

## FACULTY OF ENGINEERING ELECTIVE COURSE TYPES AND DESCRIPTIONS

## **ELECTIVE COURSE POOLS**

## (2018-2019 Akademic Year)

Elective Courses are the courses offered by the faculties and schools of Özyeğin University. 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 counted (or 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/Free Electives ATTENTION! The following courses will <u>NOT BE COUNTED AS</u> 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 Sci- ence	
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	
HUM 316	Political Anthropology	FAS- Faculty of Social Sciences	
MGMT 311	Project Management	FEAS -Faculty of Business	
MGMT 322	Sustainability in Business	FEAS -Faculty of Business	
MIS 101	Introduction to Information Systems and Technolo- gies	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 Sci- ence	
PHYS 104	Physics for Pilot Training	SAV- School of Aviation Aeronautical Sci- ence	
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	
PLT	All Courses	SAV- School of Aviation Aeronautical Sci- ence	

# 2) Social Sciences Electives

The following courses will be counted as "Social Sciences Electives".

Social Sciences Electives
SOC 201 Introduction To Social Sciences
PSY 100 General Psychology
PSY 310 Creativity
PSY 313 Motivation & Self Regulation
HIST 103 History of Civilizations I
HIST 104 History of Civilizations II
HUM 321 Science, Technology and Society
POLS 211 Turkey and Regional Politics: The Modern Middle East
IR 318 Let's explore Europe!
IR 329 Democracy and Democratization
IR 311 International Conflict Analysis
IR 313 Clashing Views: Current Issues in Politics and Society
CINE 101 Understanding Film
HUM 304 Culture Through Film
HUM 310 Culture and Society
HUM 311 Judaism, Christianity, and Islam: The Abrahamic Traditions
HUM 312 Religions of the World
HUM 313 Globalization, Democracy, and Social Justice
HUM 314 Political Ideologies
HUM 315 Literature and Gender
HUM 316 Political Anthropology
HUM 317 Ethics
HUM 318 History of Western Art
HUM 319 Philosophy Goes to the Movies: Introduction to Philosophy
HUM 352 Turkish Literature and Modernism



## 3) Engineering Certificate Elective Courses Pool/ Certificate Electives

Engineering <u>Certificate Electives</u> 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, <u>so long as the course has available quota</u>. Certificate courses <u>are not counted</u> as area courses.

### 4) Engineering Area Elective Courses Pool

#### 5.1) EE Department Area Elective Courses/BSEE Area Electives

EE Area Electives cover all elective courses with the course code EE which are offered by the Department of Electrical-Electronics Engineering at the Faculty of Engineering at Özyeğin University (excluding certificate courses). Students are liable for taking the EE Area Electives listed among the graduation requirements of their degree programs. Specialization courses are also considered "EE AREA ELECTIVES" even though they are not coded as EE.

## 5.2) CS Department Area Elective Courses/BSCS Area Electives

CS Area Electives cover all elective courses with the course code CS which are offered by the Department of Computer Science at the Faculty of Engineering at Özyeğin University (excluding certificate courses). Students are liable for taking the CS Area Electives listed among the graduation requirements of their degree programs. Specialization courses are also considered "CS AREA ELECTIVES" even though they are not coded as CS.

#### 5.3) ME Department Area Elective Courses/BSME Area Electives

ME Area Electives cover all elective courses with the course code ME which are offered by the Department of Mechanical Engineering at the Faculty of Engineering at Özyeğin University (excluding certificate courses). Students are liable for taking the ME Area Electives listed among the graduation requirements of their degree programs. Specialization courses are also considered "ME AREA ELECTIVES" even though they are not coded as ME.

#### 5.4) IE Department Area Elective Courses/BSIE Area Electives

IE Area Electives cover all elective courses with the course code IE which are offered by the Department of Industrial Engineering at the Faculty of Engineering at Özyeğin University. Students are liable for taking the IE Area Electives listed among the graduation requirements of their degree programs (excluding certificate courses).



### 5.7) CE Department Area Elective Courses/BSCE Area Electives

CE Area Electives cover all elective courses with the course code CE which are offered by the Department of Civil Engineering at the Faculty of Engineering at Özyeğin University. Students are liable for taking the CE Area Electives listed among the graduation requirements of their degree programs.

a) <u>AREA I Construction Management</u>		
CE 340	Techniques for Construction Planning and Control	Area Required Course
CE 460	Construction Cost Management	Area Required Course
CE 461	Risk Management in Construction Projects	Area Elective Course
CE 462	Health and Safety in Construction	Area Elective Course
CE 467	Information Technology for Construction Management	Area Elective Course
CE 463	Building Information Modeling	Area Elective Course

### a) AREA 1 Construction Management

#### b) AREA 2 Structural Analysis

CE 411	Reinforced Concrete	Area Required Course
CE 417	Advanced Design of Steel Structures	Area Required Course
CE 409	Prestressed Concrete	Area Elective Course
CE 414	Uncertainty and Reliability in Civil Engineering	Area Elective Course
CE 416	Structural Risk Management of Historical Structures	Area Elective Course
CE 464	Performance Based Design of RC Structures	Area Elective Course

## c) AREA 3 Earthquake Engineering

CE 403	Introduction to Earthquake Engineering	Area Required Course
CE 404	Structural Dynamics	Area Required Course



CE 414	Uncertainty and Reliability in Civil Engineering	Area Elective Course
CE 420	Geotechnical Earthquake Engineering	Area Elective Course
CE 427	Earthquake Resistant Design of RC Structures	Area Elective Course
CE 464	Performance Based Design of RC Structures	Area Elective Course

# d) AREA 4 Geotechnical Engineering

CE 420	Geotechnical Earthquake Engineering	Area Required Course
CE 437	Geotechnical Site Investigation	Area Required Course
CE 428	Advanced Soil Mechanics	Area Required Course
CE 424	Advanced Foundation Engineering	Alan Seçmeli dersi
CE 431	Engineering Geology	Alan Seçmeli dersi