

FACULTY OF ENGINEERING ELECTIVE COURSE TYPES AND DESCRIPTIONS

ELECTIVE COURSE POOLS

(2021-2022 Academic Year-Spring)

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 204	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	Senior Project Courses	FE-Engineering Faculty
MATH 101	Mathematics for Social Sciences 1	FE-Engineering Faculty
MATH 102	Mathematics for Social Sciences 2	FE-Engineering Faculty
MATH 113- MATH 113 R	Calculus 1	FE-Engineering Faculty
PHYS 111, PHYS 111 L	Physics 1	FE-Engineering Faculty

2) Social Sciences Electives

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

Dersin Kodu	Dersin Adı (ING)
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HIST	103	World History I
HIST	104	World History II
HIST	309	The Ottomans Inside and Out
HIST	310	History of the Balkans
HIST	311	Travel, maps and wonders through history
HUM	302	Seriality in Media and Literature
HUM	304	Culture Through Film
HUM	310	Culture and Society
HUM	315	Literature and Gender
HUM	316	Political Anthropology
HUM	319	Philosophy Goes to the Movies: An Introduction to Philosophy
HUM	321	Science, Technology and Society
HUM	353	Literature and Modernism
IR	101	Introduction to Political Science
IR	311	International Conflict Analysis
IR	312	American Politics
IR	313	Clashing Views: Current Issues in Politics and Society
IR	318	Let's Explore Europe!
IR	323	Russian Politics
IR	326	Politics of Race and Ethnicity
IR	329	Democracy and Democratization
MUSIC	103	Music of the World
PHIL	104	Truth, Knowledge and Ethics
PSY	100	General Psychology
PSY	302	Biopsychology
PSY	313	Motivation and Self Regulation
PSY	314	Human Memory
PSY	317	Thinking & Reasoning
PSY	324	Sensation and Perception
PSY	429	Leadership and Motivation at Work
SOC	201	Introduction to Social Sciences
SOC	302	Sociology and Politics of Religion and Secularism
SOC	304	Sociology of Work and Employment: An Introduction to Modern Working Life

3) Engineering Certificate Elective Courses Pool/ Certificate Electives

Engineering **Certificate Electives** cover all courses start with the course codes EE, CS, ME, CE, or IE and course numbers from 390 to 399. 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.

**2021-2022 SPRING SEMESTER
CERTIFICATE ELECTIVE COURSES**

Ders Kodu	Ders Adı
CE 397	Lean Construction Management (Certificate Elective)
CS 390	Introduction to High Performance Computing
CS 391	Web Application Development (Certificate Elective)
CS 399	Communication Security
EE 396	Automotive Electronics (Certificate Elective)
IE 395	Agile Management (Certificate Elective)
IE 396	Agile Software and Product Development
IE 397	Business Process Management
ME 395	Industrial Robot Programming (Certificate Elective)

- The list of **IN-PROGRAM** Elective Courses that can be taken in the 2021-2022 Spring Semester is given below according to the departments.

**2021-2022 SPRING SEMESTER
COMPUTER ENGINEERING- IN PROGRAM ELECTIVE COURSES**

Ders Kodu	Ders Adı
CS 412	Bioinformatic Algorithms
CS 418	Networked Entertainment
CS 435	Multicore Programming
CS 446	Security for Network Technologies
CS 451	Introduction to Artificial Intelligence
CS 454	Introduction to Machine Learning and Artificial Neural Networks
CS 460	Information Retrieval and Search

	Engines
CS 476	Agile Software Development
EE 450	Wireless Networks
EE 321	Microprocessors

2021-2022 SPRING SEMESTER
ELECTRICAL AND ELECTRONICS ENGINEERING - IN PROGRAM ELECTIVE COURSES

Ders Kodu	Ders Adı
EE 372	Basics of Electrical Machines
EE 421	Digital Image Processing
EE 450	Wireless Networks
EE 480	Advanced Optoelectronics: Innovative Design
EE 488	Photonics
EE 491	Control Systems
ME 417	Mechatronics
CS 240	Computer Architecture

2021-2022 SPRING SEMESTER
MECHANICAL ENGINEERING IN-PROGRAM ELECTIVE COURSES

Ders Kodu	Ders Adı
ME 412	Finite Element Analysis
ME 417	Mechatronics
ME 428	Materials Characterization with X-ray Diffraction
ME 442	Biomechanics of Human Motion
EE 203	Digital Systems

EE 321	Microprocessors
EE 372	Basics of Electrical Machines
CE 205	Construction Materials

2021-2022 SPRING SEMESTER

INDUSTRIAL ENGINEERING IN-PROGRAM ELECTIVE COURSES

Ders Kodu	Ders Adı
IE 359	Machine Learning Using Statistical Analysis System
IE 360	Business Analysis
IE 367	Organizational Behaviour
IE 368	Computer Integrated Manufacturing
IE 476	Corporate Transformation
IE 378	Sustainable Resilience Management
IE 383	Decision Support Systems
IE 388	Work Study and Ergonomics
IE 416	Blockchain Technologies in Finance
IE 443	Optimization under Uncertainty
IE 472	Scheduling

2021-2022 SPRING SEMESTER

CIVIL ENGINEERING IN-PROGRAM ELECTIVE COURSES

Ders Kodu	Ders Adı
CE 410	Transportation Economy
CE 412	Plastic Analysis and Design
CE 420	Geotechnical Earthquake Engineering
CE 466	Ports and Waterways

