2025-2026 AKADEMİK YILI / *Academic Year*

EĞİTİMDE KALİTE GÜVENCESİ GÜZ DÖNEMİ RAPORU

QUALITY ASSURANCE IN EDUCATION FALL SEMESTER REPORT

MÜHENDİSLİK FAKÜLTESİ

FACULTY OF ENGINEERING

BİLGİSAYAR MÜHENDİSLİĞİ LİSANS PROGRAMI (CS)

COMPUTER ENGINEERING UNDERGRADUATE PROGRAM (CS)

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MÜHENDİSLİK FAKÜLTESİ / *FACULTY OF ENGINEERING*

BİLGİSAYAR MÜHENDİSLİĞİ LİSANS PROGRAMI – CS / COMPUTER ENGINEERING UNDERGRADUATE PROGRAM - CS

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**
CS 101	Algoritmalar ve Programlama I / *Algorithms and Programming I*	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
MBG 110	Modern Biyolojiye Giriş / *Introduction to Modern Biology*	3	0	3	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**
CS 102	Algoritmalar ve Programlama II / *Algorithms and Programming II*	3	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
MATH 132	Sonlu ve Kombinasyonal Matematik / *Discrete and Combinatorial Mathematics*	3	0	3	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 211	Veri Yapıları / *Data Structures*	3	0	3	5
CS 223	Sayısal Devre Tasarımı / *Digital Design*	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 225	Doğrusal Cebir ve Türevsel Denklemler / *Linear Algebra and Differential Equations*	4	0	4	6,5
PHYS 101	Genel Fizik I / *General Physics I*	3	3	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**
CS 224	Bilgisayar Yapısı / *Computer Organization*	3	4	4	6,5
CS 319	Nesneye Yönelik Yazılım Mühendisliği / *Object-Oriented Software Engineering*	3	0	4	6,5
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 230	Mühendisler İçin Olasılık ve İstatistik / *Probability and Statistics for Engineers*	3	0	3	5
PHYS 102	Genel Fizik II / *General Physics II*	3	3	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**
CS 299	Yaz Stajı I / *Summer Training I*	0	0	0	7
CS 311	Yapay Zekanın Matematiksel ve Hesaplamalı Temelleri / *Mathematical and Computational Foundations of Artificial Intelligence*	3	0	3	5
CS 353	Veri Tabanı Sistemleri / *Database Systems*	3	0	3	5
CS 473	Algoritmalar I / *Algorithms I*	3	0	3	5
ENG 401	Teknik Rapor Yazma ve Sunum / *Technical Report Writing and Presentation*	3	0	3	5
	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**
CS 342	İşletim Sistemleri / *Operating Systems*	3	0	4	6,5
CS 476	Otomata Teorisi ve Formal Diller / *Automata Theory and Formal Languages*	3	0	3	5
GE 301	Bilim, Teknoloji ve Toplum / *Science Technology and Society*	2	0	2	3,5
HIST 200	Türkiye Tarihi / *History of Turkey*	3	0	4	6,5
	Mühendislik Seçmeli Dersi / *Engineering Core 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**
CS 399	Yaz Stajı II / *Summer Training II*	0	0	0	7
IE 400	Mühendislik Yönetiminin İlkeleri / *Principles of Engineering Management*	3	0	3	5
	Temel Sanat Seçmeli Ders / *Arts Core Elective*			3	
	Proje Seçmeli Dersi / *Project Elective*			3	
	Teknik Seçmeli Ders (3) / *Technical Elective (3)*			9	
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**
	Genel Seçmeli Ders / *General Elective*			3	
	Proje Seçmeli Dersi / *Project Elective*			3	
	Teknik Seçmeli Ders (3) / *Technical Elective (3)*			9	

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 apply 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*

e. *contexts.*

f. 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 function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.*

g. 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.*

h. 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.*

i. 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. ÇIKTILARI – DERSLER MATRİSİ / *PROGRAM OUTCOMES - COURSES TABLE*

Dersler / *Courses*	Program Çıktıları / *Program Outcomes*							
	a	b	c	d	e	f	g	h
CS 101				✔		✔		
CS 102	✔	✔				✔		
CS 211	✔					✔		
CS 223		✔						
CS 224						✔		
CS 299	✔		✔	✔			✔	
CS 311	✔	✔						
CS 319	✔	✔	✔		✔			
CS 342						✔		
CS 353	✔	✔						
CS 399	✔		✔	✔			✔	
CS 473	✔	✔						
CS 476	✔							
ENG 101			✔				✔	
ENG 102			✔				✔	
ENG 401			✔				✔	
GE 100			✔	✔			✔	✔
GE 250			✔				✔	✔
GE 251			✔				✔	✔
GE 301				✔	✔		✔	
HIST 200			✔		✔		✔	
HUM 111			✔				✔	
HUM 112			✔				✔	
IE 400	✔				✔			
MATH 101	✔		✔		✔			
MATH 102	✔		✔		✔			
MATH 132	✔							
MATH 225	✔							
MATH 230	✔							
MBG 110	✔							
PHYS 101	✔	✔			✔		✔	
PHYS 102	✔	✔			✔		✔	
TURK 101			✔				✔	
TURK 102			✔				✔	

Tablo.2.2. Bilgisayar Mühendisliği Lisans Programı - Program Çıktıları ve Dersler Tablosu /
Table.2.2. *Computer Engineering Undergraduate Program - Program*

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	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 101	d	100	100	M1	50	75
	Program Outputs	**Lab work**	**Total Contribution**	**Qualification Calculation Method**	**(Average) Qualification Grade**	**Qualification Threshold (%)**
	f	100	100	M1	60	75

Course Code	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Lab work	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 102	a	30	30	10	30	100	M1	50	75
	Program Outputs	**Midterm:Essay/ written**	**Final:Essay/ written**	**Project**	**Total Contribution**	**Qualification Calculation Method**	**(Average) Qualification Grade**	**Qualification Threshold (%)**	
	b	33	34	33	100	M1	50	75	
	Program Outputs	**Lab work**	**Total Contribution**	**Qualification Calculation Method**	**(Average) Qualification Grade**	**Qualification Threshold (%)**			
	f	100	100	M1	60	75			

Course Code	Program Outputs	Lab work	Midterm:Open-Book	Final:Open-book	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 223	b	20	40	40	100	M1	50	75

Course Code	Program Outputs	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 224	f	100	100	M1	50	75

Course Code	Program Outputs	Midterm	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 319	a	100	100	M1	40	75
	Program Outputs	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	b	100	100	M1	40	75
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	c	100	100	M1	50	75
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	100	100	M1	50	75

Course Code	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 342	f	100	100	M1	50	75

Course Code	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 353	a	40	40	20	100	M1	40	75
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	b	100	100	M1	50	75		

Course Code	Program Outputs	Homework	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 473	a	40	25	35	100	M1	30	75
	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	b	40	60	100	M1	30	75	

Course Code	Program Outputs	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CS 476	a	100	100	M1	30	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 (%)**
	d	100	100	M1	12	80

Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
GE 100	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	Quiz	Quiz	Quiz	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
GE 301	d	30	20	10	10	10	20	100	M1	45	60
	Program Outputs	Final	Midterm	Quiz	Quiz	Quiz	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	30	20	10	10	10	20	100	M1	45	60
	Program Outputs	Final	Midterm	Quiz	Quiz	Quiz	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	30	20	10	10	10	20	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

Course Code	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
HIST 200	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:Essay/ written	Quiz	Quiz	Quiz	Quiz	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
IE 400	a	25	10	10	10	10	35	100	M1	30	75	
	Program Outputs	Midterm:Essay/ written	Quiz	Quiz	Quiz	Quiz	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	e	25	10	10	10	10	35	100	M1	30	75	
Course Code	Program Outputs	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
MATH 101	a	30	30	40	100	M1	40	50				

Course Code	Program Outputs	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MATH 101	c	30	30	40	100	M1	40	50
	Program Outputs	**Midterm**	**Midterm**	**Final**	**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	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	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MATH 132	a	33	33	34	100	M1	40	50

Course Code	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MATH 225	a	40	40	4	4	4	4	4	100	M1	40	50

Course Code	Program Outputs	Midterm:Essay/ written	Homework	Homework	Homework	Homework	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
MATH 230	a	40	3	4	4	4	45	100	M1	30	75	

Course Code	Program Outputs	Homework	Quiz	Quiz	Quiz	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MBG 110	a	7,5	7,5	7,5	7,5	20	25	25	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	a	15	20	15	5	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	15	5	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	15	5	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	15	5	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	15	5	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	15	5	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	15	5	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	15	5	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: Öğrencilerin ilgili program çıktısını kazanacağı öngörülen minimum not / *G: Minimum grade at which students attain the relevant program outcome*
- T: Dersin ilgili program çıktısının kazanımı için yeterli sayılacağı eşik öğrenci yüzdesi / *T: Threshold percentage of students for the course to be considered sufficient for the attainment of the relevant program outcome*
- 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*

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 (%) / *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 101 - Algoritmalar ve Programlama I / *CS 101 - Algorithms and Programming I*													
d	M1	50	75	132	120	93.76	93.7	132	120	100	100	Yeterli √ / Sufficient √	100
f	M1	60	75	132	120	94.11	94.42	132	120	100	100	Yeterli √ / Sufficient √	100
CS 102 - Algoritmalar ve Programlama II / *CS 102 - Algorithms and Programming II*													
a	M1	50	75	37	36	73.45	73.37	37	36	100	100	Yeterli √ / Sufficient √	100
b	M1	50	75	37	36	71.09	71.01	37	36	100	100	Yeterli √ / Sufficient √	100
f	M1	60	75	37	36	93.2	93.1	37	36	100	100	Yeterli √ / Sufficient √	100
CS 223 - Sayısal Devre Tasarımı / *CS 223 - Digital Design*													
b	M1	50	75	125	125	75	75	121	121	96.8	96.8	Yeterli √ / Sufficient √	96.8
CS 224 - Bilgisayar Yapısı / *CS 224 - Computer Organization*													
f	M1	50	75	64	64	87.69	87.69	61	61	95.31	95.31	Yeterli √ / Sufficient √	95.31
CS 319 - Nesneye Yönelik Yazılım Mühendisliği / *CS 319 - Object-Oriented Software Engineering*													
a	M1	40	75	139	139	61.33	61.33	132	132	94.96	94.96	Yeterli √ / Sufficient √	94.96
b	M1	40	75	139	139	70.83	70.83	137	137	98.56	98.56	Yeterli √ / Sufficient √	98.56
c	M1	50	75	139	139	91.81	91.81	139	139	100	100	Yeterli √ / Sufficient √	100
e	M1	50	75	139	139	91.81	91.81	139	139	100	100	Yeterli √ / Sufficient √	100
CS 342 - İşletim Sistemleri / *CS 342 - Operating Systems*													
f	M1	50	75	31	30	89.34	89.86	31	30	100	100	Yeterli √ / Sufficient √	100

Program Çıktısı / *Program Outcome*	Yeterlilik Hesaplama Yöntemi / *Method*	(Ortalama) Yeterlilik Notu / *Minimum Successful Grade*	Yeterlilik Eşiği (%) / *Treshold Percentage (%)*	Toplam Öğrenci Sayısı / *Number of Students (All)*	Toplam Dept. Öğrenci Sayısı / *Number of Students (Dept.)*	Tüm Öğrenci Ort. / *Average (All Std.)*	Dept. Öğrenci Ort. / *Average (Dept. Std.)*	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / *Number of Succ. Students (Dept.)*	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / *Success Ratio (Dept.)*	Performans / *Performance*	Yeterlilik Oranı / *Success Ratio*
CS 353 - Veri Tabanı Sistemleri / *CS 353 - Database Systems*													
a	M1	40	75	79	73	60.81	61.44	71	66	89.87	90.41	Yeterli √ / Sufficient √	90.41
b	M1	50	75	79	73	87.58	87.68	78	72	98.73	98.63	Yeterli √ / Sufficient √	98.63
CS 473 - Algoritmalar I / *CS 473 - Algorithms I*													
a	M1	30	75	190	188	63.43	63.71	189	188	99.47	100	Yeterli √ / Sufficient √	100
b	M1	30	75	190	188	69.2	69.56	187	186	98.42	98.94	Yeterli √ / Sufficient √	98.94
CS 476 - Otomata Teorisi ve Formal Diller / *CS 476 - Automata Theory and Formal Languages*													
a	M1	30	75	67	67	48.33	48.33	52	52	77.61	77.61	Yeterli √ / Sufficient √	77.61
ENG 101 - İngilizce ve Kompozisyon I / *ENG 101 - English and Composition I*													
c	M1	70	75	1478	129	83.35	87.41	1377	126	93.17	97.67	Yeterli √ / Sufficient √	97.67
g	M1	70	75	1478	129	83.35	87.41	1377	126	93.17	97.67	Yeterli √ / Sufficient √	97.67
ENG 102 - İngilizce ve Kompozisyon II / *ENG 102 - English and Composition II*													
c	M1	70	70	535	42	86.02	90.46	521	41	97.38	97.62	Yeterli √ / Sufficient √	97.62
g	M1	70	70	535	42	86.02	90.46	521	41	97.38	97.62	Yeterli √ / Sufficient √	97.62
ENG 401 - Teknik Rapor Yazma ve Sunum / *ENG 401 - Technical Report Writing and Presentation*													
c	M1	70	80	322	137	90.17	90.48	317	134	98.45	97.81	Yeterli √ / Sufficient √	97.81
g	M1	70	80	322	137	90.17	90.48	317	134	98.45	97.81	Yeterli √ / Sufficient √	97.81
GE 100 - Üniversite Hayatına Giriş / *GE 100 - Orientation*													
c	M1	12	80	1518	130	96.71	98.62	1518	130	100	100	Yeterli √ / Sufficient √	100
d	M1	12	80	1518	130	96.71	98.62	1518	130	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 100 - Üniversite Hayatına Giriş / *GE 100 - Orientation*													
g	M1	12	80	1518	130	96.71	98.62	1518	130	100	100	Yeterli √ / Sufficient √	100
h	M1	12	80	1518	130	96.71	98.62	1518	130	100	100	Yeterli √ / Sufficient √	100
GE 251 - Üniversite Etkinlik Programı II / *GE 251 - Collegiate Activities Program II*													
c	M1	70	70	889	61	92.49	95.16	799	58	89.88	95.08	Yeterli √ / Sufficient √	95.08
g	M1	70	70	889	61	92.49	95.16	799	58	89.88	95.08	Yeterli √ / Sufficient √	95.08
h	M1	70	70	889	61	92.49	95.16	799	58	89.88	95.08	Yeterli √ / Sufficient √	95.08
GE 301 - Bilim, Teknoloji ve Toplum / *GE 301 - Science Technology and Society*													
d	M1	45	60	358	64	85.47	86.19	358	64	100	100	Yeterli √ / Sufficient √	100
e	M1	45	60	358	64	85.47	86.19	358	64	100	100	Yeterli √ / Sufficient √	100
g	M1	45	60	358	64	85.47	86.19	358	64	100	100	Yeterli √ / Sufficient √	100
HIST 200 - Türkiye Tarihi / *HIST 200 - History of Turkey*													
c	M1	70	75	1022	107	91.01	93.36	1006	107	98.43	100	Yeterli √ / Sufficient √	100
e	M1	70	75	1022	107	91.01	93.36	1006	107	98.43	100	Yeterli √ / Sufficient √	100
g	M1	70	75	1022	107	91.01	93.36	1006	107	98.43	100	Yeterli √ / Sufficient √	100
HUM 111 - Kültürler, Medeniyetler ve Düşünceler I / *HUM 111 - Cultures Civilizations and Ideas I*													
c	M1	60	75	1273	127	83.63	88.19	1262	126	99.14	99.21	Yeterli √ / Sufficient √	99.21
g	M1	60	75	1273	127	83.63	88.19	1262	126	99.14	99.21	Yeterli √ / Sufficient √	99.21
HUM 112 - Kültürler, Medeniyetler ve Düşünceler II / *HUM 112 - Cultures Civilizations and Ideas II*													
c	M1	60	75	289	44	83.97	87.29	285	44	98.62	100	Yeterli √ / Sufficient √	100
g	M1	60	75	289	44	83.97	87.29	285	44	98.62	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*
IE 400 - Mühendislik Yönetiminin İlkeleri / *IE 400 - Principles of Engineering Management*													
a	M1	30	75	122	117	65.34	65.96	120	115	98.36	98.29	Yeterli √ / Sufficient √	98.29
e	M1	30	75	122	117	65.34	65.96	120	115	98.36	98.29	Yeterli √ / Sufficient √	98.29
MATH 101 - Matematik I / *MATH 101 - Calculus I*													
a	M1	40	50	690	134	55.03	60.24	547	118	79.28	88.06	Yeterli √ / Sufficient √	88.06
c	M1	40	50	690	134	55.03	60.24	547	118	79.28	88.06	Yeterli √ / Sufficient √	88.06
e	M1	40	50	690	134	55.03	60.24	547	118	79.28	88.06	Yeterli √ / Sufficient √	88.06
MATH 102 - Matematik II / *MATH 102 - Calculus II*													
a	M1	40	50	183	43	59.14	68.16	150	42	81.97	97.67	Yeterli √ / Sufficient √	97.67
c	M1	40	50	183	43	59.14	68.16	150	42	81.97	97.67	Yeterli √ / Sufficient √	97.67
e	M1	40	50	183	43	59.14	68.16	150	42	81.97	97.67	Yeterli √ / Sufficient √	97.67
MATH 132 - Sonlu ve Kombinasyonal Matematik / *MATH 132 - Discrete and Combinatorial Mathematics*													
a	M1	40	50	155	52	63.28	67.06	144	50	92.9	96.15	Yeterli √ / Sufficient √	96.15
MATH 225 - Doğrusal Cebir ve Türevsel Denklemler / *MATH 225 - Linear Algebra and Differential Equations*													
a	M1	40	50	230	81	62.43	64.85	206	76	89.57	93.83	Yeterli √ / Sufficient √	93.83
MATH 230 - Mühendisler İçin Olasılık ve İstatistik / *MATH 230 - Probability and Statistics for Engineers*													
a	M1	30	75	223	135	65.13	67.52	223	135	100	100	Yeterli √ / Sufficient √	100
MBG 110 - Modern Biyolojiye Giriş / *MBG 110 - Introduction to Modern Biology*													
a	M1	50	50	449	126	77.45	81.87	433	126	96.44	100	Yeterli √ / Sufficient √	100
PHYS 101 - Genel Fizik I / *PHYS 101 - General Physics I*													
a	M1	50	50	638	130	73.77	78.27	613	127	96.08	97.69	Yeterli √ / Sufficient √	97.69
b	M1	50	50	638	130	73.77	78.27	613	127	96.08	97.69	Yeterli √ / Sufficient √	97.69

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*
PHYS 101 - Genel Fizik I / *PHYS 101 - General Physics I*													
e	M1	50	50	638	130	73.77	78.27	613	127	96.08	97.69	Yeterli √ / Sufficient √	97.69
g	M1	50	50	638	130	73.77	78.27	613	127	96.08	97.69	Yeterli √ / Sufficient √	97.69
PHYS 102 - Genel Fizik II / *PHYS 102 - General Physics II*													
a	M1	50	50	179	44	64.59	69.3	152	40	84.92	90.91	Yeterli √ / Sufficient √	90.91
b	M1	50	50	179	44	64.59	69.3	152	40	84.92	90.91	Yeterli √ / Sufficient √	90.91
e	M1	50	50	179	44	64.59	69.3	152	40	84.92	90.91	Yeterli √ / Sufficient √	90.91
g	M1	50	50	179	44	64.59	69.3	152	40	84.92	90.91	Yeterli √ / Sufficient √	90.91
TURK 101 - Türkçe I / *TURK 101 - Turkish I*													
c	M1	70	60	1373	108	87.67	90.3	1347	108	98.11	100	Yeterli √ / Sufficient √	100
g	M1	70	60	1373	108	87.67	90.3	1347	108	98.11	100	Yeterli √ / Sufficient √	100
TURK 102 - Türkçe II / *TURK 102 - Turkish II*													
c	M1	70	60	592	48	88.83	90.93	588	47	99.32	97.92	Yeterli √ / Sufficient √	97.92
g	M1	70	60	592	48	88.83	90.93	588	47	99.32	97.92	Yeterli √ / Sufficient √	97.92

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
CS 101				✓		✓		
CS 102	✓	✓				✓		
CS 223		✓						
CS 224						✓		
CS 319	✓	✓	✓		✓			
CS 342						✓		
CS 353	✓	✓						
CS 473	✓	✓						
CS 476	✓							
ENG 101			✓				✓	
ENG 102			✓				✓	
ENG 401			✓				✓	
GE 100			✓	✓			✓	✓
GE 251			✓				✓	✓
GE 301				✓	✓		✓	

Dersler / *Courses*	Program Çıktıları / *Program Outcomes*							
	a	b	c	d	e	f	g	h
HIST 200			✓		✓		✓	
HUM 111			✓				✓	
HUM 112			✓				✓	
IE 400	✓				✓			
MATH 101	✓		✓		✓			
MATH 102	✓		✓		✓			
MATH 132	✓							
MATH 225	✓							
MATH 230	✓							
MBG 110	✓							
PHYS 101	✓	✓			✓		✓	
PHYS 102	✓	✓			✓		✓	
TURK 101			✓				✓	
TURK 102			✓				✓	

Tablo.3.3.1. 2025-2026 Akademik Yılı Güz Dönemi Bilgisayar Mühendisliği Lisans Programı Program Çıktıları Performans Tablosu / ***Table.3.3.1.***
2025-2026 Academic Year Fall Semester Computer Engineering Undergraduate Program - Program Outcomes Performance Table

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

Dersler / *Courses*	Program Çıktıları / *Program Outcomes*							
	a	b	c	d	e	f	g	h
CS 101				100		100		
CS 102	100	100				100		
CS 223		96.8						
CS 224						95.31		
CS 319	94.96	98.56	100		100			
CS 342						100		
CS 353	90.41	98.63						
CS 473	100	98.94						
CS 476	77.61							
ENG 101			97.67				97.67	
ENG 102			97.62				97.62	
ENG 401			97.81				97.81	
GE 100			100	100			100	100
GE 251			95.08				95.08	95.08
GE 301				100	100		100	

Dersler / *Courses*	Program Çıktıları / *Program Outcomes*							
	a	b	c	d	e	f	g	h
HIST 200			100		100		100	
HUM 111			99.21				99.21	
HUM 112			100				100	
IE 400	98.29				98.29			
MATH 101	88.06		88.06		88.06			
MATH 102	97.67		97.67		97.67			
MATH 132	96.15							
MATH 225	93.83							
MATH 230	100							
MBG 110	100							
PHYS 101	97.69	97.69			97.69		97.69	
PHYS 102	90.91	90.91			90.91		90.91	
TURK 101			100				100	
TURK 102			97.92				97.92	

Tablo.3.3.2. 2025-2026 Akademik Yılı Güz Dönemi Bilgisayar Mühendisliği Lisans Programı Program Çıktıları Performans Oranları Tablosu /
Table.3.3.2. *2025-2026 Academic Year Fall Semester Computer Engineering Undergraduate Program - Program Outcomes Performance Rates Table*