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YILI / Academic Year

EĞİTİMDE KALİTE
GÜVENCESİ GÜZ
DÖNEMİ RAPORU
*QUALITY ASSURANCE IN
EDUCATION FALL SEMESTER
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. LİSANS PROGRAMI / UNDERGRADUATE PROGRAM
1.1. 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	

2. PROGRAM ÇIKTILARI / PROGRAM OUTCOMES

2.1. 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.*

2.2. PROGRAM ÇIKTILARI - DERSLER MATRİSİ / 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.2.2. Makine Mühendisliği Lisans Programı - Program Çıktıları ve Dersler Tablosu / **Table.2.2.** Mechanical Engineering Undergraduate Program - Program Outcomes and Courses Table

3. PERFORMANS ÖLÇÜMLERİNDE KULLANILACAK METRİKLER / METRICS TO BE USED IN PERFORMANCE MEASUREMENT

3.1. PERFORMANS ÖLÇÜMLERİNDE KULLANILACAK DEĞERLENDİRME METOTLARI / EVALUATION METHODS USED IN PERFORMANCE MEASUREMENTS

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	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
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 not ortalamasının G veya üzerinde olması / M1: T% of students have a grade point average of G or above

- M2: Öğrencilerin %T'sinin bölüm ortalaması üzerinde not almış olması / *M2: %T of students have received grades above the department average*
- M3: Öğrencilerin not ortalamasının G veya üzerinde olması / *M3: Students' grade point average should be G or above*
- M4: Öğrencilerin %T'sinin not ortalamasının dersi alan tüm öğrencilerin ortalamasına eşit veya daha yüksek olması / *M4: The GPA of %T of students is equal to or higher than the average of all students taking the course*

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

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	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

3.3. PERFORMANS ÖLÇÜM SONUÇLARI / PERFORMANCE MEASUREMENT RESULTS

3.3.1. PROGRAM ÇIKTILARI PERFORMANS TABLOSU / PROGRAM OUTCOMES PERFORMANCE TABLE

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.3.3.1. 2023-2024 Akademik Yılı Güz Dönemi Makine Mühendisliği Lisans Programı Program Çıktıları Performans Tablosu / **Table.3.3.1.** 2023-2024 Academic Year Fall Semester Mechanical Engineering Undergraduate Program - Program Outcomes Performance Table

3.3.2. PROGRAM ÇIKTILARI PERFORMANS ORANLARI / PROGRAM ÇIKTILARI PERFORMANS ORANLARI / PROGRAM OUTCOMES PERFORMANCE RATES

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.3.3.2. 2023-2024 Akademik Yılı Güz Dönemi Makine Mühendisliği Lisans Programı Program Çıktıları Performans Oranları Tablosu / *Table.3.3.2. 2023-2024 Academic Year Fall Semester Mechanical Engineering Undergraduate Program - Program Outcomes Performance Rates Table*