

FACULTY OF ARTIFICIAL INTELLIGENCE AND INFORMATICS  
ARTIFICIAL INTELLIGENCE ENGINEERING

YAPAY ZEKA VE BİLİŞİM FAKÜLTESİ  
YAPAY ZEKA MÜHENDİSLİĞİ

1<sup>st</sup> Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
MTH113	LINEAR ALGEBRA	DOĞRUSAL CEBİR	C	3	3	5	
AI102	PROGRAMMING AND PROBLEM SOLVING	PROGRAMLAMA VE PROBLEM ÇÖZME	C	3	4	5	
ENG101	ENGLISH I	İNGİLİZCE I	C	3	2	3	
MTH101	CALCULUS I	MATEMATİK I	C	4	4	5	
PHY101	GENERAL PHYSICS I	GENEL FİZİK I	C	3	4	5	
CHM101	GENERAL CHEMISTRY I	GENEL KİMYA I	C	3	4	5	
Total				21	21	#	

2<sup>nd</sup> Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AI104	DISCRETE STRUCTURES	DISKRİT YAPILAR	C	3	0	3	5
ENG102	ENGLISH II	İNGİLİZCE II	C	3	0	2	3
MTH102	CALCULUS II	MATEMATİK II	C	4	0	4	6
PHY102	GENERAL PHYSICS II	GENEL FİZİK II	C	3	2	4	6
AI108	OBJECT ORIENTED PROGRAMMING	NESNE YÖNÜMLÜ PROGRAMLAMA	C	2	2	3	6
GECS51	21ST CENTURY SKILLS	21. YY BECERİLERİ	E	2	0	0	2
Total				19	4	16	30

3<sup>rd</sup> Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AI001	LOGIC DESIGN	SAYISAL MANTIK	C	3	4	6	
AI201	DATA STRUCTURES & ALGORITHMS	VERİ YAPILARI VE ALGORİTMALAR	C	3	4	6	
AIE201	AI PRINCIPLES AND TECHNIQUES	YAPAY ZEKA İLKE VE TEKNİKLERİ	C	3	3	3	
MTH201	DIFFERENTIAL EQUATIONS	DİFERANSİYEL DENKLEMLER	C	4	4	6	
AI007	MULTIMEDIA SYSTEMS	MÜLTİMEDYA SİSTEMLERİ	C	3	3	5	
AI103	ATATÜRK PRINCIPLES AND REFORMS I	ATATÜRK İLKELERİ VE İNKILAP TARİHİ I	C	2	2	2	
YIT101	TURKISH FOR FOREIGNERS I	YABANCILAR İÇİN TÜRKÇE I	C	2	2	2	
Total				20	22	#	

4<sup>th</sup> Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AI202	DATABASE MANAGEMENT SYSTEMS	VERİ TABANI YÖNETİM SİSTEMLERİ	C	4	0	4	5
AIE206	REASONING AND AGENTS IN AI	YAPAY ZEKADA AKIL YÜRÜTME VE ARACILAR	C	4	0	4	7
MTH251	PROBABILITY AND STATISTICS	OLASILIK VE İSTATİSTİK	C	3	0	3	6
AI104	ATATÜRK PRINCIPLES AND REFORMS II	ATATÜRK İLKELERİ VE İNKILAP TARİHİ II	C	2	0	2	2
AIE299	SUMMER TRAINING I	STAJ I	C	0	0	0	6
CHC100	CYPRUS HISTORY AND CULTURE	KIBRIS KÜLTÜRÜ VE TARİHİ	E	2	0	0	2
YIT102	TURKISH FOR FOREIGNERS II	YABANCILAR İÇİN TÜRKÇE II	C	2	0	2	2
Total				17	0	15	30

5<sup>th</sup> Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AI302	OPERATING SYSTEMS	İŞLETİM SİSTEMLERİ	C	3	3	6	
AIE301	PATTERN RECOGNITION	DESEN TANIMA	E	2	3	5	
ENG201	ORAL COMMUNICATION SKILLS	SÖZLÜ İLETİŞİM BECERİLERİ	C	3	3	3	
AIE303	NATURAL LANGUAGE PROCESSING	DOĞAL DİL İŞLEMİ	E	3	3	3	
AI439	OCCUPATIONAL HEALTH AND SAFETY I	İŞ SAĞLIĞI VE GÜVENLİĞİ I	C	2	2	4	
AI427	MANAGEMENT FOR ENGINEERS	MÜHENDİSLER İÇİN YÖNETİM	C	3	3	5	
AIE204	NEURAL COMPUTATION	SİNİRSEL HESAPLAMALAR	C	2	3	4	
Total				18	20	#	

6<sup>th</sup> Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AIE302	INTRODUCTION TO MACHINE LEARNING	MAKİNE ÖĞRENİMİNE GİRİŞ	E	3	2	4	7
AI303	DATA COMMUNICATIONS AND NETWORKING	VERİ İLETİŞİMİ VE AĞLAR	C	3	2	4	5
AIE304	LEARNING IN HUMANS	İNSANLARDA ÖĞRENME	E	3	0	3	5
AIE306	DEEP LEARNING	DERİN ÖĞRENME	E	2	2	3	5
AI440	OCCUPATIONAL HEALTH AND SAFETY II	İŞ SAĞLIĞI VE GÜVENLİĞİ II	C	2	0	3	2
AIE399	SUMMER TRAINING II	STAJ II	C	0	0	0	6
Total				13	6	17	30

7<sup>th</sup> Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AIE401	INTRODUCTION TO ROBOTICS	ROBOTİĞE GİRİŞ	E	2	3	7	
AIE403	COMPUTER VISION	BİLGİSAYAR GÖRÜŞÜ	E	2	3	7	
AIE491	SENIOR PROJECT I	BİTİRME PROJESİ I	C	3	3	6	
TE	TECHNICAL ELECTIVE	TEKNİK SEÇMELİ	E	2	3	5	
TE	TECHNICAL ELECTIVE	TEKNİK SEÇMELİ	E	2	3	5	
Total				11	15	#	

8<sup>th</sup> Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AI429	ENGINEERING ETHICS	MÜHENDİSLİK ETİĞİ	C	3	0	3	6
AIE492	SENIOR PROJECT II	BİTİRME PROJESİ II	C	4	0	4	7
AIE402	SPEECH PROCESSING	KONUŞMA İŞLEMİ	E	2	2	3	7
TE	TECHNICAL ELECTIVE	TEKNİK SEÇMELİ	E	2	2	3	5
TE	TECHNICAL ELECTIVE	TEKNİK SEÇMELİ	E	2	2	3	5
Total				7	0	16	30

Total No. of Courses	51
Total No. Of Electives	14
Total No. Of Credits	142

Percentage of Electives	27
New Total ECTS	240

Kov: C/E: Compulsory/Elective T: Hours of Theoretical Study

P: Hours of Practice/Lab C: Credits E: ECTS

Previous Total No. of Credits	141
New Total No. of Credits	142
Previous Total ECTS	240
New Total ECTS	No change

CODE	COURSE NAME	COURSE TURKISH NAME	T	P	C	E
AI002	Sistemlerin Simülasyonu	Systems Simulation	2	2	3	5
AI415	Decision Making	Karar verme	2	2	3	5
AI419	Image Processing	Görüntü İşleme	2	2	3	5
AIE411	Advanced Data Analysis	Gelişmiş Veri Analizi	2	2	3	5
AIE412	Information Retrieval and Web Search	Bilgi Alma ve Web Araması	2	2	3	5
AIE413	Human-Robot Interaction	İnsan-Robot Etkileşimi	2	2	3	5
AIE414	Deep Reinforcement Learning and Control	Derin Güçlendirme Öğrenmesi ve Kontrolü	2	2	3	5
AIE415	Mobile Robot Programming	Mobil Robot Programlama	2	2	3	5
AIE416	Autonomous Agents	Otonom Aracilar	2	2	3	5
AIE417	Introduction to Quantum Computing	Kuantum Bilgisayara Giriş	2	2	3	5
AIE418	Computer Animation & Visualization	Bilgisayar Animasyonu ve Görselleştirme	2	2	3	5
AIE419	Algorithmic Game Theory and Its Applications	Algoritmik Oyun Teorisi ve Uygulamaları	2	2	3	5
AIE420	Fuzzy Systems	Bulanık Sistemler	2	2	3	5
AIE458	Artificial Intelligence and Internet of Things	Yapay Zeka ve Nesnelerin İnterneti	2	2	3	5
AIE457	AI and Cloud Computing	Yapay Zeka ve Bulut Bilgişim	2	2	3	5
AI461	Fundamentals of Generative Artificial Intelligence	Üretken Yapay Zekanın Temelleri	2	2	3	5