2023-2024 AKADEMİK YILI /
Academic Year

EĞİTİMDE KALİTE GÜVENCESİ YILLIK RAPORU

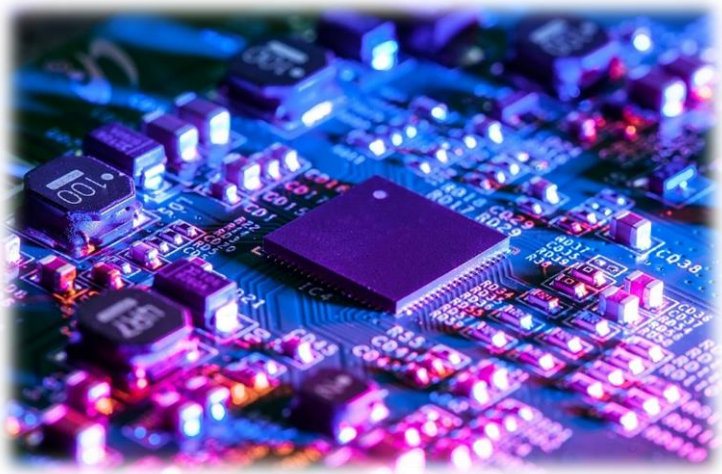
QUALITY ASSURANCE IN EDUCATION ANNUAL REPORT

MÜHENDİSLİK FAKÜLTESİ

FACULTY OF ENGINEERING

ELEKTRİK VE ELEKTRONİK MÜHENDİSLİĞİ LİSANS PROGRAMI (EE)

ELECTRICAL AND ELECTRONICS ENGINEERING UNDERGRADUATE PROGRAM (EE)



İÇİNDEKİLER / CONTENTS

MÜHENDİSLİK FAKÜLTESİ / *FACULTY OF ENGINEERING*

ELEKTRİK VE ELEKTRONİK MÜHENDİSLİĞİ LİSANS PROGRAMI – EE / *ELECTRICAL AND ELECTRONICS ENGINEERING UNDERGRADUATE PROGRAM – EE*

1. BÖLÜM HAKKINDA / *ABOUT THE DEPARTMENT*

1.1. EĞİTİM AMAÇLARI / *EDUCATIONAL OBJECTIVES*

- PEO1. BU-EEE (Bilkent Üniversitesi – Elektrik ve Elektronik Mühendisliği) mezunları, akademi, sanayi veya kamu kuruluşlarında ya da girişimci olarak başarılı kariyerlere sahip olacak ve BU-EEE'deki geniş eğitimleri ve eleştirel düşünme becerileri sayesinde programın desteklediği yetenekleri ile farklı alanlarda yenilikçi olacaklar. / *PEO1. BU-EEE (Bilkent University – Electrical and Electronics Engineering) graduates will have successful careers in academia, industry, or government organizations, or as entrepreneurs, and will become innovators in diverse fields based on their broad education at BU-EEE and the critical thinking abilities that the program fosters.*
- PEO2. BU-EEE mezunları mesleki gelişimlerini sürdürecek, prestijli lisansüstü okullarda ileri dereceler elde edecek ve meslektaşları arasında mesleki sorumluluk ve etik farkındalığı geliştireceklerdir. / *PEO2. BU-EEE graduates will continue professional development, pursue advanced degrees in prestigious graduate schools, and cultivate professional responsibility and ethical awareness among their colleagues.*
- PEO3. BU-EEE mezunları, gerçek dünyanın önemli sorunlarına çözümler sunacak, çok disiplinli ve kültürel açıdan çeşitli çalışma ortamlarında lider olacaklardır. / *PEO3. BU-EEE graduates will provide solutions to important real-world problems and become leaders in multidisciplinary and culturally diverse work environments.*

1.1.1. DANIŞMA KURULU / *ADVISORY BOARD*

- Dr. İlge Akkaya, Teknik Personel Üyesi, Open AI / *Dr. İlge Akkaya, Member of Technical Staff, Open AI*
- Prof. Dr. Murat Alanyalı, Mühendislik Dekanı TOBB-ETU / *Prof. Dr. Murat Alanyalı, Dean of Engineering, TOBB-ETU*
- Prof. Dr. A. Aydın Alatan, Elektrik ve Elektronik Mühendisliği Öğretim Üyesi, ODTÜ / *Prof. Dr. A. Aydın Alatan, Faculty Member of Electrical and Electronics Engineering, METU*
- Selçuk Alparslan, Genel Müdür / Meteksan Savunma Sanayi A.Ş. / *Selçuk Alparslan, President, Meteksan Defense Industries Inc.*
- Dr. Nil Apaydın, Anten Mühendisi, Facebook / *Dr. Nil Apaydın, Antenna Engineer, Facebook*
- Dr. Oğuzhan Atak, Kıdemli Dalga Şekli Tasarım Mühendisi, Aselsan / *Dr. Oğuzhan Atak, Senior Waveform Design Engineer, Aselsan*
- Dr. Nail Çadallı, Kurucu ve Genel Müdür, Signalton Teknoloji A.Ş. */ Dr. Nail Çadallı, Founder and Managing Director, Signalton Technology Inc*
- Dr. Belma Doğdaş, Kıdemli Baş Bilim İnsanı, PAIGE / *Dr. Belma Doğdaş, Senior Principal Scientist, PAIGE*
- Cemal Erdoğan, Kurucu, Biosys / *Cemal Erdoğan, Founder, Biosys*

- Dr. Mustafa Eröz, Danışman Mühendis, Hughes Ağ Sistemleri / *Dr. Mustafa Eröz, Advisory Engineer, Hughes Network Systems*
- Dr. Ali Taha Koç, Türkiye Cumhuriyeti Bilgi Teknolojileri Daire Başkanlığı / *Dr. Ali Taha Koç, Turkish Republic Department of Information Technologies*
- Dr. Defne Küçükyavuz, Kıdemli Baş Tasarım Mühendisi, Aselsan / *Dr. Defne Küçükyavuz, Senior Lead Design Engineer, Aselsan*
- Dr. Emre Oğuz, Ar-Ge Direktörü, Arçelik / *Dr. Emre Oğuz, R&D Director, Arçelik*
- Dr. Öğretim Üyesi Mert Pilanci, Elektrik Mühendisliği Öğretim Üyesi, Stanford University /*Asst. Prof. Mert Pilanci, Faculty Member of Electrical Engineering, Stanford University*
- Selma Şahin, Bulut Çözüm Mimarı Müdürü, Microsoft / *Selma Şahin, Cloud Solution Architect Manager, Microsoft*
- Filiz Şahin, Teknik Lider, Karel Elektronik / *Filiz Şahin, Technical Leader, Karel Electronics*
- Burak Selvi, Genel Müdür, Selvi Teknoloji A.Ş. / *Burak Selvi, General Manager, Selvi Tech Inc.*
- Cem Sezer, Kurucu ve CEO, Red Pine Software / *Cem Sezer, Founder and CEO, Red Pine Software*
- Dr. Tolga Sönmez, Proje Koordinatörü, Havelsan / *Dr. Tolga Sönmez, Project Coordinator, Havelsan*
- Prof. Dr. Şennur Ulukuş, Elektrik ve Bilgisayar Mühendisliği Öğretim Üyesi, University of Maryland / *Prof. Dr. Şennur Ulukuş, Faculty Member of Electrical and Computer Engineering, University of Maryland*
- Prof. Dr. Hakan Ürey, Elektrik ve Elektronik Mühendisliği Öğretim Üyesi, Koç Üniversitesi / *Prof. Dr. Hakan Ürey, Faculty Member of Electrical and Electronics Engineering, Koç University*
- Prof. Dr. Murat Uysal, Elektrik ve Elektronik Mühendisliği Bölüm Başkanı, Özyeğin Üniversitesi /*Prof. Dr. Murat Uysal, Chair of Electrical and Electronics Engineering Department, Özyeğin University*
- Işıl Yalçın, Genel Müdür, Ericsson Türkiye / *Işıl Yalçın, President, Ericsson Turkey*

1.2. LİSANS PROGRAMI / *UNDERGRADUATE PROGRAM*

1.2.1. MÜFREDAT / *CURRICULUM*

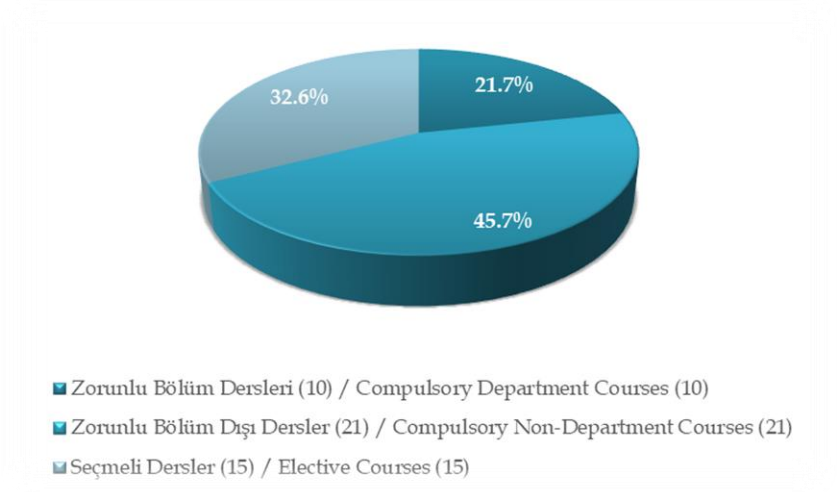
Birinci Yıl / *First Year*					
Güz Dönemi / *Fall Semester*					
Ders Kod / *Course Code*	**Ders Adı / *Course Name***	**Saatler / *Hours***		**Kredi / *Credits***	
		Ders / *Lecture*	**Lab / Stüdyo / Diğer / *Lab / Studio / Others***	**Bilkent**	**ECTS**
CS 115	Python ile Programlamaya Giriş / *Introduction to Programming in Python*	3	4	4	6,5
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
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**
EEE 102	Sayısal Devre Tasarımı / *Introduction to Digital Circuit Design*	4	4	4	6,5
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
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**
EEE 211	Analog Elektronik / *Analog Electronics*	3	4	4	6,5
GE 250	Üniversite Etkinlik Programı I / *Collegiate Activities Program I*	0	0	0	1
HIST 200	Türkiye Tarihi / *History of Turkey*	3	0	4	6,5
HUM 111	Kültürler, Medeniyetler ve Düşünceler I / *Collegiate Activities Program I*	3	0	3	5
MATH 241	Mühendislik Matematiği I / *Engineering Mathematics I*	4	0	4	6,5
	Matematik veya Fen Seçmeli Dersi / *Mathematics or Science Elective*			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**
EE 202	Devre Teorisi / *Circuit Theory*	3	4	4	6,5
EEE 212	Mikroişlemciler / *Microprocessors*	3	4	4	6,5
ENG 401	Teknik Rapor Yazma ve Sunum / *Technical Report Writing and Presentation*	3	0	3	5
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 242	Mühendislik Matematiği II / *Engineering Mathematics II*	4	0	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**
EEE 299	Yaz Stajı I / *Summer Training I*	0	0	0	7
EEE 313	Elektronik Devre Tasarımı / *Electronic Circuit Desig n*	3	4	4	6,5
EEE 321	Sinyaller ve Sistemler / *Signals and Systems*	3	2	4	6,5
EEE 351	Mühendislik Elektromanyetiği / *Engineering Electromagnetics*	3	0	3	5
	Genel Seçmeli Ders / *General Elective*			3	
	Temel Sosyal Bilimler Seçmeli Dersi / *Social Science Core Elective*			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**
EE 342	Geri Beslemeli Kontrol Sistemleri / *Feedback Control Systems*	3	0	3	5
MATH 255	Olasılık ve İstatistik / *Probability and Statistics*	4	0	4	6,5
	Temel Sanat Seçmeli Dersi / *Arts Core Elective*			3	
	Temel Mühendislik Seçmeli Dersi / *Basic Engineering Elective*			3	
	Elektrik ve Elektronik Mühendisliği Seçmeli Dersi / *EEE Elective*			3	

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**
EEE 399	Yaz Stajı II / *Summer Training II*	0	0	0	7
GE 301	Bilim, Teknoloji ve Toplum / *Science Technology and Society*	2	0	2	3,5
	Elektrik ve Elektronik Mühendisliği Seçmeli Dersi / *EEE Elective*			3	
	Elektrik ve Elektronik Mühendisliği Sınırlı Seçmeli Dersi / *EEE Restricted Elective*			3	
	Matematik veya Fen Seçmeli Dersi / *Mathematics or Science Elective*			3	
	Proje Seçmeli Dersi I / *Project 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**
GE 304	Teknoloji, Toplum ve Mesleki Gelişim Semineri / *Technology Society and Professional Development Seminar*	2	0	1	2
	Elektrik ve Elektronik Mühendisliği Genişletilmiş Seçmeli Dersi (2) / *EEE Expanded Elective (2)*			6	
	Elektrik ve Elektronik Mühendisliği Sınırlı Seçmeli Dersi / *EEE Restricted Elective*			3	
	Genel Seçmeli Ders / *General Elective*			3	
	Proje Seçmeli Dersi II / *Project Elective II*			3	

1.2.2. DERSLERİN DAĞILIMI / *DISTRIBUTION COURSES*



Grafik.1.2.2. Elektrik ve Elektronik Mühendisliği Lisans Programı Müfredatındaki Derslerin Dağılımı / ***Graphic.1.2.2.*** *Distribution of Courses in the Electrical and Electronics Engineering Undergraduate Program Curriculum*

1.3. ÖĞRENCİLER / *STUDENTS*

1.3.1. ÖĞRENCİ SAYILARI / *NUMBER OF STUDENTS*

	Öğrenci Sayıları / *Number of Students*
Hazırlık / *Prep*	51
1. Sınıf / *1. Class*	180
2. Sınıf / *2. Class*	194
3. Sınıf / *3. Class*	184
4. Sınıf / *4. Class*	199
Toplam Öğrenci Sayısı / *Total Number of Students*	**808**

Tablo.1.3.1. 2023-2024 Akademik Yılı Elektrik ve Elektronik Mühendisliği Lisans Programı Öğrenci Sayıları / ***Table.1.3.1.*** *Number of Students in Electrical and Electronics 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*
1. Sınıf / *1. Class*	4
2. Sınıf / *2. Class*	7
3. Sınıf / *3. Class*	4
4. Sınıf / *4. Class*	7
Toplam Yabancı Öğrenci Sayısı / *Total Number of Foreign Students*	**22**

Tablo.1.3.2. 2023-2024 Akademik Yılı Elektrik ve Elektronik Mühendisliği Lisans Programı Yabancı Öğrenci Sayıları / ***Table.1.3.2.*** *Number of Foreign Students in Electrical and Electronics 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*	20
Doçent Doktor / *Associate Professor*	2
Doktor Öğretim Üyesi / *Asisstant Professor*	4
Öğretim Görevlisi / *Instructor*	2
Toplam Öğretim Elemanı Sayısı / *Total Number of Faculty Members*	**28**

Tablo.1.4.1. 2023-2024 Akademik Yılında Elektrik ve Elektronik 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 Electrical and Electronics 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*	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	Emine Ülkü Sarıtaş Çukur	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Behzat Orhan Aytür
Doçent Doktor / Associate Professor	Tam Zamanlı / Full Time	Cem Tekin	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Ezhan Karaşan
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Aykut Koç	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Nail Akar
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Erdinç Tatar	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Vakur Behçet Ertürk
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Burçin Çakır	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Ergin Atalar
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Muhammed Ömer Sayın	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Hitay Özbay
Öğretim Görevlisi / Instructor	Tam Zamanlı / Full Time	Mehmet Alper Kutay	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Levent Onural
Öğretim Görevlisi / Instructor	Yarı Zamanlı / Part Time	İsmail Enis Ungan	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Arif Bülent Özgüler
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Volkan Kurşun	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Ömer Morgül
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Abdullah Atalar	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Sinan Gezici
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Erdal Arıkan	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Tolga Mete Duman
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Memduh Haldun Özaktaş	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Süleyman Serdar Kozat
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Billur Barshan Özaktaş	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Tolga Çukur
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Orhan Arıkan	Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Ayhan Altıntaş

Tablo.1.4.2. 2023-2024 Akademik Yılında Elektrik ve Elektronik 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 Electrical and Electronics Engineering Undergraduate Program in the 2023-2024 Academic Year*

1.5. EĞİTİMDE KALİTE KOMİTESİ / *COMMITTEE OF QUALITY IN EDUCATION*

- Sinan Gezici
- Tolga Mete Duman

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 EQF-LLL: 6th Level QF-EHEA: 1st Cycle	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. 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.	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. 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.	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.

		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.		

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 Elektrik ve Elektronik Mühendisliği Lisans Programı Program Çıktıları Bağlantı Tablosu / ***Table.3.2.*** *National Qualifications and Electrical and Electronics 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							
	a	b	c	d	e	f	g	h
CS 115	✔							
EEE 102	✔		✔	✔		✔	✔	
EEE 202	✔					✔		
EEE 211	✔	✔	✔	✔		✔		
EEE 212	✔					✔		
EEE 299	✔	✔	✔	✔	✔	✔	✔	
EEE 313	✔	✔				✔		
EEE 321	✔							
EEE 342	✔							
EEE 351	✔	✔						
EEE 399	✔	✔	✔	✔	✔	✔	✔	
ENG 101			✔				✔	
ENG 102			✔				✔	
ENG 401			✔				✔	
GE 100			✔				✔	✔
GE 250			✔				✔	✔

Dersler / *Courses*	Program Çıktıları / Program Outcomes							
	a	b	c	d	e	f	g	h
GE 251			✔				✔	✔
GE 301				✔	✔		✔	
GE 304		✔		✔			✔	
HIST 200			✔		✔		✔	
HUM 111			✔				✔	
HUM 112			✔				✔	
MATH 101	✔		✔		✔			
MATH 102	✔		✔		✔			
MATH 241	✔							
MATH 242	✔							
MATH 255	✔					✔		
PHYS 101	✔	✔			✔		✔	
PHYS 102	✔	✔			✔		✔	
TURK 101			✔				✔	
TURK 102			✔				✔	

Tablo.4.1. Elektrik ve Elektronik Mühendisliği Lisans Programı - Program Çıktıları ve Dersler Tablosu / ***Table.4.1.*** *Electrical and Electronics 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 / / *EVAULATION 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	Lab exam	Midterm:Essay/ written	Final:Essay/writ ten	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 115	a	20	40	40	100	M1	40	75

Course Code	Program Outputs	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 102	f	100	100	M1	80	75

Course Code	Program Outputs	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 202	a	29	29	42	100	M1	30	75

Course Code	Program Outputs	Quiz	Quiz	Quiz	Quiz	Quiz	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
EEE 211	a	5	5	5	5	5	35	40	100	M1	45
		Qualification Threshold (%)									
		75									
	Program Outputs	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work
	f	6,5	6,5	6,5	6,5	6,5	6,5	6,5	6,5	6,5	41,5
		Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
		100	M1	70	75						

Course Code	Program Outputs	Project	Project	Lab work	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 212	f	29	29	21	21	100	M1	60	75

Course Code	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Final:Essay /written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
EEE 313	a	28,6	28,6	42,8	100	M1	25	75	

Course Code	Program Outputs	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
EEE 321	a	46	54	100	M1	30	75	

Course Code	Program Outputs	Midterm:Essay /written	Final:Essay /written	Lab work	Lab work	Lab work	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method
EEE 342	a	29	35	5	5	5	7	7	7	100	M1
		(Average) Qualification Grade	Qualification Threshold (%)								
		45	75								

Course Code	Program Outputs	Midterm:Essay /written	Final:Essay /written	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
EEE 351	a	32,2	48,3	6,5	6,5	6,5	100	M1	30	75	
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	b	100	100	M1	60	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	Oral presentation	Oral presentation	Written Project Proposal	Written Final Report	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
ENG 401	c	30	15	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 (%)**
	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	Quiz	Quiz	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
MATH 241	a	35	35	6	6	6	6	6	100	M1	25
		Qualification Threshold (%)									
		75									

Course Code	Program Outputs	Midterm:Essay / written	Quiz	Homework	Final:Essay / written	MATLAB	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
MATH 242	a	30	30	5	30	5	100	M1	30	75	

Course Code	Program Outputs	Midterm:Essay / written	Midterm:Essay / written	Final:Essay / written	Homework	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
MATH 255	a	25	25	40	5	5	100	M1	35	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*

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

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	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 102	f	100	100	M1	80	75

Course Code	Program Outputs	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 202	a	29	29	42	100	M1	30	75

Course Code	Program Outputs	Quiz	Quiz	Quiz	Quiz	Quiz	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 211	a	5	5	5	5	5	35	40	100	M1	45	75
	Program Outputs	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Total Contribution
	f	6,5	6,5	6,5	6,5	6,5	6,5	6,5	6,5	6,5	41,5	100
		Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)								
		M1	70	75								

Course Code	Program Outputs	Project	Lab work	Lab work	Lab work	Lab work	Lab work	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 212	f	34	11	11	11	11	11	11	100	M1	60	75

Course Code	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 313	a	45	55	100	M1	25	75

Course Code	Program Outputs	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 321	a	46	54	100	M1	30	75

Course Code	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Lab work	Lab work	Lab work	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
EEE 342	a	29	35	5	5	5	7	7	7	100	M1	45
		Qualification Threshold (%)										
		75										

Course Code	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
EEE 351	a	32,2	48,3	6,5	6,5	6,5	100	M1	30	75
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	b	100	100	M1	60	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	Qualification Threshold (%)
ENG 101	c	20	25	8	7	10	5	25	100	M1	70	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	Qualification Threshold (%)
	g	20	25	8	7	10	5	25	100	M1	70	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 (%)
	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	In-class attendance	In-class attendance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
GE 304	b	50	50	100	M1	4	90
	Program Outputs	In-class attendance	In-class attendance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	d	50	50	100	M1	4	90
	Program Outputs	In-class attendance	In-class attendance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	50	50	100	M1	4	90

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	Quiz	Quiz	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MATH 241	a	35	35	6	6	6	6	6	100	M1	25	75

Course Code	Program Outputs	Midterm:Essay/ written	Quiz	Homework	Final:Essay/ written	MATLAB	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MATH 242	a	30	30	5	30	5	100	M1	30	75

Course Code	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Homework	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MATH 255	a	25	25	40	5	5	100	M1	35	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

Course Code	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
PHYS 101	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*
CS 115 - Python ile Programlamaya Giriş / *CS 115 - Introduction to Programming in Python*													
a	M1	40	75	351	141	69.76	75.73	346	140	98.58	99.29	Yeterli √ / *Sufficient √*	99.29
EEE 102 - Sayısal Devre Tasarımı / EEE 102 - Introduction to Digital Circuit Design													
f	M1	80	75	120	120	96.84	96.84	117	117	97.50	97.50	Yeterli √ / *Sufficient √*	97.50
EEE 202 - Devre Teorisi / *EEE 202 - Circuit Theory*													
a	M1	30	75	77	77	59.89	59.89	77	77	100.00	100.00	Yeterli √ / *Sufficient √*	100.00
EEE 211 - Analog Elektronik / *EEE 211 - Analog Electronics*													
a	M1	45	75	131	130	65.55	65.73	110	110	83.97	84.62	Yeterli √ / *Sufficient √*	84.62
f	M1	70	75	131	130	97.62	97.62	131	130	100.00	100.00	Yeterli √ / *Sufficient √*	100.00
EEE 212 - Mikroişlemciler / *EEE 212 - Microprocessors*													
f	M1	60	75	56	55	86.87	86.93	53	52	94.64	94.55	Yeterli √ / *Sufficient √*	94.55
EEE 313 - Elektronik Devre Tasarımı / *EEE 313 - Electronic Circuit Design*													
a	M1	25	75	104	104	45.87	45.87	89	89	85.58	85.58	Yeterli √ / *Sufficient √*	85.58
EEE 321 - Sinyaller ve Sistemler / *EEE 321 - Signals and Systems*													
a	M1	30	75	81	80	56.08	56.17	75	74	92.59	92.50	Yeterli √ / *Sufficient √*	92.50
EEE 342 - Geri Beslemeli Kontrol Sistemleri / *EEE 342 - Feedback Control Systems*													
a	M1	45	75	70	69	60.84	60.60	57	56	81.43	81.16	Yeterli √ / *Sufficient √*	81.16
EEE 351 - Mühendislik Elektromanyetiği / *EEE 351 - Engineering Electromagnetics*													
a	M1	30	75	82	82	51.59	51.59	81	81	98.78	98.78	Yeterli √ / *Sufficient √*	98.78
b	M1	60	75	82	82	81.85	81.85	82	82	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*
ENG 101 - İngilizce ve Kompozisyon I / *ENG 101 - English and Composition I*													
c	M1	70	75	1698	129	82.20	86.82	1560	128	91.87	99.22	Yeterli √ / *Sufficient* √	99.22
g	M1	70	75	1698	129	82.20	86.82	1560	128	91.87	99.22	Yeterli √ / *Sufficient* √	99.22
ENG 102 - İngilizce ve Kompozisyon II / *ENG 102 - English and Composition II*													
c	M1	70	70	543	36	85.44	89.11	526	35	96.87	97.22	Yeterli √ / *Sufficient* √	97.22
g	M1	70	70	543	36	85.44	89.11	526	35	96.87	97.22	Yeterli √ / *Sufficient* √	97.22
ENG 401 - Teknik Rapor Yazma ve Sunum / *ENG 401 - Technical Report Writing and Presentation*													
c	M1	70	80	266	37	88.72	87.59	266	37	100.00	100.00	Yeterli √ / *Sufficient* √	100.00
g	M1	70	80	266	37	88.72	87.59	266	37	100.00	100.00	Yeterli √ / *Sufficient* √	100.00
GE 100 - Üniversite Hayatına Giriş / *GE 100 - Orientation*													
c	M1	12	80	1681	128	97.14	98.71	1681	128	100.00	100.00	Yeterli √ / *Sufficient* √	100.00
g	M1	12	80	1681	128	97.14	98.71	1681	128	100.00	100.00	Yeterli √ / *Sufficient* √	100.00
h	M1	12	80	1681	128	97.14	98.71	1681	128	100.00	100.00	Yeterli √ / *Sufficient* √	100.00
GE 251 - Üniversite Etkinlik Programı II / *GE 251 - Collegiate Activities Program II*													
c	M1	70	70	838	64	93.01	94.38	776	62	92.60	96.88	Yeterli √ / *Sufficient* √	96.88
g	M1	70	70	838	64	93.01	94.38	776	62	92.60	96.88	Yeterli √ / *Sufficient* √	96.88
h	M1	70	70	838	64	93.01	94.38	776	62	92.60	96.88	Yeterli √ / *Sufficient* √	96.88
GE 301 - Bilim, Teknoloji ve Toplum / *GE 301 - Science Technology and Society*													
d	M1	45	60	366	99	82.99	85.38	366	99	100.00	100.00	Yeterli √ / *Sufficient* √	100.00
e	M1	45	60	366	99	82.99	85.38	366	99	100.00	100.00	Yeterli √ / *Sufficient* √	100.00
g	M1	45	60	366	99	82.99	85.38	366	99	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*
HIST 200 - Türkiye Tarihi / *HIST 200 - History of Turkey*													
c	M1	70	75	1055	101	93.35	94.94	1044	101	98.96	100.00	Yeterli √ / *Sufficient* √	100.00
e	M1	70	75	1055	101	93.35	94.94	1044	101	98.96	100.00	Yeterli √ / *Sufficient* √	100.00
g	M1	70	75	1055	101	93.35	94.94	1044	101	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	130	83.62	85.83	1099	130	99.01	100.00	Yeterli √ / *Sufficient* √	100.00
g	M1	60	75	1110	130	83.62	85.83	1099	130	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	36	83.67	85.16	237	36	99.58	100.00	Yeterli √ / *Sufficient* √	100.00
g	M1	60	75	238	36	83.67	85.16	237	36	99.58	100.00	Yeterli √ / *Sufficient* √	100.00
MATH 101 - Matematik I / *MATH 101 - Calculus I*													
a	M1	40	50	741	145	65.46	72.38	686	138	92.58	95.17	Yeterli √ / *Sufficient* √	95.17
c	M1	40	50	741	145	65.46	72.38	686	138	92.58	95.17	Yeterli √ / *Sufficient* √	95.17
e	M1	40	50	741	145	65.46	72.38	686	138	92.58	95.17	Yeterli √ / *Sufficient* √	95.17
MATH 102 - Matematik II / *MATH 102 - Calculus II*													
a	M1	40	50	215	40	54.07	57.79	156	35	72.56	87.50	Yeterli √ / *Sufficient* √	87.50
c	M1	40	50	215	40	54.07	57.79	156	35	72.56	87.50	Yeterli √ / *Sufficient* √	87.50
e	M1	40	50	215	40	54.07	57.79	156	35	72.56	87.50	Yeterli √ / *Sufficient* √	87.50

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 241 - Mühendislik Matematiği I / *MATH 241 - Engineering Mathematics I*													
a	M1	25	75	129	107	41.65	41.88	112	94	86.82	87.85	Yeterli √ / *Sufficient* √	87.85
MATH 242 - Mühendislik Matematiği II / *MATH 242 - Engineering Mathematics II*													
a	M1	30	75	70	61	57.16	57.14	68	59	97.14	96.72	Yeterli √ / *Sufficient* √	96.72
MATH 255 - Olasılık ve İstatistik / *MATH 255 - Probability and Statistics*													
a	M1	35	75	78	77	52.38	52.62	69	69	88.46	89.61	Yeterli √ / *Sufficient* √	89.61
PHYS 101 - Genel Fizik I / *PHYS 101 - General Physics I*													
a	M1	50	50	663	135	68.54	75.85	598	131	90.20	97.04	Yeterli √ / *Sufficient* √	97.04
b	M1	50	50	663	135	68.54	75.85	598	131	90.20	97.04	Yeterli √ / *Sufficient* √	97.04
e	M1	50	50	663	135	68.54	75.85	598	131	90.20	97.04	Yeterli √ / *Sufficient* √	97.04
g	M1	50	50	663	135	68.54	75.85	598	131	90.20	97.04	Yeterli √ / *Sufficient* √	97.04
PHYS 102 - Genel Fizik II / PHYS 102 - General Physics II													
a	M1	50	50	135	44	63.16	67.40	107	39	79.26	88.64	Yeterli √ / *Sufficient* √	88.64
b	M1	50	50	135	44	63.16	67.40	107	39	79.26	88.64	Yeterli √ / *Sufficient* √	88.64
e	M1	50	50	135	44	63.16	67.40	107	39	79.26	88.64	Yeterli √ / *Sufficient* √	88.64
g	M1	50	50	135	44	63.16	67.40	107	39	79.26	88.64	Yeterli √ / *Sufficient* √	88.64
TURK 101 - Türkçe I / *TURK 101 - Turkish I*													
c	M1	70	60	1516	126	87.68	89.20	1493	125	98.48	99.21	Yeterli √ / *Sufficient* √	99.21
g	M1	70	60	1516	126	87.68	89.20	1493	125	98.48	99.21	Yeterli √ / *Sufficient* √	99.21

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 102 - Türkçe II / TURK 102 - Turkish II													
c	M1	70	60	492	49	90.84	92.11	487	49	98.98	100.00	Yeterli √ / *Sufficient* √	100.00
g	M1	70	60	492	49	90.84	92.11	487	49	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 (%) / *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*
CS 115 - Python ile Programlamaya Giriş / *CS 115 - Introduction to Programming in Python*													
a	M1	40	75	245	45	67.23	73.56	236	44	96.33	97.78	Yeterli √ / *Sufficient √*	97.78
EEE 102 - Sayısal Devre Tasarımı / *EEE 102 - Introduction to Digital Circuit Design*													
f	M1	80	75	179	174	96.77	96.7	177	172	98.88	98.85	Yeterli √ / *Sufficient √*	98.85
EEE 202 - Devre Teorisi / *EEE 202 - Circuit Theory*													
a	M1	30	75	100	100	60.97	60.97	100	100	100	100	Yeterli √ / *Sufficient √*	100
EEE 211 - Analog Elektronik / *EEE 211 - Analog Electronics*													
a	M1	45	75	63	63	55.03	55.03	45	45	71.43	71.43	İyileştirmeye Açık! / *Insufficient!*	71.43
f	M1	70	75	63	63	94.56	94.56	61	61	96.83	96.83	Yeterli √ / *Sufficient √*	96.83
EEE 212 - Mikroişlemciler / *EEE 212 - Microprocessors*													
f	M1	60	75	101	101	91.47	91.47	99	99	98.02	98.02	Yeterli √ / *Sufficient √*	98.02
EEE 313 - Elektronik Devre Tasarımı / *EEE 313 - Electronic Circuit Design*													
a	M1	25	75	81	81	49.4	49.4	71	71	87.65	87.65	Yeterli √ / *Sufficient √*	87.65
EEE 321 - Sinyaller ve Sistemler / *EEE 321 - Signals and Systems*													
a	M1	30	75	62	62	61.32	61.32	62	62	100	100	Yeterli √ / *Sufficient √*	100
EEE 342 - Geri Beslemeli Kontrol Sistemleri / *EEE 342 - Feedback Control Systems*													
a	M1	45	75	101	100	66.49	66.52	96	95	95.05	95	Yeterli √ / *Sufficient √*	95
EEE 351 - Mühendislik Elektromanyetiği / *EEE 351 - Engineering Electromagnetics*													
a	M1	30	75	68	68	47.49	47.49	63	63	92.65	92.65	Yeterli √ / *Sufficient √*	92.65
b	M1	60	75	68	68	82.99	82.99	68	68	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*
ENG 101 - İngilizce ve Kompozisyon I / *ENG 101 - English and Composition I*													
c	M1	70	75	740	41	81.27	84.86	662	39	89.46	95.12	Yeterli √ / *Sufficient* √	95.12
g	M1	70	75	740	41	81.27	84.86	662	39	89.46	95.12	Yeterli √ / *Sufficient* √	95.12
ENG 102 - İngilizce ve Kompozisyon II / *ENG 102 - English and Composition II*													
c	M1	70	70	1495	132	84.92	87.92	1428	130	95.52	98.48	Yeterli √ / *Sufficient* √	98.48
g	M1	70	70	1495	132	84.92	87.92	1428	130	95.52	98.48	Yeterli √ / *Sufficient* √	98.48
ENG 401 - Teknik Rapor Yazma ve Sunum / *ENG 401 - Technical Report Writing and Presentation*													
c	M1	70	80	312	114	88.8	89.69	309	113	99.04	99.12	Yeterli √ / *Sufficient* √	99.12
g	M1	70	80	312	114	88.8	89.69	309	113	99.04	99.12	Yeterli √ / *Sufficient* √	99.12
GE 100 - Üniversite Hayatına Giriş / *GE 100 - Orientation*													
c	M1	12	80	587	39	96.23	97.82	587	39	100	100	Yeterli √ / *Sufficient* √	100
g	M1	12	80	587	39	96.23	97.82	587	39	100	100	Yeterli √ / *Sufficient* √	100
h	M1	12	80	587	39	96.23	97.82	587	39	100	100	Yeterli √ / *Sufficient* √	100
GE 251 - Üniversite Etkinlik Programı II / *GE 251 - Collegiate Activities Program II*													
c	M1	70	70	1375	109	93.49	94.5	1287	102	93.6	93.58	Yeterli √ / *Sufficient* √	93.58
g	M1	70	70	1375	109	93.49	94.5	1287	102	93.6	93.58	Yeterli √ / *Sufficient* √	93.58
h	M1	70	70	1375	109	93.49	94.5	1287	102	93.6	93.58	Yeterli √ / *Sufficient* √	93.58
GE 301 - Bilim, Teknoloji ve Toplum / *GE 301 - Science Technology and Society*													
d	M1	45	60	284	69	82.54	82.22	284	69	100	100	Yeterli √ / *Sufficient* √	100
e	M1	45	60	284	69	82.54	82.22	284	69	100	100	Yeterli √ / *Sufficient* √	100
g	M1	45	60	284	69	82.54	82.22	284	69	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 304 - Teknoloji, Toplum ve Mesleki Gelişim Semineri / *GE 304 - Technology Society and Professional Development Seminar*													
b	M1	4	90	139	138	85.05	85.05	139	138	100	100	Yeterli √ / *Sufficient* √	100
d	M1	4	90	139	138	85.05	85.05	139	138	100	100	Yeterli √ / *Sufficient* √	100
g	M1	4	90	139	138	85.05	85.05	139	138	100	100	Yeterli √ / *Sufficient* √	100
HIST 200 - Türkiye Tarihi / *HIST 200 - History of Turkey*													
c	M1	70	75	968	42	92.06	94.27	931	42	96.18	100	Yeterli √ / *Sufficient* √	100
e	M1	70	75	968	42	92.06	94.27	931	42	96.18	100	Yeterli √ / *Sufficient* √	100
g	M1	70	75	968	42	92.06	94.27	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	36	80.91	84.78	457	36	98.28	100	Yeterli √ / *Sufficient* √	100
g	M1	60	75	465	36	80.91	84.78	457	36	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	134	85.62	87.93	930	134	99.25	100	Yeterli √ / *Sufficient* √	100
g	M1	60	75	937	134	85.62	87.93	930	134	99.25	100	Yeterli √ / *Sufficient* √	100
MATH 101 - Matematik I / *MATH 101 - Calculus I*													
a	M1	40	50	263	44	58.04	64.54	217	40	82.51	90.91	Yeterli √ / *Sufficient* √	90.91
c	M1	40	50	263	44	58.04	64.54	217	40	82.51	90.91	Yeterli √ / *Sufficient* √	90.91
e	M1	40	50	263	44	58.04	64.54	217	40	82.51	90.91	Yeterli √ / *Sufficient* √	90.91
MATH 102 - Matematik II / *MATH 102 - Calculus II*													
a	M1	40	50	694	148	55.51	62.1	518	129	74.64	87.16	Yeterli √ / *Sufficient* √	87.16
c	M1	40	50	694	148	55.51	62.1	518	129	74.64	87.16	Yeterli √ / *Sufficient* √	87.16
e	M1	40	50	694	148	55.51	62.1	518	129	74.64	87.16	Yeterli √ / *Sufficient* √	87.16

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 241 - Mühendislik Matematiği I / *MATH 241 - Engineering Mathematics I*													
a	M1	25	75	76	62	47.95	46.25	73	59	96.05	95.16	Yeterli √ / *Sufficient* √	95.16
MATH 242 - Mühendislik Matematiği II / *MATH 242 - Engineering Mathematics II*													
a	M1	30	75	139	115	64.53	64.09	138	114	99.28	99.13	Yeterli √ / *Sufficient* √	99.13
MATH 255 - Olasılık ve İstatistik / *MATH 255 - Probability and Statistics*													
a	M1	35	75	84	80	48.19	48.93	58	56	69.05	70	İyileştirmeye Açık! / *Insufficient!*	70
PHYS 101 - Genel Fizik I / *PHYS 101 - General Physics I*													
a	M1	50	50	274	46	65.93	71.99	223	43	81.39	93.48	Yeterli √ / *Sufficient* √	93.48
b	M1	50	50	274	46	65.93	71.99	223	43	81.39	93.48	Yeterli √ / *Sufficient* √	93.48
e	M1	50	50	274	46	65.93	71.99	223	43	81.39	93.48	Yeterli √ / *Sufficient* √	93.48
g	M1	50	50	274	46	65.93	71.99	223	43	81.39	93.48	Yeterli √ / *Sufficient* √	93.48
PHYS 102 - Genel Fizik II / *PHYS 102 - General Physics II*													
a	M1	50	50	647	150	64.72	70.27	549	137	84.85	91.33	Yeterli √ / *Sufficient* √	91.33
b	M1	50	50	647	150	64.72	70.27	549	137	84.85	91.33	Yeterli √ / *Sufficient* √	91.33
e	M1	50	50	647	150	64.72	70.27	549	137	84.85	91.33	Yeterli √ / *Sufficient* √	91.33
g	M1	50	50	647	150	64.72	70.27	549	137	84.85	91.33	Yeterli √ / *Sufficient* √	91.33
TURK 101 - Türkçe I / *TURK 101 - Turkish I*													
c	M1	70	60	612	37	86.39	89.53	605	37	98.86	100	Yeterli √ / *Sufficient* √	100
g	M1	70	60	612	37	86.39	89.53	605	37	98.86	100	Yeterli √ / *Sufficient* √	100
TURK 102 - Türkçe II / *TURK 102 - Turkish II*													
c	M1	70	60	1438	123	88.83	90.01	1425	122	99.1	99.19	Yeterli √ / *Sufficient* √	99.19
g	M1	70	60	1438	123	88.83	90.01	1425	122	99.1	99.19	Yeterli √ / *Sufficient* √	99.19

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
CS 115	✓							
EEE 102						✓		
EEE 202	✓							
EEE 211	✓					✓		
EEE 212						✓		
EEE 313	✓							
EEE 321	✓							
EEE 342	✓							
EEE 351	✓	✓						
ENG 101			✓				✓	
ENG 102			✓				✓	
ENG 401			✓				✓	
GE 100			✓				✓	✓
GE 251			✓				✓	✓
GE 301				✓	✓		✓	
HIST 200			✓		✓		✓	
HUM 111			✓				✓	
HUM 112			✓				✓	
MATH 101	✓		✓		✓			
MATH 102	✓		✓		✓			
MATH 241	✓							
MATH 242	✓							
MATH 255	✓							
PHYS 101	✓	✓			✓		✓	
PHYS 102	✓	✓			✓		✓	
TURK 101			✓				✓	
TURK 102			✓				✓	

Tablo.4.3.1.1. 2023-2024 Akademik Yılı Güz Dönemi Elektrik ve Elektronik Mühendisliği Lisans Programı Program Çıktıları Performans Tablosu / ***Table.4.3.1.1.*** *2023-2024 Academic Year Fall Semester Electrical and Electronics 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
CS 115	✓							
EEE 102						✓		
EEE 202	✓							
EEE 211	✗					✓		
EEE 212						✓		
EEE 313	✓							
EEE 321	✓							
EEE 342	✓							
EEE 351	✓	✓						
ENG 101			✓				✓	
ENG 102			✓				✓	
ENG 401			✓				✓	
GE 100			✓				✓	✓
GE 251			✓				✓	✓
GE 301				✓	✓		✓	
GE 304		✓		✓			✓	
HIST 200			✓		✓		✓	
HUM 111			✓				✓	
HUM 112			✓				✓	
MATH 101	✓		✓		✓			
MATH 102	✓		✓		✓			
MATH 241	✓							
MATH 242	✓							
MATH 255	✗							
PHYS 101	✓	✓			✓		✓	
PHYS 102	✓	✓			✓		✓	
TURK 101			✓				✓	
TURK 102			✓				✓	

Tablo.4.3.1.2. 2023-2024 Akademik Yılı Bahar Dönemi Elektrik ve Elektronik Mühendisliği Lisans Programı Program Çıktıları Performans Tablosu / ***Table.4.3.1.2.*** *2023-2024 Academic Year Spring Semester Electrical and Electronics 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
CS 115	99.29							
EEE 102						97.50		
EEE 202	100.00							
EEE 211	84.62					100.00		
EEE 212						94.55		
EEE 313	85.58							
EEE 321	92.50							
EEE 342	81.16							
EEE 351	98.78	100.00						
ENG 101			99.22				99.22	
ENG 102			97.22				97.22	
ENG 401			100.00				100.00	
GE 100			100.00				100.00	100.00
GE 251			96.88				96.88	96.88
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	95.17		95.17		95.17			
MATH 102	87.50		87.50		87.50			
MATH 241	87.85							
MATH 242	96.72							
MATH 255	89.61							
PHYS 101	97.04	97.04			97.04		97.04	
PHYS 102	88.64	88.64			88.64		88.64	
TURK 101			99.21				99.21	
TURK 102			100.00				100.00	

Tablo.4.3.2.1. 2023-2024 Akademik Yılı Güz Dönemi Elektrik ve Elektronik Mühendisliği Lisans Programı Program Çıktıları Performans Oranları Tablosu / ***Table.4.3.2.1.*** *2023-2024 Academic Year Fall Semester Electrical and Electronics 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
CS 115	97.78							
EEE 102						98.85		
EEE 202	100							
EEE 211	71.43					96.83		
EEE 212						98.02		
EEE 313	87.65							
EEE 321	100							
EEE 342	95							
EEE 351	92.65	100						
ENG 101			95.12				95.12	
ENG 102			98.48				98.48	
ENG 401			99.12				99.12	
GE 100			100				100	100
GE 251			93.58				93.58	93.58
GE 301				100	100		100	
GE 304		100		100			100	
HIST 200			100		100		100	
HUM 111			100				100	
HUM 112			100				100	
MATH 101	90.91		90.91		90.91			
MATH 102	87.16		87.16		87.16			
MATH 241	95.16							
MATH 242	99.13							
MATH 255	70							
PHYS 101	93.48	93.48			93.48		93.48	
PHYS 102	91.33	91.33			91.33		91.33	
TURK 101			100				100	
TURK 102			99.19				99.19	

Tablo.4.3.2.2. 2023-2024 Akademik Yılı Bahar Dönemi Elektrik ve Elektronik Mühendisliği Lisans Programı Program Çıktıları Performans Oranları Tablosu / ***Table.4.3.2.2.*** *2023-2024 Academic Year Spring Semester Electrical and Electronics Engineering Undergraduate Program - Program Outcomes Performance Rates Table*

5. DEĞERLENDİRME / *EVALUATION*

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

In the measurement and evaluation studies carried out to evaluate the program outcomes of the 2023-2024 academic year, 8 program outcomes were measured with 27 different courses in the fall semester and 8 program outcomes were measured with 28 different courses in the spring semester.

In the evaluation made at the end of the fall semester, it was observed that all courses evaluated reached the targets set for the proficiency criteria regarding the achievement of program outcomes.

In the spring semester, two of the measurements taken regarding program outcome "a" were slightly below the proficiency threshold of 75%. It should be noted here that measurements were taken from 14 different courses in the fall semester for program outcome "a", and success scores over 87% were obtained in 12 of them. The scores of 71.43% and 70% in EEE 211 and MATH 255 are not far below the threshold and are not at a level that would significantly reduce the average value of program outcome "a" over the courses. Nevertheless, investigations have been initiated by the relevant professors and the curriculum committee to make updates to the components of EEE 211 and MATH 255 courses related to program outcome "a".

5.2. EĞİTİM AMAÇLARININ DEĞERLENDİRİLMESİ / *EVALUATION OF EDUCATIONAL OBJECTIVES*

Based on the evaluations made by the Advisory Board members of the Department of Electrical and Electronics Engineering, alumni, employers, students and faculty members, the educational objectives of our department were updated 2 years ago, and many different surveys and measurements were conducted to evaluate these new educational objectives. (These are graduate surveys, surveys conducted with senior students, employer surveys, Advisory Board surveys, and surveys conducted with faculty members.) When these surveys and measurements are evaluated, it is seen that the updated educational objectives are at a very satisfactory level and compatible with the mission of the university. In addition, it is evaluated that our graduates satisfy the items listed in our educational objectives. The collected data also includes recommendations to further improve educational objectives. Suggestions such as greater emphasis on teamwork and cooperation, practical skills, and social and cultural issues are also taken into consideration. Our department continues to collect measurements and make evaluations on these issues through meetings and surveys.