

**2020-2021**  
**UNDERGRADUATE CURRICULUM**  
**FACULTY OF ENGINEERING**  
**DEPARTMENT OF CIVIL ENGINEERING**  
**UNDERGRADUATE CURRICULUM**

**Semester 1**

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
TRD111	Turkish I	2	0	2	2	Compulsory	
ATA111	History of Turkish Revolution I	2	0	2	2	Compulsory	
CHM103	Chemistry	2	2	3	5	Compulsory	
PHYS113	Physics I	2	2	3	5	Compulsory	
MATH113	Mathematics I	3	2	4	6	Compulsory	
CE101	Introduction to Civil Engineering	3	0	3	6	Compulsory	
	Foreign Language Elective	2	2	3	4	Elective	
	<b>Total Credit</b>	<b>20</b>		<b>30</b>			

**Semester 2**

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
TRD112	Turkish II	2	0	2	2	Compulsory	
ATA112	History of Turkish Revolution II	2	0	2	2	Compulsory	
PHYS114	Physics II	2	2	3	5	Compulsory	PHYS113
MATH114	Mathematics II	3	2	4	6	Compulsory	MATH113
CLP001	Career and Life Planning	0	2	1	3	Compulsory	
CE102	Statics	3	0	3	8	Compulsory	
	Foreign Language Elective	2	2	3	4	Elective	
	<b>Total Credit</b>	<b>18</b>		<b>30</b>			

**Semester 3**

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
MATH215	Mathematics III	2	2	3	6	Compulsory	MATH113
ME201	Computer Aided Technical Drawing	2	2	3	5	Compulsory	
CE201	Strength of Materials I	3	0	3	6	Compulsory	
CE205	Materials Science	3	0	3	6	Compulsory	
CE217	Dynamics	3	0	3	7	Compulsory	PHYS113
CE221	Introduction to Programming	2	2	3	2	Compulsory	
	<b>Total Credit</b>	<b>18</b>		<b>32</b>			

**Semester 4**

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
MATH216	Mathematics IV	2	2	3	6	Compulsory	MATH114
MATH265	Probability and Statistics I	3	0	3	5	Compulsory	MATH113
CE204	Fluid Mechanics	3	0	3	4	Compulsory	
CE206	Building Materials	3	0	3	3	Compulsory	
CE228	Surveying	2	2	3	3	Compulsory	
CE210	Strength of Materials II	3	0	3	4	Compulsory	
	Departmental Elective	3	0	3	5	Elective	
	<b>Total Credit</b>	<b>21</b>		<b>30</b>			

**Semester 5**

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
MATH220	Numerical Methods	2	2	3	4	Compulsory	MATH113
CE311	Hydraulics	3	0	3	6	Compulsory	
CE303	Soil Mechanics I	3	0	3	6	Compulsory	
CE315	Earthwork and Railway Construction	3	0	3	4	Compulsory	
CE319	Theory of Structures I	3	0	3	5	Compulsory	
CE405	Steel Structures	3	0	3	5	Compulsory	
	Departmental Elective	3	0	3	5	Elective	
	<b>Total Credit</b>	<b>21</b>		<b>35</b>			

**Semester 6**

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
MATH266	Probability and Statistics II	3	0	3	5	Compulsory	
CE302	Hydrology	3	0	3	6	Compulsory	
CE304	Soil Mechanics II	3	0	3	5	Compulsory	
CE306	Highway Engineering	3	0	3	5	Compulsory	
CE320	Theory of Structures II	3	0	3	6	Compulsory	
CE340	Reinforced Concrete I	3	0	3	8	Compulsory	
	<b>Total Credit</b>	<b>18</b>		<b>35</b>			

**Semester 7**

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
BBA222	Entrepreneurship Applications	2	0	2	3	Compulsory	
CE435	Design Of Reinforced Concrete Structures	1	2	2	3	Compulsory	
CE443	Foundation Engineering	3	0	3	9	Compulsory	
CE447	Reinforced Concrete II	3	0	3	9	Compulsory	
CE497	Civil Engineering Design	0	2	1	4	Compulsory	
IE367	Occupational Health and Safety	3	0	3	5	Compulsory	
	Departmental Elective	3	0	3	5	Elective	
	<b>Total Credit</b>	<b>17</b>		<b>38</b>			

**Semester 8**

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
CE498	Civil Engineering Graduation Project	0	4	2	4	Compulsory	
	Faculty Elective	3	0	3	5	Elective	
	University Elective	3	0	3	4	Elective	
	University Elective	3	0	3	4	Elective	
INT001	Internship I	0	0	0	4	Compulsory	
INT002	Internship II	0	0	0	4	Compulsory	
	<b>Total Credit</b>	<b>11</b>		<b>25</b>			

<b>TOTAL CREDIT</b>	<b>144</b>
<b>TOTAL ECTS</b>	<b>255</b>

Abbreviations: T=Weekly hours: theoretical; A=Weekly hours: application; C=Credits in Turkish System; ECTS= European Credit Transfer System

## UNDERGRADUATE CURRICULUM

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### ELECTIVE COURSES

#### Semester 1

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
SECOND FOREIGN LANGUAGE							
DEPARTMENTAL ELECTIVE							
FACULTY ELECTIVE							
UNIVERSITY ELECTIVE							

#### Semester 2

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
SECOND FOREIGN LANGUAGE							
DEPARTMENTAL ELECTIVE							
FACULTY ELECTIVE							
UNIVERSITY ELECTIVE							

#### Semester 3

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
SECOND FOREIGN LANGUAGE							
DEPARTMENTAL ELECTIVE							
FACULTY ELECTIVE							
UNIVERSITY ELECTIVE							

#### Semester 4

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
SECOND FOREIGN LANGUAGE							
DEPARTMENTAL ELECTIVE							
CE203	Engineering Geology	3	0	3	5	Elective	
CE307	Construction Engineering and Management	3	0	3	5	Elective	
CE316	Fundamentals of Traffic Engineering	3	0	3	5	Elective	
CE420	Environmental Sanitation	3	0	3	5	Elective	
CE421	Rock Blasting Technology For Construction	3	0	3	5	Elective	
CE470	Energy Efficiency Applications in Buildings	3	0	3	5	Elective	
CE481	Hazardous Waste Management	3	0	3	5	Elective	
FACULTY ELECTIVE							
UNIVERSITY ELECTIVE							

#### Semester 5

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
SECOND FOREIGN LANGUAGE							
DEPARTMENTAL ELECTIVE							

#### Semester 6

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
SECOND FOREIGN LANGUAGE							
DEPARTMENTAL ELECTIVE							

[illegible]

Semesters 5 and 7	
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Code	Course Title	T	A	C	ECTS	Status	Prerequisite
<b>MENTAL ELECTIVE</b>							
CE307	Construction Engineering and Management	3	0	3	5	Elective	
CE312	Computer Aided Structural Modelling and Analysis	3	0	3	5	Elective	
CE316	Fundamentals of Traffic Engineering	3	0	3	5	Elective	
CE321	Advanced Materials Technology	3	0	3	5	Elective	
CE323	Composite Materials	3	0	3	5	Elective	
CE403	Water Supply and Sewage Systems	3	0	3	5	Elective	
CE407	Water Resources Engineering	3	0	3	5	Elective	
CE417	Soil Mechanics - III	3	0	3	5	Elective	
CE419	Groundwater Hydraulics	3	0	3	5	Elective	
CE420	Environmental Sanitation	3	0	3	5	Elective	
CE421	Rock Blasting Technology For Construction	3	0	3	5	Elective	
CE425	Special Concretes	3	0	3	5	Elective	
CE433	Concrete Technology	3	0	3	5	Elective	
CE451	Coastal and Harbour Structures	3	0	3	5	Elective	
CE454	Water Power	3	0	3	5	Elective	
CE456	Risk Management in Construction	3	0	3	5	Elective	
CE458	Construction Project Management	3	0	3	5	Elective	
CE460	Irrigation and Drainage	3	0	3	5	Elective	
CE462	Prestressed Concrete	3	0	3	5	Elective	
CE434	Earthquake Resistant Design and Performance Evaluation	3	0	3	5	Elective	
CE466	Open Channel Flow	3	0	3	5	Elective	
CE468	Reinforced Concrete Project Design	3	0	3	5	Elective	
CE470	Energy Efficiency Applications in Buildings	3	0	3	5	Elective	
CE472	Durability of Concrete	3	0	3	5	Elective	
CE474	Admixtures for Concrete	3	0	3	5	Elective	
CE481	Hazardous Waste Management	3	0	3	5	Elective	
CE492	Civil Engineering O'COOP 1	3	0	3	4	Elective	

CURRICULUM	FACULTY ELECTIVE							
	UNIVERSITY ELECTIVE							

## Semester 8

Code	Course Title	T	A	C	ECTS	Status	Prerequisite
<b>FACULTY ELECTIVE</b>							
CE496	Civil Engineering O'COOP 3	3	0	3	5	Elective	
ENG301	Management for Engineers	3	0	3	5	Faculty Elective	
ENG302	Fuzzy Logic and Its Applications	3	0	3	5	Faculty Elective	
ENG303	Project Management	3	0	3	5	Faculty Elective	
ENG304	Technology Management	3	0	3	5	Faculty Elective	
ENG305	Introduction to Information Security	3	0	3	5	Faculty Elective	
ENG306	Introduction to Web Programming	3	0	3	5	Faculty Elective	
ENG307	Biotechnology:Combining Engineering with the Biological S	3	0	3	5	Faculty Elective	
ENG308	Energy Policy	3	0	3	5	Faculty Elective	
ENG310	Sustainable Energy & Environment	3	0	3	5	Faculty Elective	
ENG316	Introduction to Traffic Engineering	3	0	3	5	Faculty Elective	
ENG318	Introduction to Environmental Engineering	3	0	3	5	Faculty Elective	
ENG368	Wireless Network	3	0	3	5	Faculty Elective	