

FACULTY OF ENGINEERING ELECTIVE COURSE TYPES AND DESCRIPTIONS

ELECTIVE COURSE POOLS

(2025-2026 Academic Year)

Courses offered by the faculties and schools of Özyeğin University which are not required course for the student, are elective courses. Students are liable for taking a certain number of electives as per the graduation requirements of their degree programs. Turkish-medium courses are not considered electives. Courses (not counted) as electives for Engineering students are identified and announced by the Faculty Board of the Faculty of Engineering at the beginning of each academic semester. Unless otherwise is stated, electives announced in the previous academic semester will prevail.

1) Free Elective Courses Pool

ATTENTION! The following courses will NOT BE COUNTED AS free electives. Courses not listed below can be considered Free Electives.

Course Code	Course Name	School
ACCT 201	Financial Accounting	FEAS -Faculty of Business
ACCT 301	Managerial Accounting	FEAS -Faculty of Business
ARCH 208	Structural Analysis	FAD- Faculty of Architecture and Design
AVM 202	Data Analysis in Aviation Management	SAV- School of Aviation Aeronautical Science
COD 206	Information Architecture	FAD- Faculty of Architecture and Design
COD 208	Advanced Programming	FAD- Faculty of Architecture and Design
ECON 101	Microeconomics	FEAS -Faculty of Business
ECON 102	Macroeconomics	FEAS -Faculty of Business
ECON 106	Economics for Lawyers	FEAS -Faculty of Business
ECON 307	Game Theory	FEAS -Faculty of Business
ECON 206	Statistics for Economics II	FEAS -Faculty of Business
ENG 103	English I (Turkish-medium programs)	SCOLA- School of Languages
ENG 104	English II (Turkish-medium programs)	SCOLA- School of Languages
ENG 105	English I (Speaking Skills)	SCOLA- School of Languages
ENG 106	English II (Speaking Skills)	SCOLA- School of Languages
MGMT 311	Project Management	FEAS -Faculty of Business
MGMT 322	Sustainability in Business	FEAS -Faculty of Business
MIS 101	Introduction to Information Systems and Technologies	FEAS -Faculty of Business
MIS 102	Database Management	FEAS -Faculty of Business
MIS 202	Data Mining	FEAS -Faculty of Business
MIS 304	Information Security	FEAS -Faculty of Business
MIS 311	Introduction to Management Information Systems	FEAS -Faculty of Business
MIS 313	Enterprise Data and Knowledge: Organization and Management	FEAS -Faculty of Business
MIS 315	Data Analysis and Decision Modeling	FEAS -Faculty of Business
MIS 411	Programming in Visual Basic	FEAS -Faculty of Business
OPER 202	Operations Management	FEAS -Faculty of Business
OPER 312	Supply Chain Management	FEAS -Faculty of Business

OPER 314	Service Operations Management	FEAS -Faculty of Business
OPER 315	Decision Making & Optimization Models	FEAS -Faculty of Business
OPER 316	Management Science Modeling with Excel	FEAS -Faculty of Business
OPER 412	Enterprise Resource Planning Systems with SAP	FEAS -Faculty of Business
PHYS 103	Physics for Pilot Training	SAV- School of Aviation Aeronautical Science
PHYS 104	Physics for Pilot Training	SAV- School of Aviation Aeronautical Science
PSY 104	Statistics for Psychology II	FAS- Faculty of Social Sciences
PSY 104R	Statistics for Psychology II -Recitation	FAS- Faculty of Social Sciences
HMAN	All Courses	SAS- School of Applied Sciences
GARM	All Courses	SAS- School of Applied Sciences
SAS	All Courses	SAS- School of Applied Sciences
PLT	All Courses	SAV- School of Aviation Aeronautical Science
CS 401-CS 402-EE401-EE402-ME 401-ME 402-IE 401-IE 402-CE 441, AI 401 and 402	Senior Project Courses	FE-Engineering Faculty

2) Social Sciences Electives

The following courses **will be counted** as “Social Sciences Electives”.

Dersin Kodu		Dersin Adı (ING)	Dersin Adı (TR)
HIST	103	World History I	Uygarlık Tarihi I
HIST	104	World History II	Uygarlık Tarihi II
HIST	309	The Ottomans Inside and Out	Enine Boyuna Osmanlılar
HIST	310	History of the Balkans	Balkan Tarihi
HIST	311	Travel, maps and wonders through history	Tarih boyunca seyahat, haritalar ve harikalar
HUM	302	Seriality in Media and Literature	Medya ve Edebiyatta Dizisellik
HUM	304	Culture Through Film	Film Yoluyla kültürleri Anlamak
HUM	310	Culture and Society	Kültür ve Toplum
HUM	315	Literature and Gender	Edebiyat ve Toplumsal Cinsiyet
HUM	316	Political Anthropology	Siyasal Antropoloji
HUM	319	Philosophy Goes to the Movies: An Introduction to Philosophy	Filmlerle Felsefe: Felsefeye Giriş
HUM	321	Science, Technology and Society	Bilim, Teknoloji ve Toplum
HUM	353	Literature and Modernism	Edebiyat ve Modernizm
IR	101	Introduction to Political Science	Siyaset Bilimine Giriş
IR	311	International Conflict Analysis	Uluslararası Çatışma Analizi
IR	312	American Politics	Amerikan Politikası

IR	313	Clashing Views: Current Issues in Politics and Society	Tartışmalı Fikirler: Politik ve Toplumsal Konular
IR	318	Let's Explore Europe!	Avrupayı Keşfetmek!
IR	323	Russian Politics	Rusya Siyaseti
IR	326	Politics of Race and Ethnicity	İrk ve Etnisite Siyaset
IR	329	Democracy and Democratization	Demokrasi ve Demokratikleşme
IR	421	Computational Social Science	Programlamalı Sosyal Bilimler
MUSIC	103	Music of the World	Dünya Müzikleri
PHIL	104	Truth, Knowledge and Ethics	Doğruluk, Bilgi ve Etik Karar Verme
PSY	100	General Psychology	Genel Psikoloji
PSY	302	Biopsychology	Biyopsikoloji
PSY	313	Motivation and Self Regulation	Motivasyon ve Öz-Düzenleme
PSY	314	Human Memory	İnsan Belleği
PSY	317	Thinking & Reasoning	Düşünme ve Akıl Yürütme
PSY	324	Sensation and Perception	Duyum ve Algı
PSY	429	Leadership and Motivation at Work	İş Hayatında Liderlik ve Motivasyon
SOC	201	Introduction to Social Sciences	Sosyal Bilimlere Giriş
SOC	302	Sociology and Politics of Religion and Secularism	Din ve Sekülerlik Sosyolojisi ve Siyaseti
SOC	304	Sociology of Work and Employment: An Introduction to Modern Working Life	Çalışma ve İstihdamın Sosyolojisi: Modern Çalışma Hayatına Giriş
ANT	101	Introduction to Anthropology	Antropolojiye Giriş
ANT	212	Environment ve Society	Çevre ve Toplum
ANT	303	Gender, Society, Politics	Toplumsal Cinsiyet, Toplum, Siyaset
ANT	319	Disasters and Resilient Cities	Afetler ve Dayanıklı Kentler

3) Engineering Certificate Elective Courses Pool/ Certificate Electives

Engineering **Certificate Electives** cover all courses start with the course codes EEC, CSC, MEC, CEC, IEC or AIC Students may take any certificate electives they prefer, regardless of their departments, so long as the course has available quota. Certificate courses **are not counted** as area elective courses.

2025-2026 FALL SEMESTER CERTIFICATE ELECTIVE COURSES

Ders Kodu	Ders Adı
CEC 397	Yalın İnşaat Yönetimi/ Lean Construction Management
CSC 393	Spring Framework ile Backend Uygulamaları Geliştirmek / Developing Backend Applications with Spring Framework
CSC 399	Haberleşme Güvenliği/Communications Security
EEC 394	Kablosuz İletişim Mühendisliği Teknolojileri/ Wireless Communications Engineering Technologies
EEC 398	Sürdürülebilir Elektronik ve Döngüsel Ekonomi/ Sustainable Electronics and Circular Economics- NEW COURSE
IEC 391	Proje Yönetimi/ Project Management
IEC 399	İnovasyon ve Teknoloji Yönetimi/ Agile Software and Product Development

MEC 396	Hesaplamalı Akışkanlar Dinamiği için Profesyonel Simülasyon Yazılımı Kullanımı/Computational fluid dynamics with professional simulation tools
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**2025-2026 FALL SEMESTER
COMPUTER ENGINEERING- IN-PROGRAM ELECTIVE COURSES**

Ders Kodu	Ders Adı
CS 423	Bilgisayarla Görme/Computer Vision
CS 434	Yazılım Tasarım Örüntüleri/Software Design Patterns
CS 435	Çok Çekirdek Programlama/Multicore Programming
CS 440	Finansta Makine Öğrenmesi/Machine Learning in Finance
CS 452	Python ile Veri Bilimi/Data Science with Python
CS 454	Yapay Sinir Ağları ve Otomatik Öğrenmeye Giriş/Introduction to Machine Learning and Artificial Neural Networks
CS 460	Bilgi Erişim Sistemleri ve Arama Motorları/Information Retrieval and Search Engines
CS 462	Çok Etmenli Sistemlerde Ortak Karar Alma/Collective Decision Making In Multiagent Systems
CS 468	Ağ Üzerine Güncel Konular/Contemporary Topics in Networking
EE 462	HDL Tabanlı Sayısal Sistemler Tasarımı/HDL Based Digital Systems Design
AI 425	Large Language Models-Büyük Dil Modelleri- NEW COURSE

**2025-2026 FALL SEMESTER
ELECTRICAL-ELECTRONIC ENGINEERING – IN-PROGRAM ELECTIVE COURSES**

Ders Kodu	Ders Adı	Özelleşilen Alan
EE 303	Güç Sistemlerinin Temelleri	PES, PES+ → Zorunlu
EE 421	Sayısal Görüntü İşleme	SPC, SPC+, DSS, DSS+
EE 423	Sinyal İşleme için Derin Öğrenme	SPC, SPC+, CAS+,
EE 442	Sayısal Haberleşmeye Giriş	SPC+, CAS+
EE 462	HDL Tabanlı Sayısal Sistemler Tasarımı	DSS, DSS+ → Zorunlu
EE 491	Kontrol Sistemleri	DSS, DSS+
EE 493	Güç Elektroniği	PES, PES+
EE 497	Otomotiv Gömülü Yazılımına Giriş	DSS, DSS+
CS 423	Bilgisayarla Görme	SPC, SPC+
CS 440	Finansta Makine Öğrenmesi	SPC+, PES+
CS 454	Yapay Sinir Ağları ve Otomatik Öğrenmeye Giriş	SPC+, PES+
CS 468	Ağ Üzerine Güncel Konular	SPC+

CS 102	Nesneye Dayalı Programlama	DSS+
CS 105	Nesne-Yönelimli Programlamaya Giriş	DSS+
CS 304*	Yapay Zeka, Makina Öğrenmesi ve Veri Bilimine Giriş*	SPC+, CAS+, DSS+, PES+
ME 419	Mühendisler için Hesaplamalı Metotlar	PES, PES+

2025-2026 FALL SEMESTER

MECHANICAL ENGINEERING- IN-PROGRAM ELECTIVE COURSES

Ders Kodu	Ders Adı
ME 405	İnsan-Merkezli Tasarım ve Mekanizma Uygulamaları
ME 410	Turbomakine Tasarımı
ME 415	Veri Toplama ve Sayısal Kontrol
ME 419	Mühendisler için Hesaplamalı Metotlar
ME 435	Malzemelerin Fiziksel Özellikleri
EE 201	Sinyaller ve Sistemler/Sinyaller ve Sistemler/
EE 203	Sayısal Sistemler/Digital Systems
CS 423	Bilgisayarla Görme/Advanced Structural Analysis

2025-2026 FALL SEMESTER

INDUSTRIAL ENGINEERING –IN-PROGRAM ELECTIVE COURSES

IE 352	Tedarik Zinciri Yönetimi/Supply Chain Management
IE 354	Envanter Yönetimi/Inventory Management
IE 362	Risk Yönetimi/Risk Management
IE 363	Sayısal Finans/Quantitative Finance
IE 366	Optimizasyon için Sezgisel Yöntemler/Heuristic Methods for Optimization
IE 368	Bilgisayarla Tümlleşik Üretim/Computer Integrated Manufacturing
IE 372	Üretim Planlama ve Çizelgeleme/Production Planning and Scheduling
IE 373	Servis Hizmetleri Yönetimi/Service Systems Planning
IE 411	Finansta Yapay Zeka/Artificial Intelligence in Finance-YENİ DERS
IE 490	Endüstri Mühendisliğinde Araştırmaya Giriş/Introduction to Research in Industrial Engineering
CS 440	Finansta Makine Öğrenmesi/Machine Learning in Finance
CS 454	Yapay Sinir Ağları ve Otomatik Öğrenmeye Giriş/Introduction to Machine Learning and Artificial Neural Networks
CS 102	Nesneye Dayalı Programlama/Object-Oriented Programming
CS 105	Nesne-Yönelimli Programlamaya Giriş/Introduction to Object-Oriented Programming
CS 201	Veri Yapıları ve Algoritmalar/Data Structures and Algorithms
CS 202	Veritabanı Yönetim Sistemleri/Database Management Systems

**2025-2026 FALL SEMESTER
CIVIL ENGINEERING- IN-PROGRAM ELECTIVE COURSES**

Ders Kodu	Ders Adı
CE 412	Plastik Analiz ve Tasarım/Plastic Analysis and Design
CE 423	İleri Yapı Analizi/Advanced Structural Analysis- NEW COURSE
CE 426	Yapı Malzemeleri için Dijital Çözümler/Digital Solutions for Construction Materials
CE 420	Geoteknik Deprem Mühendisliği/Geotechnical Earthquake Engineering
CE 424	Geoteknik Yapılar/Geotechnical Structures
CE 469	Trafik Mühendisliğinde Simülasyon ve Makine Öğrenmesi/ Introduction to Simulation and Machine Learning Applications in Traffic Engineering

**2025-2026 FALL SEMESTER
ARTIFICIAL INTELLIGENCE AND DATA
ENGINEERING-IN-PROGRAM ELECTIVE COURSES**

Ders Kodu	Ders Adı
AI 425	Büyük dil Modelleri/ Large Language Models-
CS 462	Coketmenli Sistemlerde Ortak Karar Alma-Collective Decision Making in Multiagent Systems
CS 423	Bilgisayarla Görme/Computer Vision