışabilme becerisine sahiptir. / *An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.*

- f. Uygun deneyler geliştirme ve yürütme, verileri analiz etme ve yorumlama ve tüm bunlardan sonuç çıkarmak için mühendislik yargısını kullanma becerisine sahiptir. / *An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.*
- g. Uygun öğrenme stratejilerini kullanarak gerektiğinde yeni bilgi edinme ve uygulama becerisine sahiptir. / *An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.*
- h. Öğrenciler, derslerin yanı sıra çeşitli ve yaratıcı, sanatsal, kültürel, sportif ve entelektüel faaliyetlere katılarak kampüs hayatından daha fazla faydalanırlar. / *Take advantage of the campus life where students are engaged in diversity, creativity and commitment outside coursework through artistic, cultural, sportive and intellectual activities.*

3.2. ULUSAL YETERLİLİKLER İLE PROGRAM ÇIKTILARI BAĞLANTI TABLOSU / NATIONAL QUALIFICATIONS AND PROGRAM OUTCOMES CONNECTION TABLE

Ulusal Yeterlilikler / National Competencies	Program Çıktıları / Program Outcomes							
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
K1	✓							
S1	✓							
S2	✓							
S3	✓	✓						
S4	✓							
S5						✓		
W1					✓			✓
W2							✓	
L1							✓	
L2							✓	
L3	✓							
L4	✓							
L5	✓	✓						
L6	✓							
L7					✓			✓
C1	✓							
C2			✓					
C3			✓					
C4							✓	
C5				✓				
F1				✓				
F2				✓				
F3		✓		✓				

Tablo.3.2. Ulusal Yeterlilikler ile Makine Mühendisliği Lisans Programı Program Çıktıları Bağlantı Tablosu / *Table.3.2. National Qualifications and Mechanical Engineering Undergraduate Program Program Outcomes Link Table*

4. DERSLER / COURSES

4.1. PROGRAM ÇIKTILARI - DERSLER TABLOSU / PROGRAM OUTCOMES - COURSES TABLE

Dersler / Courses	Program Çıktıları / Program Outcomes								Dersler / Courses	Program Çıktıları / Program Outcomes							
	a	b	c	d	e	f	g	h		a	b	c	d	e	f	g	h
CHEM 201	✓								ME 101	✓				✓			
CS 115	✓								ME 102			✓		✓			
ENG 101			✓					✓	ME 211	✓					✓		
ENG 102			✓					✓	ME 212	✓					✓		
ENG 401			✓					✓	ME 231	✓					✓		
GE 100			✓	✓				✓	ME 232	✓		✓			✓		
GE 250			✓					✓	ME 299	✓		✓	✓			✓	
GE 251			✓					✓	ME 341	✓							
GE 301				✓	✓			✓	ME 342	✓							
HIST 200			✓		✓			✓	ME 371	✓				✓	✓		
HUM 111			✓					✓	ME 381	✓	✓						
HUM 112			✓					✓	ME 384		✓			✓	✓		
MATH 101	✓		✓		✓				ME 399	✓		✓	✓			✓	
MATH 102	✓		✓		✓				PHYS 101	✓	✓			✓		✓	
MATH 220	✓								PHYS 102	✓	✓			✓		✓	
MATH 230	✓								TURK 101			✓				✓	
MATH 240	✓								TURK 102			✓				✓	
MBG 110	✓																

Tablo.4.1. Makine Mühendisliği Lisans Programı - Program Çıktıları ve Dersler Tablosu / *Table.4.1.. Mechanical Engineering Undergraduate Program - Program Outcomes and Courses Table*

4.2. PERFORMANS ÖLÇÜMÜNDE KULLANILAN METRİKLER / METRICS TO BE USED IN PERFORMANCE MEASUREMENT

4.2.1. PERFORMANS ÖLÇÜMLERİNDE KULLANILAN DEĞERLENDİRME METOTLARI // EVALUATION METHODS USED IN PERFORMANCE MEASUREMENTS

4.2.1.1. 2023-2024 Akademik Yılı Güz Dönemi için / For 2023-2024 Academic Year Fall Semester;

Course Code	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay /written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
CHEM 201	a	30	30	40	100	M1	50	70			
Course Code	Program Outputs	Lab exam	Midterm:Essay/ written	Final:Essay /written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
CS 115	a	20	40	40	100	M1	40	75			
Course Code	Program Outputs	Academic Essay 1	Essay	Oral Presentation	Student Led Discussion	Academic Summary and Critical Response Task	Self-progress Reflection Task	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
ENG 101	c	20	25	8	7	10	5	25	100	M1	70
		Qualification Threshold (%)									
	75										
	g	Academic Essay 1	Essay	Oral Presentation	Student Led Discussion	Academic Summary and Critical Response Task	Self-progress Reflection Task	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
		20	25	8	7	10	5	25	100	M1	70
	Qualification Threshold (%)										
75											
Course Code	Program Outputs	Library Skills Task	Academic Essay	Oral Presentation	Research Paper Outline	Research essay	Interviews	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
ENG 102	c	5	20	20	10	30	15	100	M1	70	70

Course Code	Program Outputs	Library Skills Task	Academic Essay	Oral Presentation	Research Paper Outline	Research essay	Interviews	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
ENG 102	g	5	20	20	10	30	15	100	M1	70	70
Course Code	Program Outputs	Oral presentation	Oral presentation	Written Project Proposal	Written Final Report	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
ENG 401	c	15	30	20	35	100	M1	70	80		
	Program Outputs	Oral presentation	Oral presentation	Written Project Proposal	Written Final Report	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	g	15	30	20	35	100	M1	70	80		
Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
GE 100	c	100	100	M1	12	80					
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	d	100	100	M1	12	80					
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	g	100	100	M1	12	80					
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	h	100	100	M1	12	80					
Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
GE 251	c	100	100	M1	70	70					
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	g	100	100	M1	70	70					
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	h	100	100	M1	70	70					

Course Code	Program Outputs	Final	Midterm	Project	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
GE 301	d	25	30	30	15	100	M1	45	60	
	Program Outputs	Final	Midterm	Project	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	e	25	30	30	15	100	M1	45	60	
	Program Outputs	Final	Midterm	Project	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	g	25	30	30	15	100	M1	45	60	
Course Code	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
HIST 200	c	10	60	30	100	M1	70	75		
	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	e	10	60	30	100	M1	70	75		
	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	g	10	60	30	100	M1	70	75		
Course Code	Program Outputs	Quizzes	Course Project	In-class participation	Final Examination	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
HUM 111	c	30	30	10	30	100	M1	60	75	
	Program Outputs	Quizzes	Course Project	In-class participation	Final Examination	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	g	30	30	10	30	100	M1	60	75	
Course Code	Program Outputs	Quizzes	In-class participation	Final:Essay /written	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
HUM 112	c	30	10	30	30	100	M1	60	75	
	Program Outputs	Quizzes	In-class participation	Final:Essay /written	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	g	30	10	30	30	100	M1	60	75	

Course Code	Program Outputs	Midterm	Midterm	Final	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
MATH 101	a	25	25	30	10	10	100	M1	40	50		
	Program Outputs	Midterm	Midterm	Final	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	c	25	25	30	10	10	100	M1	40	50		
	Program Outputs	Midterm	Midterm	Final	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	e	25	25	30	10	10	100	M1	40	50		
Course Code	Program Outputs	Midterm:Essay/written	Midterm	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
MATH 102	a	30	30	40	100	M1	40	50				
	Program Outputs	Midterm:Essay/written	Midterm	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	c	30	30	40	100	M1	40	50				
	Program Outputs	Midterm:Essay/written	Midterm	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	e	30	30	40	100	M1	40	50				
Course Code	Program Outputs	Midterm:Essay/written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
MATH 220	a	50	50	100	M1	40	40					
Course Code	Program Outputs	Midterm:Essay/written	Homework	Homework	Homework	Homework	Homework	Homework	Final:Essay/written	Total Contribution	Qualification Calculation Method	
MATH 230	a	40	2,5	2,5	2,5	2,5	2,5	2,5	45	100	M1	
		(Average) Qualification Grade	Qualification Threshold (%)									
		30	75									

Course Code	Program Outputs	Midterm:Essay /written	Final:Essay / written	Homework	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	
MATH 240	a	40	48	2	2	2	2	2	2	100	M1	
		(Average) Qualification Grade	Qualification Threshold (%)									
		30	70									
Course Code	Program Outputs	Quiz	Quiz	Quiz	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
MBG 110	a	5	5	5	25	30	30	100	M1	50	50	
Course Code	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Final:Essay/written	Total Contribution	
ME 101	a	20	20	5	5	5	5	5	5	30	100	
		Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)								
		M1	40	75								
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
	e	100	100	M1	30	75						
Course Code	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay / written	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
ME 211	a	20	20	30	30	100	M1	48	75			
	Program Outputs	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
	f	100	100	M1	70	75						
Course Code	Program Outputs	Homework	Homework	Homework	Homework	Homework	Homework	Homework	Homework	Homework	Homework	
ME 231	a	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	
		Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
		22,5	22,5	30	100	M1	35	75				
	Program Outputs	Lab work	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	f	50	50	100	M1	65	75					

Course Code	Program Outputs	Quiz	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay /written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
ME 341	a	10	25	25	40	100	M1	40	75		
Course Code	Program Outputs	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
ME 371	e	100	100	M1	80	75					
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	f	100	100	M1	80	75					
Course Code	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 101	a	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	b	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
g	15	20	10	10	25	20	100	M1	50	50	
Course Code	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 102	a	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	b	15	20	10	10	25	20	100	M1	50	50

Course Code	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 102	e	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	15	20	10	10	25	20	100	M1	50	50
Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
TURK 101	c	70	30	100	M1	70	60				
	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	g	70	30	100	M1	70	60				
Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
TURK 102	c	70	30	100	M1	70	60				
	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	g	70	30	100	M1	70	60				

Ölçümlerde Kullanılan Metotlarla İlgili Açıklamalar / *Explanations About the Methods Used in Measurements*

Bütün metotlar için sadece dersi geçen öğrencilerin notları kullanılacaktır. / *For all methods, only the grades of students who pass the course will be used.*

- G = Bölüm tarafından belirlenmiş olan başarılı sayılabilecek minimum not / *G = Minimum grade that can be considered successful as determined by the department*
- T = Program çıktısı başarısı için eşik değer / *T = Threshold value for program output success*
- M1: Öğrencilerin %T'sinin dönem toplamlarının en az G olması / *M1: T% of the students to have a semester total of at least G*

- M2: Öğrencilerin %T'sinin dönem toplamlarının en az bölümdeki dönem toplamlarının ortalaması kadar olması/ *M2: T% of the students of the department to have a semester total of at least that of the department average*
- M3: Öğrencilerin dönem toplamlarının ortalamasının en az G olması / *M3: Average semester total of students of the department to be at least G*
- M4: Öğrencilerin %T'sinin dönem toplamlarının en az tüm bölümlerdeki tüm öğrencilerin dönem toplamlarının ortalaması kadar olması / *M4: T% of the students of the department to have a semester total of at least average semester total of all students from all departments*

4.2.1.2. 2023-2024 Akademik Yılı Bahar Dönemi için / For 2023-2024 Academic Year Spring Semester;

Course Code	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
CHEM 201	a	30	30	40	100	M1	50	70			
Course Code	Program Outputs	Lab exam	Midterm:Essay /written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
CS 115	a	20	40	40	100	M1	40	75			
Course Code	Program Outputs	Academic Essay 1	Essay	Oral Presentation	Student Led Discussion	Academic Summary and Critical Response Task	Self-progress Reflection Task	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
ENG 101	c	20	25	8	7	10	5	25	100	M1	70
		Qualification Threshold (%)									
	75										
	Program Outputs	Academic Essay 1	Essay	Oral Presentation	Student Led Discussion	Academic Summary and Critical Response Task	Self-progress Reflection Task	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
g	20	25	8	7	10	5	25	100	M1	70	
	Qualification Threshold (%)										
75											
Course Code	Program Outputs	Library Skills Task	Academic Essay	Oral Presentation	Research Paper Outline	Research essay	Interviews	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
ENG 102	c	5	20	20	10	30	15	100	M1	70	70
	Program Outputs	Library Skills Task	Academic Essay	Oral Presentation	Research Paper Outline	Research essay	Interviews	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	5	20	20	10	30	15	100	M1	70	70

Course Code	Program Outputs	Presentations	Written Project Proposal	Written Final Report	Interviews	Interviews	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
ENG 401	c	15	20	35	5	5	20	100	M1	70	80
	Program Outputs	Presentations	Written Project Proposal	Written Final Report	Interviews	Interviews	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	15	20	35	5	5	20	100	M1	70	80

Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
GE 100	c	100	100	M1	12	80
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	d	100	100	M1	12	80
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	100	100	M1	12	80
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	h	100	100	M1	12	80

Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
GE 251	c	100	100	M1	70	70
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	100	100	M1	70	70
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	h	100	100	M1	70	70

Course Code	Program Outputs	Final	Midterm	Project	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
GE 301	d	25	30	30	15	100	M1	45	60
	Program Outputs	Final	Midterm	Project	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	25	30	30	15	100	M1	45	60
	Program Outputs	Final	Midterm	Project	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	25	30	30	15	100	M1	45	60

Course Code	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
HIST 200	c	10	60	30	100	M1	70	75
	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	10	60	30	100	M1	70	75
	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	10	60	30	100	M1	70	75

Course Code	Program Outputs	Quizzes	Course Project	In-class participation	Final Examination	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
HUM 111	c	30	30	10	30	100	M1	60	75
	Program Outputs	Quizzes	Course Project	In-class participation	Final Examination	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	30	30	10	30	100	M1	60	75

Course Code	Program Outputs	Quizzes	In-class participation	Final:Essay/ written	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
HUM 112	c	30	10	30	30	100	M1	60	75
	Program Outputs	Quizzes	In-class participation	Final:Essay/ written	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	30	10	30	30	100	M1	60	75

Course Code	Program Outputs	Midterm	Midterm	Final	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MATH 101	a	25	25	30	10	10	100	M1	40	50
	Program Outputs	Midterm	Midterm	Final	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	c	25	25	30	10	10	100	M1	40	50
	Program Outputs	Midterm	Midterm	Final	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	25	25	30	10	10	100	M1	40	50

Course Code	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MATH 102	a	30	30	40	100	M1	40	50
	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	c	30	30	40	100	M1	40	50
	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	30	30	40	100	M1	40	50

Course Code	Program Outputs	Midterm:Essay /written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
MATH 220	a	50	50	100	M1	40	40					
Course Code	Program Outputs	Midterm:Essay /written	Homework	Homework	Homework	Homework	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
MATH 230	a	40	4	4	4	3	45	100	M1	30	75	
Course Code	Program Outputs	Midterm:Essay /written	Final:Essay/ written	Homework	Homework	Homework	Homework	Homework	Homework	Homework	Total Contribution	
MATH 240	a	40	46	2	2	2	2	2	2	2	100	
		Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)								
		M1	30	75								
Course Code	Program Outputs	Quiz	Quiz	Quiz	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
MBG 110	a	5	5	5	25	30	30	100	M1	50	50	
Course Code	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Final:Essay/written	Total Contribution	
ME 101	a	20	20	5	5	5	5	5	5	30	100	
		Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)								
		M1	40	75								
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
	e	100	100	M1	30	75						

Course Code	Program Outputs	Project	Lab work	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
ME 102	b	60	20	20	100	M1	70	75				
	Program Outputs	Lab work	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	f	80	20	100	M1	70	75					
Course Code	Program Outputs	Final	Midterm:Essay /written	Midterm:Essay /written	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
ME 212	a	30	20	20	30	100	M1	52	75			
	Program Outputs	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
	f	100	100	M1	75	75						
Course Code	Program Outputs	Quiz	Quiz	Quiz	Quiz	Quiz	Lab work	Lab work	Lab work	Midterm:Essay /written	Final:Essay/ written	
ME 232	a	3	3	3	3	3	5	5	5	20	20	
		In-class participation	In-class participation	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
		10	10	10	100	M1	50	75				
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
	c	100	100	M1	50	75						
	Program Outputs	Lab work	Lab work	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
f	33	34	33	100	M1	50	75					
Course Code	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Final:Essay/wri tten	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
ME 342	a	25	25	30	20	100	M1	40	75			

Course Code	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
ME 381	b	100	100	M1	70	75					
Course Code	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
ME 384	a	30	30	40	100	M1	30	75			
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	b	100	100	M1	50	75					
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	e	100	100	M1	50	75					
	Program Outputs	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
f	100	100	M1	50	75						
Course Code	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 101	a	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	b	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
g	15	20	10	10	25	20	100	M1	50	50	

Course Code	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 102	a	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	b	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	15	20	10	10	25	20	100	M1	50	50
Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
TURK 101	c	70	30	100	M1	70	60				
	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	g	70	30	100	M1	70	60				
Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
TURK 102	c	70	30	100	M1	70	60				
	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	g	70	30	100	M1	70	60				

Ölçümlerde Kullanılan Metotlarla İlgili Açıklamalar / Explanations About the Methods Used in Measurements

Bütün metotlar için sadece dersi geçen öğrencilerin notları kullanılacaktır. / For all methods, only the grades of students who pass the course will be used.

- G = Bölüm tarafından belirlenmiş olan başarılı sayılabilecek minimum not / G = Minimum grade that can be considered successful as determined by the department
- T = Program çıktısı başarısı için eşik değer / T = Threshold value for program output success
- M1: Öğrencilerin %T'sinin dönem toplamlarının en az G olması / M1: T% of the students to have a semester total of at least G
- M2: Öğrencilerin %T'sinin dönem toplamlarının en az bölümdeki dönem toplamlarının ortalaması kadar olması / M2: T% of the students of the department to have a semester total of at least that of the department average
- M3: Öğrencilerin dönem toplamlarının ortalamasının en az G olması / M3: Average semester total of students of the department to be at least G
- M4: Öğrencilerin %T'sinin dönem toplamlarının en az tüm bölümlerdeki tüm öğrencilerin dönem toplamlarının ortalaması kadar olması / M4: T% of the students of the department to have a semester total of at least average semester total of all students from all departments

4.2.2. PERFORMANS ÖLÇÜMLERİNDE KULLANILAN METOTLAR VE PERFORMANS SONUÇ DETAYLARI / METHODS USED IN PERFORMANCE MEASUREMENTS AND PERFORMANCE RESULT DETAILS

4.2.2.1. 2023-2024 Akademik Yılı Güz Dönemi için / For 2023-2024 Academic Year Fall Semester;

Program Çıktısı / Program Outcome	Yeterlilik Hesaplama Yöntemi / Method	(Ortalama) Yeterlilik Notu / Minimum Successful Grade	Yeterlilik Eşiği (%) / Treshold Percentage (%)	Toplam Öğrenci Sayısı / Number of Students (All)	Toplam Dept. Öğrenci Sayısı / Number of Students (Dept.)	Tüm Öğrenci Ort. / Average (All Std.)	Dept. Öğrenci Ort. / Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
CHEM 201 - Malzeme Bilimi ve Teknolojisi / CHEM 201 - Materials Science and Technology													
a	M1	50	70	125	59	61.44	63.22	93	49	74.40	83.05	Yeterli ✓ / Sufficient ✓	83.05
CS 115 - Python ile Programlamaya Giriş / CS 115 - Introduction to Programming in Python													
a	M1	40	75	351	48	69.76	68.76	346	46	98.58	95.83	Yeterli ✓ / Sufficient ✓	95.83
ENG 101 - İngilizce ve Kompozisyon I / ENG 101 - English and Composition I													
c	M1	70	75	1698	77	82.20	84.12	1560	76	91.87	98.70	Yeterli ✓ / Sufficient ✓	98.70
g	M1	70	75	1698	77	82.20	84.12	1560	76	91.87	98.70	Yeterli ✓ / Sufficient ✓	98.70
ENG 102 - İngilizce ve Kompozisyon II / ENG 102 - English and Composition II													
c	M1	70	70	543	22	85.44	88.37	526	22	96.87	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	70	70	543	22	85.44	88.37	526	22	96.87	100.00	Yeterli ✓ / Sufficient ✓	100.00
ENG 401 - Teknik Rapor Yazma ve Sunum / ENG 401 - Technical Report Writing and Presentation													
c	M1	70	80	266	51	88.72	89.98	266	51	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	70	80	266	51	88.72	89.98	266	51	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
GE 100 - Üniversite Hayatına Giriş / GE 100 - Orientation													
c	M1	12	80	1681	76	97.14	99.08	1681	76	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
d	M1	12	80	1681	76	97.14	99.08	1681	76	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	12	80	1681	76	97.14	99.08	1681	76	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
h	M1	12	80	1681	76	97.14	99.08	1681	76	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%) / Treshold Percentage (%)	Toplam Öğrenci Sayısı/ Number of Students (All)	Toplam Dept. Öğrenci Sayısı/ Number of Students (Dept.)	Tüm Öğrenci Ort./ Average (All Std.)	Dept. Öğrenci Ort./ Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam)/ Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.)/ Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
GE 251 - Üniversite Etkinlik Programı II / GE 251 - Collegiate Activities Program II													
c	M1	70	70	838	35	93.01	96.29	776	32	92.60	91.43	Yeterli ✓ / Sufficient ✓	91.43
g	M1	70	70	838	35	93.01	96.29	776	32	92.60	91.43	Yeterli ✓ / Sufficient ✓	91.43
h	M1	70	70	838	35	93.01	96.29	776	32	92.60	91.43	Yeterli ✓ / Sufficient ✓	91.43
GE 301 - Bilim, Teknoloji ve Toplum / GE 301 - Science Technology and Society													
d	M1	45	60	366	61	82.99	81.09	366	61	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
e	M1	45	60	366	61	82.99	81.09	366	61	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	45	60	366	61	82.99	81.09	366	61	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
HIST 200 - Türkiye Tarihi / HIST 200 - History of Turkey													
c	M1	70	75	1055	25	93.35	93.22	1044	25	98.96	100.00	Yeterli ✓ / Sufficient ✓	100.00
e	M1	70	75	1055	25	93.35	93.22	1044	25	98.96	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	70	75	1055	25	93.35	93.22	1044	25	98.96	100.00	Yeterli ✓ / Sufficient ✓	100.00
HUM 111 - Kültürler, Medeniyetler ve Düşünceler I / HUM 111 - Cultures Civilizations and Ideas I													
c	M1	60	75	1110	66	83.62	83.13	1099	66	99.01	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	60	75	1110	66	83.62	83.13	1099	66	99.01	100.00	Yeterli ✓ / Sufficient ✓	100.00
HUM 112 - Kültürler, Medeniyetler ve Düşünceler II / HUM 112 - Cultures Civilizations and Ideas II													
c	M1	60	75	238	3	83.67	87.39	237	3	99.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	60	75	238	3	83.67	87.39	237	3	99.58	100.00	Yeterli ✓ / Sufficient ✓	100.00

Program Çıktısı / Program Outcome	Yeterlilik Hesaplama Yöntemi / Method	(Ortalama) Yeterlilik Notu / Minimum Successful Grade	Yeterlilik Eşiği (%) / Treshold Percentage (%)	Toplam Öğrenci Sayısı / Number of Students (All)	Toplam Dept. Öğrenci Sayısı / Number of Students (Dept.)	Tüm Öğrenci Ort. / Average (All Std.)	Dept. Öğrenci Ort. / Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
MATH 101 - Matematik I / MATH 101 - Calculus I													
a	M1	40	50	741	87	65.46	64.12	686	82	92.58	94.25	Yeterli ✓ / Sufficient ✓	94.25
c	M1	40	50	741	87	65.46	64.12	686	82	92.58	94.25	Yeterli ✓ / Sufficient ✓	94.25
e	M1	40	50	741	87	65.46	64.12	686	82	92.58	94.25	Yeterli ✓ / Sufficient ✓	94.25
MATH 102 - Matematik II / MATH 102 - Calculus II													
a	M1	40	50	215	18	54.07	54.19	156	16	72.56	88.89	Yeterli ✓ / Sufficient ✓	88.89
c	M1	40	50	215	18	54.07	54.19	156	16	72.56	88.89	Yeterli ✓ / Sufficient ✓	88.89
e	M1	40	50	215	18	54.07	54.19	156	16	72.56	88.89	Yeterli ✓ / Sufficient ✓	88.89
MATH 220 - Doğrusal Cebir / MATH 220 - Linear Algebra													
a	M1	40	40	87	73	57.02	55.89	75	63	86.21	86.30	Yeterli ✓ / Sufficient ✓	86.30
MATH 230 - Mühendisler İçin Olasılık ve İstatistik / MATH 230 - Probability and Statistics for Engineers													
a	M1	30	75	246	81	58.33	56.86	237	79	96.34	97.53	Yeterli ✓ / Sufficient ✓	97.53
MATH 240 - Türevsel Denklemler / MATH 240 - Differential Equations													
a	M1	30	70	34	14	71.85	71.38	34	14	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
MBG 110 - Modern Biyolojiye Giriş / MBG 110 - Introduction to Modern Biology													
a	M1	50	50	450	31	64.65	71.07	345	29	76.67	93.55	Yeterli ✓ / Sufficient ✓	93.55
ME 101 - Makine Mühendisliğinin Temelleri / ME 101 - Fundamentals of Mechanical Engineering													
a	M1	40	75	75	74	65.93	65.72	73	72	97.33	97.30	Yeterli ✓ / Sufficient ✓	97.30
e	M1	30	75	75	74	76.63	76.65	72	71	96.00	95.95	Yeterli ✓ / Sufficient ✓	95.95

Program Çıktısı / Program Outcome	Yeterlilik Hesaplama Yöntemi / Method	(Ortalama) Yeterlilik Notu / Minimum Successful Grade	Yeterlilik Eşiği (%) / Threshold Percentage (%)	Toplam Öğrenci Sayısı / Number of Students (All)	Toplam Dept. Öğrenci Sayısı / Number of Students (Dept.)	Tüm Öğrenci Ort. / Average (All Std.)	Dept. Öğrenci Ort. / Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
ME 211 - Termoakışkanlar Mühendisliği I / ME 211 - Thermo-Fluids Engineering I													
a	M1	48	75	72	72	60.77	60.77	61	61	84.72	84.72	Yeterli ✓ / Sufficient ✓	84.72
f	M1	70	75	72	72	79.38	79.38	63	63	87.50	87.50	Yeterli ✓ / Sufficient ✓	87.50
ME 231 - Mekanik ve Malzeme I / ME 231 - Mechanics and Materials I													
a	M1	35	75	70	70	67.52	67.52	70	70	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
f	M1	65	75	70	70	90.54	90.54	69	69	98.57	98.57	Yeterli ✓ / Sufficient ✓	98.57
ME 341 - Dinamik ve Kontrol I / ME 341 - Dynamics and Control I													
a	M1	40	75	89	89	57.73	57.73	77	77	86.52	86.52	Yeterli ✓ / Sufficient ✓	86.52
ME 371 - Ölçme ve Değerlendirme / ME 371 - Measurement and Instrumentation													
e	M1	80	75	93	93	91.13	91.13	93	93	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
f	M1	80	75	93	93	94.14	94.14	93	93	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
PHYS 101 - Genel Fizik I / PHYS 101 - General Physics I													
a	M1	50	50	663	82	68.54	67.75	598	73	90.20	89.02	Yeterli ✓ / Sufficient ✓	89.02
b	M1	50	50	663	82	68.54	67.75	598	73	90.20	89.02	Yeterli ✓ / Sufficient ✓	89.02
e	M1	50	50	663	82	68.54	67.75	598	73	90.20	89.02	Yeterli ✓ / Sufficient ✓	89.02
g	M1	50	50	663	82	68.54	67.75	598	73	90.20	89.02	Yeterli ✓ / Sufficient ✓	89.02
PHYS 102 - Genel Fizik II / PHYS 102 - General Physics II													
a	M1	50	50	135	19	63.16	61.86	107	16	79.26	84.21	Yeterli ✓ / Sufficient ✓	84.21
b	M1	50	50	135	19	63.16	61.86	107	16	79.26	84.21	Yeterli ✓ / Sufficient ✓	84.21
e	M1	50	50	135	19	63.16	61.86	107	16	79.26	84.21	Yeterli ✓ / Sufficient ✓	84.21
g	M1	50	50	135	19	63.16	61.86	107	16	79.26	84.21	Yeterli ✓ / Sufficient ✓	84.21

Program Çıktısı / Program Outcome	Yeterlilik Hesaplama Yöntemi / Method	(Ortalama) Yeterlilik Notu / Minimum Successful Grade	Yeterlilik Eşiği (%) / Treshold Percentage (%)	Toplam Öğrenci Sayısı / Number of Students (All)	Toplam Dept. Öğrenci Sayısı / Number of Students (Dept.)	Tüm Öğrenci Ort. / Average (All Std.)	Dept. Öğrenci Ort. / Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
TURK 101 - Türkçe I / TURK 101 - Turkish I													
c	M1	70	60	1516	72	87.68	87.43	1493	71	98.48	98.61	Yeterli ✓ / Sufficient ✓	98.61
g	M1	70	60	1516	72	87.68	87.43	1493	71	98.48	98.61	Yeterli ✓ / Sufficient ✓	98.61
TURK 102 - Türkçe II / TURK 102 - Turkish II													
c	M1	70	60	492	22	90.84	92.09	487	22	98.98	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	70	60	492	22	90.84	92.09	487	22	98.98	100.00	Yeterli ✓ / Sufficient ✓	100.00

4.2.2.2. 2023-2024 Akademik Yılı Bahar Dönemi için / For 2023-2024 Academic Year Spring Semester;

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%)/ Threshold Percentage (%)	Toplam Öğrenci Sayısı/ Number of Students (All)	Toplam Dept. Öğrenci Sayısı/ Number of Students (Dept.)	Tüm Öğrenci Ort./ Average (All Std.)	Dept. Öğrenci Ort./ Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam)/ Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.)/ Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci)/ Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci)/ Success Ratio (Dept.)	Performans/ Performance	Yeterlilik Oranı/ Success Ratio
CHEM 201 - Malzeme Bilimi ve Teknolojisi / CHEM 201 - Materials Science and Technology													
a	M1	50	70	67	34	54.8	54.06	36	18	53.73	52.94	İyileştirmeye Açık! Insufficient!	52.94
CS 115 - Python ile Programlamaya Giriş / CS 115 - Introduction to Programming in Python													
a	M1	40	75	245	46	67.23	70.04	236	45	96.33	97.83	Yeterli ✓/ Sufficient ✓	97.83
ENG 101 - İngilizce ve Kompozisyon I / ENG 101 - English and Composition I													
c	M1	70	75	740	30	81.27	85.5	662	30	89.46	100	Yeterli ✓/ Sufficient ✓	100
g	M1	70	75	740	30	81.27	85.5	662	30	89.46	100	Yeterli ✓/ Sufficient ✓	100
ENG 102 - İngilizce ve Kompozisyon II / ENG 102 - English and Composition II													
c	M1	70	70	1495	74	84.92	85.02	1428	73	95.52	98.65	Yeterli ✓/ Sufficient ✓	98.65
g	M1	70	70	1495	74	84.92	85.02	1428	73	95.52	98.65	Yeterli ✓/ Sufficient ✓	98.65
ENG 401 - Teknik Rapor Yazma ve Sunum / ENG 401 - Technical Report Writing and Presentation													
c	M1	70	80	312	23	88.8	89.09	309	22	99.04	95.65	Yeterli ✓/ Sufficient ✓	95.65
g	M1	70	80	312	23	88.8	89.09	309	22	99.04	95.65	Yeterli ✓/ Sufficient ✓	95.65
GE 100 - Üniversite Hayatına Giriş / GE 100 - Orientation													
c	M1	12	80	587	30	96.22	98.33	587	30	100	100	Yeterli ✓/ Sufficient ✓	100
d	M1	12	80	587	30	96.22	98.33	587	30	100	100	Yeterli ✓/ Sufficient ✓	100
g	M1	12	80	587	30	96.22	98.33	587	30	100	100	Yeterli ✓/ Sufficient ✓	100
h	M1	12	80	587	30	96.22	98.33	587	30	100	100	Yeterli ✓/ Sufficient ✓	100

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%) / Treshold Percentage (%)	Toplam Öğrenci Sayısı / Number of Students (All)	Toplam Dept. Öğrenci Sayısı / Number of Students (Dept.)	Tüm Öğrenci Ort. / Average (All Std.)	Dept. Öğrenci Ort. / Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans/ Performance	Yeterlilik Oranı / Success Ratio
GE 251 - Üniversite Etkinlik Programı II / GE 251 - Collegiate Activities Program II													
c	M1	70	70	1375	67	93.49	95.15	1287	66	93.6	98.51	Yeterli ✓ / Sufficient ✓	98.51
g	M1	70	70	1375	67	93.49	95.15	1287	66	93.6	98.51	Yeterli ✓ / Sufficient ✓	98.51
h	M1	70	70	1375	67	93.49	95.15	1287	66	93.6	98.51	Yeterli ✓ / Sufficient ✓	98.51
GE 301 - Bilim, Teknoloji ve Toplum / GE 301 - Science Technology and Society													
d	M1	45	60	284	19	82.54	79.48	284	19	100	100	Yeterli ✓ / Sufficient ✓	100
e	M1	45	60	284	19	82.54	79.48	284	19	100	100	Yeterli ✓ / Sufficient ✓	100
g	M1	45	60	284	19	82.54	79.48	284	19	100	100	Yeterli ✓ / Sufficient ✓	100
HIST 200 - Türkiye Tarihi / HIST 200 - History of Turkey													
c	M1	70	75	968	42	92.06	95.15	931	42	96.18	100	Yeterli ✓ / Sufficient ✓	100
e	M1	70	75	968	42	92.06	95.15	931	42	96.18	100	Yeterli ✓ / Sufficient ✓	100
g	M1	70	75	968	42	92.06	95.15	931	42	96.18	100	Yeterli ✓ / Sufficient ✓	100
HUM 111 - Kültürler, Medeniyetler ve Düşünceler I / HUM 111 - Cultures Civilizations and Ideas I													
c	M1	60	75	465	29	80.91	79.83	457	29	98.28	100	Yeterli ✓ / Sufficient ✓	100
g	M1	60	75	465	29	80.91	79.83	457	29	98.28	100	Yeterli ✓ / Sufficient ✓	100
HUM 112 - Kültürler, Medeniyetler ve Düşünceler II / HUM 112 - Cultures Civilizations and Ideas II													
c	M1	60	75	937	61	85.62	84.28	930	60	99.25	98.36	Yeterli ✓ / Sufficient ✓	98.36
g	M1	60	75	937	61	85.62	84.28	930	60	99.25	98.36	Yeterli ✓ / Sufficient ✓	98.36

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%) / Treshold Percentage (%)	Toplam Öğrenci Sayısı / Number of Students (All)	Toplam Dept. Öğrenci Sayısı / Number of Students (Dept.)	Tüm Öğrenci Ort./ Average (All Std.)	Dept. Öğrenci Ort./ Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans/ Performance	Yeterlilik Oranı / Success Ratio
MATH 101 - Matematik I / MATH 101 - Calculus I													
a	M1	40	50	261	32	58.23	58.52	217	29	83.14	90.63	Yeterli ✓ / Sufficient ✓	90.63
c	M1	40	50	261	32	58.23	58.52	217	29	83.14	90.63	Yeterli ✓ / Sufficient ✓	90.63
e	M1	40	50	261	32	58.23	58.52	217	29	83.14	90.63	Yeterli ✓ / Sufficient ✓	90.63
MATH 102 - Matematik II / MATH 102 - Calculus II													
a	M1	40	50	694	83	55.51	53.64	518	62	74.64	74.7	Yeterli ✓ / Sufficient ✓	74.7
c	M1	40	50	694	83	55.51	53.64	518	62	74.64	74.7	Yeterli ✓ / Sufficient ✓	74.7
e	M1	40	50	694	83	55.51	53.64	518	62	74.64	74.7	Yeterli ✓ / Sufficient ✓	74.7
MATH 220 - Doğrusal Cebir / MATH 220 - Linear Algebra													
a	M1	40	40	28	23	62.64	62.22	28	23	100	100	Yeterli ✓ / Sufficient ✓	100
MATH 230 - Mühendisler İçin Olasılık ve İstatistik / MATH 230 - Probability and Statistics for Engineers													
a	M1	30	75	82	18	53.57	46.04	78	17	95.12	94.44	Yeterli ✓ / Sufficient ✓	94.44
MATH 240 - Türevsel Denklemler / MATH 240 - Differential Equations													
a	M1	30	75	76	59	64.93	62.45	75	58	98.68	98.31	Yeterli ✓ / Sufficient ✓	98.31
MATH 240 - Türevsel Denklemler / MBG 110 - Introduction to Modern Biology													
a	M1	50	50	446	55	70.85	77.23	410	55	91.93	100	Yeterli ✓ / Sufficient ✓	100
ME 101 - Makine Mühendisliğinin Temelleri / ME 101 - Fundamentals of Mechanical Engineering													
a	M1	40	75	37	37	68.08	68.08	34	34	91.89	91.89	Yeterli ✓ / Sufficient ✓	91.89
e	M1	30	75	37	37	76.62	76.62	36	36	97.3	97.3	Yeterli ✓ / Sufficient ✓	97.3

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%) / Threshold Percentage (%)	Toplam Öğrenci Sayısı / Number of Students (All)	Toplam Dept. Öğrenci Sayısı / Number of Students (Dept.)	Tüm Öğrenci Ort./ Average (All Std.)	Dept. Öğrenci Ort./ Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans/ Performance	Yeterlilik Oranı / Success Ratio
ME 102 - Sistem Mühendisliğine Giriş / ME 102 - Introduction to Systems Engineering													
b	M1	70	75	106	105	76.68	76.63	80	79	75.47	75.24	Yeterli ✓ / Sufficient ✓	75.24
f	M1	70	75	106	105	86.38	86.33	104	103	98.11	98.1	Yeterli ✓ / Sufficient ✓	98.1
ME 212 - Termodinamikler Mühendisliği II / ME 212 - Thermo-Fluids Engineering II													
a	M1	52	75	81	81	64.03	64.03	61	61	75.31	75.31	Yeterli ✓ / Sufficient ✓	75.31
f	M1	75	75	81	81	78.96	78.96	57	57	70.37	70.37	İyileştirmeye Açık! / Insufficient!	70.37
ME 232 - Mekanik ve Malzeme II / ME 232 - Mechanics and Materials II													
a	M1	50	75	73	73	73.62	73.62	72	72	98.63	98.63	Yeterli ✓ / Sufficient ✓	98.63
c	M1	50	75	73	73	86.37	86.37	70	70	95.89	95.89	Yeterli ✓ / Sufficient ✓	95.89
f	M1	50	75	73	73	74.99	74.99	73	73	100	100	Yeterli ✓ / Sufficient ✓	100
ME 342 - Dinamik ve Kontrol II / ME 342 - Dynamics and Control II													
a	M1	40	75	83	83	64.64	64.64	80	80	96.39	96.39	Yeterli ✓ / Sufficient ✓	96.39
ME 381 - Tasarım ve İmalat / ME 381 - Design and Manufacturing													
b	M1	70	75	82	82	96.28	96.28	82	82	100	100	Yeterli ✓ / Sufficient ✓	100
ME 384 - Mekatronik Sistemler / ME 384 - Mechatronic Systems													
a	M1	30	75	81	81	67.95	67.95	81	81	100	100	Yeterli ✓ / Sufficient ✓	100
b	M1	50	75	81	81	81.14	81.14	81	81	100	100	Yeterli ✓ / Sufficient ✓	100
e	M1	50	75	81	81	81.14	81.14	81	81	100	100	Yeterli ✓ / Sufficient ✓	100
f	M1	50	75	81	81	67.52	67.52	71	71	87.65	87.65	Yeterli ✓ / Sufficient ✓	87.65

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%) / Threshold Percentage (%)	Toplam Öğrenci Sayısı / Number of Students (All)	Toplam Dept. Öğrenci Sayısı / Number of Students (Dept.)	Tüm Öğrenci Ort. / Average (All Std.)	Dept. Öğrenci Ort. / Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
PHYS 101 - Genel Fizik I / PHYS 101 - General Physics I													
a	M1	50	50	274	37	65.93	68.47	223	35	81.39	94.59	Yeterli ✓ / Sufficient ✓	94.59
b	M1	50	50	274	37	65.93	68.47	223	35	81.39	94.59	Yeterli ✓ / Sufficient ✓	94.59
e	M1	50	50	274	37	65.93	68.47	223	35	81.39	94.59	Yeterli ✓ / Sufficient ✓	94.59
g	M1	50	50	274	37	65.93	68.47	223	35	81.39	94.59	Yeterli ✓ / Sufficient ✓	94.59
PHYS 102 - Genel Fizik II / PHYS 102 - General Physics II													
a	M1	50	50	647	88	64.72	62.79	549	76	84.85	86.36	Yeterli ✓ / Sufficient ✓	86.36
b	M1	50	50	647	88	64.72	62.79	549	76	84.85	86.36	Yeterli ✓ / Sufficient ✓	86.36
e	M1	50	50	647	88	64.72	62.79	549	76	84.85	86.36	Yeterli ✓ / Sufficient ✓	86.36
g	M1	50	50	647	88	64.72	62.79	549	76	84.85	86.36	Yeterli ✓ / Sufficient ✓	86.36
TURK 101 - Türkçe I / TURK 101 - Turkish I													
c	M1	70	60	612	28	86.39	89.33	605	28	98.86	100	Yeterli ✓ / Sufficient ✓	100
g	M1	70	60	612	28	86.39	89.33	605	28	98.86	100	Yeterli ✓ / Sufficient ✓	100
TURK 102 - Türkçe II / TURK 102 - Turkish II													
c	M1	70	60	1438	72	88.83	87.98	1425	72	99.1	100	Yeterli ✓ / Sufficient ✓	100
g	M1	70	60	1438	72	88.83	87.98	1425	72	99.1	100	Yeterli ✓ / Sufficient ✓	100

4.3. PERFORMANS ÖLÇÜM SONUÇLARI / PERFORMANCE MEASUREMENT RESULTS

4.3.1. PROGRAM ÇIKTILARI PERFORMANS TABLOSU / PROGRAM OUTCOMES PERFORMANCE TABLE

4.3.1.1. 2023-2024 Akademik Yılı Güz Dönemi için / For 2023-2024 Academic Year Fall Semester;

Dersler / Courses	Program Çıktıları / Program Outcomes							
	a	b	c	d	e	f	g	h
CHEM 201	✓							
CS 115	✓							
ENG 101			✓				✓	
ENG 102			✓				✓	
ENG 401			✓				✓	
GE 100			✓	✓			✓	✓
GE 251			✓				✓	✓
GE 301				✓	✓		✓	
HIST 200			✓		✓		✓	
HUM 111			✓				✓	
HUM 112			✓				✓	
MATH 101	✓		✓		✓			
MATH 102	✓		✓		✓			
MATH 220	✓							
MATH 230	✓							
MATH 240	✓							
MBG 110	✓							
ME 101	✓				✓			
ME 211	✓					✓		
ME 231	✓					✓		
ME 341	✓							
ME 371					✓	✓		
PHYS 101	✓	✓			✓		✓	
PHYS 102	✓	✓			✓		✓	
TURK 101			✓				✓	
TURK 102			✓				✓	

Tablo.4.3.1.1. 2023-2024 Akademik Yılı Güz Dönemi Makine Mühendisliği Lisans Programı Program Çıktıları Performans Tablosu / **Table.4.3.1.1.** 2023-2024 Academic Year Fall Semester Mechanical Engineering Undergraduate Program - Program Outcomes Performance Table

4.3.1.2. 2023-2024 Akademik Yılı Bahar Dönemi için / For 2023-2024 Academic Year Spring Semester;

Dersler / Courses	Program Çıktıları / Program Outcomes							
	a	b	c	d	e	f	g	h
CHEM 201	X							
CS 115	✓							
ENG 101			✓				✓	
ENG 102			✓				✓	
ENG 401			✓				✓	
GE 100			✓	✓			✓	✓
GE 251			✓				✓	✓
GE 301				✓	✓		✓	
HIST 200			✓		✓		✓	
HUM 111			✓				✓	
HUM 112			✓				✓	
MATH 101	✓		✓		✓			
MATH 102	✓		✓		✓			
MATH 220	✓							
MATH 230	✓							
MATH 240	✓							
MBG 110	✓							
ME 101	✓				✓			
ME 102		✓				✓		
ME 212	✓					X		
ME 232	✓		✓			✓		
ME 342	✓							
ME 381		✓						
ME 384	✓	✓			✓	✓		
PHYS 101	✓	✓			✓		✓	
PHYS 102	✓	✓			✓		✓	
TURK 101			✓				✓	
TURK 102			✓				✓	

Tablo.4.3.1.2. 2023-2024 Akademik Yılı Bahar Dönemi Makine Mühendisliği Lisans Programı Program Çıktıları Performans Tablosu / *Table.4.3.1.2.* 2023-2024 Academic Year Spring Semester Mechanical Engineering Undergraduate Program - Program Outcomes Performance Table

4.3.2. PROGRAM ÇIKTILARI PERFORMANS ORANLARI / PROGRAM OUTCOMES PERFORMANCE RATES

4.3.2.1. 2023-2024 Akademik Yılı Güz Dönemi için / For 2023-2024 Academic Year Fall Semester;

Dersler / Courses	Program Çıktıları / Program Outcomes							
	a	b	c	d	e	f	g	h
CHEM 201	83.05							
CS 115	95.83							
ENG 101			98.70				98.70	
ENG 102			100.00				100.00	
ENG 401			100.00				100.00	
GE 100			100.00	100.00			100.00	100.00
GE 251			91.43				91.43	91.43
GE 301				100.00	100.00		100.00	
HIST 200			100.00		100.00		100.00	
HUM 111			100.00				100.00	
HUM 112			100.00				100.00	
MATH 101	94.25		94.25		94.25			
MATH 102	88.89		88.89		88.89			
MATH 220	86.30							
MATH 230	97.53							
MATH 240	100.00							
MBG 110	93.55							
ME 101	97.30				95.95			
ME 211	84.72					87.50		
ME 231	100.00					98.57		
ME 341	86.52							
ME 371					100.00	100.00		
PHYS 101	89.02	89.02			89.02		89.02	
PHYS 102	84.21	84.21			84.21		84.21	
TURK 101			98.61				98.61	
TURK 102			100.00				100.00	

Tablo.4.3.2.1. 2023-2024 Akademik Yılı Güz Dönemi Makine Mühendisliği Lisans Programı Program Çıktıları Performans Oranları Tablosu / *Table.4.3.2.1. 2023-2024 Academic Year Fall Semester Mechanical Engineering Undergraduate Program - Program Outcomes Performance Rates Table*

4.3.2.2. 2023-2024 Akademik Yılı Bahar Dönemi için / For 2023-2024 Academic Year Spring Semester;

Dersler / Courses	Program Çıktıları / Program Outcomes							
	a	b	c	d	e	f	g	h
CHEM 201	52.94							
CS 115	97.83							
ENG 101			100				100	
ENG 102			98.65				98.65	
ENG 401			95.65				95.65	
GE 100			100	100			100	100
GE 251			98.51				98.51	98.51
GE 301				100	100		100	
HIST 200			100		100		100	
HUM 111			100				100	
HUM 112			98.36				98.36	
MATH 101	90.63		90.63		90.63			
MATH 102	74.7		74.7		74.7			
MATH 220	100							
MATH 230	94.44							
MATH 240	98.31							
MBG 110	100							
ME 101	91.89				97.3			
ME 102		75.24				98.1		
ME 212	75.31					70.37		
ME 232	98.63		95.89			100		
ME 342	96.39							
ME 381		100						
ME 384	100	100			100	87.65		
PHYS 101	94.59	94.59			94.59		94.59	
PHYS 102	86.36	86.36			86.36		86.36	
TURK 101			100				100	
TURK 102			100				100	

Tablo.4.3.2.2. 2023-2024 Akademik Yılı Bahar Dönemi Makine Mühendisliği Lisans Programı Program Çıktıları Performans Oranları Tablosu / *Table.4.3.2.2.* 2023-2024 Academic Year Spring Semester Mechanical Engineering Undergraduate Program - Program Outcomes Performance Rates Table

5. DEĞERLENDİRME / EVALUATION

5.1. PROGRAM ÇIKTILARI ÖLÇÜM SONUÇLARININ DEĞERLENDİRİLMESİ / EVALUATION OF PROGRAM OUTCOMES MEASUREMENT RESULTS

A total of 54 courses (26 courses in the fall semester and 28 courses in the spring semester) are used to evaluate the quality of education in terms of program outcomes in the 2023-2024 academic year. All 26 courses show satisfactory results for the fall semester, for which the department plans no further action at this point. 26 out of the 28 courses used for the spring semester also show satisfactory results. The actions planned for the remaining two courses are listed below:

CHEM201: The grades of this course were higher in previous years; we think this year's low performance is a one-year fluctuation, and we will continue to monitor the performance for the following years. If the lower-than-usual performance persists, action items to increase the performance will be discussed.

ME212 (only for "f" program outcome): In past years, the course grades were higher. We believe this year's lower performance is just a temporary fluctuation, and we'll keep an eye on it in the coming years. If this trend of lower performance continues, we'll take the following steps to improve it:

- Review student feedback for common concerns (e.g., pace of the course, clarity of instruction).
- Analyze data to find trends (e.g., specific topics or assignments where students struggled). Based on the trends:
 - Incorporate more practical examples and lab work,
 - Increase the use of multimedia and interactive resources,
 - Provide additional tutorials or review sessions,
 - Offer more frequent and detailed feedback on assignments.

By following this action plan, the course can be systematically improved to enhance student performance and satisfaction, thereby restoring or exceeding previous levels of success.

5.2. EĞİTİM AMAÇLARININ DEĞERLENDİRİLMESİ / EVALUATION OF EDUCATIONAL OBJECTIVES

The advisory board of the Mechanical Engineering department was held as a face-to-face meeting on June 5th, 2024 in EA409 meeting room between 18:00-20:00. The department head Prof. Dr. İlker Temizer, Assoc. Prof. Dr. Barbaros Çetin and Assoc. Prof. Dr. Onur Özcan from the Bilkent University Mechanical Engineering Department attended the meeting as well as the following advisory board members:

- Ümit Arda Karabey – Argoritma Teknoloji – Founder (Alumni)
- Ceren Yıldız – Aselsan – Lead Thermal Design Engineer (Alumni)
- Muhammed Aybars Yalçın – TUSAŞ – Design Engineer (Alumni)

- Dr. Önder Balioglu – Arçelik – Dishwasher R&D Director
- Tahir Fidan – Aselsan – Platform Integration Engineering Director
- Dr. Levent Subaşı – TEİ – Process Development Lead Engineer
- Uğur Susuz – Meteksan – Mechanical Design Manager
- Prof. Dr. Erhan Budak – Sabancı University
- Prof. Dr. Erdem Alaca – Koç University
- Prof. Dr. Zafer Dursunkaya – Middle East Technical University

The meeting started with a presentation from Prof. Dr. İlker Temizer on the state of departmental affairs and the current curriculum. Following the presentation, potential improvements have been discussed. A summary of the items discussed are given below:

- Several board members stated their appreciation for the Bilkent Mechanical Engineering graduates’ abilities to function effectively on engineering teams and lead those teams, while also pointing out that initially, it takes time for the graduates to develop certain in-depth knowledge required, specific to the industry employed in.
- The number of elective courses should be increased with a potential emphasis on industry-related topics, such as modern manufacturing methods, project management, manufacturing tolerances, design of experiments, etc. This should be possible as the department grows and more faculty members join.
- A new discussion on the number of internships and their durations is needed, as longer internships and specific factory internships help students better understand manufacturing processes and project management.

Additionally, two questionnaires were filled by the advisory board members whose results were analyzed by the department. The first questionnaire stated “The following table lists potential features that a mechanical engineer is expected to have. Considering the ever-changing professional requirements, please rate the importance of these features from a scale of 0 (Important) to 2 (Most Important).” The second questionnaire asked how many of these features are possessed by Bilkent Mech. Eng. graduates and to which degree. The compiled results are given below:

Mechanical Engineering Features	Each Engineer should have	Bilkent Graduates have
Address evolving technological challenges and adapt to rapidly changing technologies	1,1	1,2
Flexibility in different sectors and in several career paths among academia, industry, and government	0,6	1,1
Function effectively in multi/interdisciplinary teams	1,6	1,6
Function effectively in international/multicultural environments	0,4	1,5
Serve the needs of the society	0,2	1,2

Self-learning and independent progress skills	1,3	1,4
Leadership skills	0,2	1,0
Entrepreneurship skills	0	0,7
Adaptability to new environments/conditions	1	1,0
Critical and innovative thinking skills	1,5	1,3
Hands-on experience in design and prototyping of engineering solutions	1	1,0
Competence in data science and AI-tools in engineering design and applications	0,7	0,5

The results highlight that as an emerging field, data science and AI-tool competence should be provided to the Bilkent Mech. Eng. graduates and the critical and innovative thinking skills of the graduates should be further improved.

The specific questionnaires used are given below:

BILKENT UNIVERSITY
DEPARTMENT OF MECHANICAL ENGINEERING

UNDERGRADUATE ADVISORY BOARD SURVEY
ON PROGRAM EDUCATIONAL OBJECTIVES

The following table lists potential features that a mechanical engineer is expected to have. Considering the ever-changing professional requirements, please rate the importance of these features from a scale of 0 (Important) to 2 (Most Important).

I am a representative of: () Academia () Industry

In your rating, please make sure that the total of all assigned points does not exceed 10.

	Important	Very Important	Most Important
	0	1	2
Address evolving technological challenges and adapt to rapidly changing technologies			
Flexibility in different sectors and in several career paths among academia, industry, and government			
Function effectively in multi/interdisciplinary teams			
Function effectively in international/multicultural environments			
Serve the needs of the society			
Self-learning and independent progress skills			
Leadership skills			
Entrepreneurship skills			
Adaptability to new environments/conditions			
Critical and innovative thinking skills			
Hands-on experience in design and prototyping of engineering solutions			
Competence in data science and AI-tools in engineering design and applications			
Total of All Scores:	(Must not exceed 10)		

BILKENT UNIVERSITY
DEPARTMENT OF MECHANICAL ENGINEERING

UNDERGRADUATE ADVISORY BOARD SURVEY

ON BILMECH GRADUATES

The following table lists potential features that a mechanical engineer is expected to have. Please rate each feature whether you agree/disagree that the Bilkent University Mechanical Engineering graduates possess. If you do not have any experience with our graduates for a specific feature you can select NC (No Comment)

I am a representative of: () Academia () Industry

	Strongly Agree	Agree	Disagree	NC
Address evolving technological challenges and adapt to rapidly changing technologies				
Flexibility in different sectors and in several career paths among academia, industry, and government				
Function effectively in multi/interdisciplinary teams				
Function effectively in international/multicultural environments				
Serve the needs of the society				
Self-learning and independent progress skills				
Leadership skills				
Entrepreneurship skills				
Adaptability to new environments/conditions				
Critical and innovative thinking skills				
Hands-on experience in design and prototyping of engineering solutions				
Competence in data science and AI-tools in engineering design and applications				