FACULTY OF ARTIFICIAL INTELLIGENCE AND INFORMATICS
DATA ANALYTICS ENGINEERING DEPARTMENT

YAPAY ZEKA VE BİLİŞİM FAKÜLTESİ
VERİ ANALİTİĞİ MÜHENDİSLİĞİ BÖLÜMÜ

1st Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
MTH113	LINEAR ALGEBRA	DOĞRUSAL CEBIR	C	3	0	3	5
AII102	PROGRAMMING AND PROBLEM SOLVING	PROGRAMLAMA VE PROBLEM ÇÖZME	C	3	2	4	5
ENG101	ENGLISH I	İNGILIZCE I	C	3	0	2	3
MTH101	CALCULUS I	MATEMATIK I	C	4	0	4	5
PHY101	GENERAL PHYSICS I	GENEL FIZIK I	C	3	2	4	5
CAM100	CAMPUS ORIENTATION	KAMPÜSE UYUM	C	2	0	0	2
CHM101	GENERAL CHEMISTRY I	GENEL KIMYA I	C	3	2	4	5
Total				21	6	21	#

2nd Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AII104	DISCRETE STRUCTURES	DISKRIT YAPILAR	C	3	0	3	6
ENG102	ENGLISH II	İNGILIZCE II	C	3	0	2	3
MTH102	CALCULUS II	MATEMATIK II	C	4	0	4	6
PHY102	GENERAL PHYSICS II	GENEL FIZIK II	C	3	2	4	6
AII108	OBJECT ORIENTED PROGRAMMIN	NESNE YÖNÜMLÜ PROGRAM	C	2	2	3	5
YIT101	TURKISH FOR FOREIGNERS I	YABANCILAR IÇIN TÜRKÇE I	C	2	0	2	2
GEC351	21st CENTURY SKILLS	21. YÜZYIL BECERİLERİ	C	2	0	0	2
Total				19	4	18	30

3rd Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
DAE001	ADVANCED ALGEBRA AND CALCULUS	İLERI CEBIR VE HESAPLAMA	C	3	2	4	6
AII201	DATA STRUCTURES & ALGORITHMS	VERI YAPILARI VE ALGORITMALAR	C	3	2	4	6
DAE003	INFORMATION THEORY	BILGI TEORISI	E	3	0	4	4
MTH 201	DIFFERENTIAL EQUATIONS	DIFERANSIYEL DENKLEMLER	C	4	0	4	6
DAE002	INTRODUCTION TO AUDIOVISUAL PROCESSING	GÖRSEL-İŞITSEL İŞLEME GIRIŞ	E	3	0	3	4
AIT 103	ATATÜRK PRINCIPLES AND REFORMS I	ATATÜRK İLKELERI VE İNKILAP TARIHI	C	2	0	2	2
YIT102	TURKISH FOR FOREIGNERS II	YABANCILAR IÇIN TÜRKÇE II	C	2	0	2	2
Total				20	4	23	#

4th Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AII202	DATABASE MANAGEMENT SYSTEM	VERI TABANI YÖNETIM SISTE	C	4	0	4	5
DAE004	DATA ENGINEERING THEORY	VERI MÜHENDISLIĞI TEORISI	E	3	2	3	5
DAE005	SIGNALS AND SYSTEMS	SINYAL VE SISTEMLER	C	4	0	4	4
MTH251	PROBABILITY AND STATISTICS	OLASILIK VE İSTATISTIK	C	3	0	3	6
AIT104	ATATÜRK PRINCIPLES AND REFOR	ATATÜRK İLKELERI VE İNKILA	C	2	0	2	2
AIE299	SUMMER TRAINING I	STAJ 1	C	0	2	0	6
CHC100	CYPRUS HISTORY AND CULTURE	KIBRIS KÜLTÜRÜ VE TARIHI	E	2	0	0	2
Total				18	4	16	30

5th Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
DAE007	PROBABILITY AND STATISTICS 2	OLASILIK VE İSTATISTIK 2	C	3	0	3	5
DAE006	MACHINE LEARNING FOR SATELLITE IMAGERY	UYDU GÖRÜNTÜLERI IÇIN MAKINE ÖĞ	E	2	2	3	5
ENG201	ORAL COMMUNICATION SKILLS	SÖZLÜ İLETIŞIM BECERILERI	C	3	0	3	4
DAE008	PRESCRIPTIVE ANALYTICS I	ÖNGÖRÜCÜ ANALITIK I	E	3	0	3	5
AII439	OCCUPATIONAL HEALTH AND SAFETY I	İŞ SAĞLIĞI VE GÜVENLIĞI I	C	2	0	2	4
DAE009	SYSTEMS ENGINEERING	SISTEM MÜHENDISLIĞI	E	3	0	3	5
CAR100	CAREER PLANNING	KARIYER PLANLAMA	C	2	0	0	2
				18	2	17	#

6th Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
DAE011	MACHINE LEARNING 1	MAKINE ÖĞRENMESI 1	E	3	0	4	5
DAE012	MATHEMATICAL OPTIMIZATION	MATEMATIKSEL OPTIMIZASY	E	3	2	4	5
DAE013	PARALLELISM AND DISTRIBUTED	PARALELLIK VE DAĞITIK SISTE	E	3	0	4	5
DAE014	ADVANCED DATABASES	GELIŞMIŞ VERITABANLARI	E	4	2	4	5
AIE399	SUMMER TRAINING II	STAJ II	C	0	0	0	5
DAE010	PRESCRIPTIVE ANALYTICS II	ÖNGÖRÜCÜ ANALITIK II	E	3	0	4	5
Total				16	4	20	30

7th Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
DAE015	MACHINE LEARNING 2	MAKINE ÖĞRENMESI 2	E	3	0	3	5
DAE016	ENTREPRENEURSHIP AND INNOVATION	GIRIŞIMCILIK VE İNOVASYON	E	3	0	3	4
DAE018	SENIOR ADVANCED DESIGN PROJECT I	KIDEMLI İLERI TASARIM PROJESI I	C	4	2	4	6
TE	TECHNICAL ELECTIVE	TEKNIK SEÇMELI	E	3	0	3	5
TE	TECHNICAL ELECTIVE	TEKNIK SEÇMELI	E	3	0	3	5
DAE017	INFORMATION RETRIEVAL AND ANALYSIS	BILGI ALMA VE ANALIZI	E	3	2	4	5
Total				19	4	20	#

8th Semester

CODE	COURSE NAME	DERS ADI	C/E	T	P	C	E
AII429	ENGINEERING ETHICS	MÜHENDISLIK ETIĞI	C	3	0	3	5
DAE019	SENIOR ADVANCED DESIGN PROJ	KIDEMLI İLERI TASARIM PROJ	C	3	0	3	5
DAE020	INFORMATION VISUALIZATION	BILGI GÖRSELLEŞTIRME	E	3	0	3	4
TE	TECHNICAL ELECTIVE	TEKNIK SEÇMELI	E	3	0	3	5
TE	TECHNICAL ELECTIVE	TEKNIK SEÇMELI	E	3	0	3	5
DAE021	IMAGE PROCESSING AND MACHI	GÖRÜNTÜ İŞLEME VE MAKIN	E	3	0	3	4
AII440	OCCUPATIONAL HEALTH AND SA	İŞ SAĞLIĞI VE GÜVENLIĞI II	C	2	0	3	2
Total				18	0	21	30

Total No. of Courses	54
Total No. Of Electives	21
Total No. Of Credits	156
Percentage of Electives	39
Total ECTS	240

Key:

C/E:Compulsory/Elective	T: Hours of Theoretical Study	P: Hours of Practice/Lab
C: Credits	E: ECTS	

Previous Total No. of Credits	163
New Total No. of Credits	158
Previous Total ECTS	240
New Total ECTS	No change

ELECTIVE CORSE

CODE	COURSE NAME	COURSE TURKISH NAME	T	P	C	E
AII419	IMAGE PROCESSING	GÖRÜNTÜ İŞLEME	2	2	3	5
AII415	DECISION MAKING	KARAR VERME	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 ARAMASI	2	2	3	5
AIE413	HUMAN-ROBOT INTERACTION	İNSAN-ROBOT ETKILEŞIMI	2	2	3	5
AIE414	DEEP REINFORCEMENT LEARNING AND CONTRO	DERIN GÜÇLENDIRME ÖĞRENMESI VE KONT	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 GÖRSELLEŞTIR	2	2	3	5
AIE419	ALGORITHMIC GAME THEORY AND ITS APPLICAT	ALGORITMIK OYUN TEORISI VE UYGULAMAL	2	2	3	5
AIE420	FUZZY SYSTEMS	BULANIK SISTEMLER	2	2	3	5
AIE458	AI AND INTERNET OF THINGS	YAPAY ZEKA VE NESNELERIN İNTERNETI	2	2	3	5
AIE457	AI AND CLOUD COMPUTING	YAPAY ZEKA VE BULUT BILIŞIM	2	2	3	5
DAE022	BIG DATA SYSTEMS	BÜYÜK VERI SISTEMLERI	2	2	3	5
DAE023	DATA SECURITY AND PRIVACY FOR ANALYTICS	ANALITIK ICIN VERI GÜVENLIĞI VE GIZLILIĞI	2	2	3	5
DAE024	BUSINESS ANALYTICS	İŞ ANALITIĞI	2	2	3	5
DAE025	HEALTH INFORMATICS	SAĞLIK BILIŞIMI	2	2	3	5