### Seçmeli Derslere İlişkin Uygulanan-Önerilen Tablosu (Örnek Tablo 1)

# UYGULANAN

\* Regulations for Technical Elective Courses:

1) Students in their seventh semester selects a branch among Geotechnics, Materials of Construction, Transportation, Water Resources and Hydraulics or Structural Mechanics branches.

2) At least five of six technical courses should be selected from branch(es) listed in article 1. At least two of these courses should be technical elective design courses. At most one technical elective course can be selected from outside of the Civil Engineering Undergraduate Program upon advisor's approval.

At least two courses should be taken from the selected branch. At least one of these courses should be a technical elective design course.
At least one technical elective design course from the selected branch should have been completed succesfully to be able to take CE 402.
Design project topic in CE 402 course should be determined from the selected branch.

### ÖNERİLEN

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 Students in their seventh semester selects a branch among Geotechnics, Materials of Construction, Transportation, Water Resources and Hydraulics or Structural Mechanics branches.
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be technical elective design courses. At most one technical elective course can be selected from outside of the Civil Engineering Undergraduate Program upon advisor's approval.

3) At least two courses should be taken from the selected branch. At least one of these courses should be a technical elective design course.

4) At least one technical elective design course from the selected branch should have been completed succesfully to be able to take CE 402.

5) Design project topic in CE 402 course should be determined from the selected branch.

### Geotechnics

# Geotechnics

Program	Code	Course Name	Credits	Ects	Prerequisite	Code	Course Name	Credits	Ects	Prerequisite
	CE461	Soil Mechanics II	3 (2+2)	5	CE361 "Soil Mechanics I (3-2)4	CE461	Soil Mechanics II	3 (2+2)	5	CE361 "Soil Mechanics I (3-2)4
CIVII	CE462	Introduction to Soil Dynamics	3 (3+0)	5	CE 361 "Soil Mechanics I (3-2)4"	CE462	Introduction to Soil Dynamics	3 (3+0)	5	CE 361 "Soil Mechanics I (3-2)4"
ENGINEERING	CE463*	Foundation Engineering II	3 (3+0)	5	CE362 "Foundation Engineering I (3-0)3"	CE463*	Foundation Engineering II	3 (3+0)	5	CE362 "Foundation Engineering I (3-0)3"
	CE464*	Soil Modeling and Computational Soil Mechanics	3 (3+0)	5	Pre.CE301 "Numerical Methods in Engineering (3-0)3"	CE464*	Soil Modeling and Computational Soil	3 (3+0)	5	Pre.CE301 "Numerical Methods in Engineering (3-0)3"
					Pre.CE362 "Foundation Engineering I (3-0)3"		Mechanics			Pre.CE362 "Foundation Engineering I (3-0)3"

### Materials of Construction

# Materials of Construction

Program	Code	Course Name	Credits	Ects	Prerequisite	Code	Course Name	Credits	Ects	Prerequisite
	CE441	Concrete Technology	3 (3+0)	5		CE441	Concrete Technology	3 (3+0)	5	
	CE442*	Construction Materials Design	3 (2+2)	5		CE442*	Construction Materials Design	3 (2+2)	5	
CIVIL	CE443	Introduction to Historical Construction Materials	3 (3+0)	5		CE443	Introduction to Historical Construction	3 (3+0)	5	
ENGINEERING							Materials			

### Transportation

### Program Code Course Name Credits Ects Prerequisite Code Course Name Credits Ects Prerequisite CE451 Planning and Analysis of Transportation Systems 3 (3+0) CE 351 "Introduction to Transportation Engineering (2-2)3 CE451 Planning and Analysis of Transportation Systems 3 (3+0) CE 351 "Introduction to Transportation Engineering (2-2)3 CIVII CE452\* Highway and Airport Pavement Materials 3 (3+0) 5 CE 351 "Introduction to Transportation Engineering (2-2)3 CE452\* Highway and Airport Pavement Materials 3 (3+0) 5 CE 351 "Introduction to Transportation Engineering (2-2)3 ENGINEERING CE453\* Highway, Railway, Port and Airport Design 3 (3+0) 5 CE 351 "Introduction to Transportation Engineering (2-2)3 CE453\* Highway, Railway, Port and Airport Design 3(3+0)5 CE 351 "Introduction to Transportation Engineering (2-2)3 3 (3+0) CE454 Traffic Engineering 5 CE454 Traffic Engineering 3 (3+0) 5

### Water Resources and Hydraulics

# Water Resources and Hydraulics

Program	Code	Course Name	Credits	Ects	Prerequisite	Code	Course Name	Credits	Ects	Prerequisite
	CE472	Computer Applications in Water Resources	3 (3+0)	5	Pre.CE 272 "Fluid Mechanics (3-0)3"	CE472	Computer Applications in Water Resources	3 (3+0)	5	Pre.CE 272 "Fluid Mechanics (3-0)3"
					Pre.CE 301 "Numerical Methods in Engineering (3-0)3"					Pre.CE 301 "Numerical Methods in Engineering (3-0)3"
	CE473*	Design of Water Distribution Systems	3 (3+0)	5	Pre.CE 371 "Hydromechanics (3-2)4	CE473*	Design of Water Distribution Systems	3 (3+0)	5	Pre.CE 371 "Hydromechanics (3-2)4
	CE474	Introduction to Groundwater Flow Modeling	3 (3+0)	5	Pre.CE 301 "Numerical Methods in Engineering (3-0)3"	CE474	Introduction to Groundwater Flow Modeling	3 (3+0)	5	Pre.CE 301 "Numerical Methods in Engineering (3-0)3"
					Pre.CE 372 "Engineering Hydrology (3-0)3"					Pre.CE 372 "Engineering Hydrology (3-0)3"
	CE475*	Design of Hydraulic Structures	3 (3+0)	5	Pre.CE 371 "Hydromechanics (3-2)4"	CE475*	Design of Hydraulic Structures	3 (3+0)	5	Pre.CE 371 "Hydromechanics (3-2)4"
CIVIL					Pre.CE 471 "Water Resources Engineering (3-0)3"					Pre.CE 471 "Water Resources Engineering (3-0)3"
ENGINEERING	CF476	Groundwater Monitoring and Assessment	3 (3+0)	5	Pre CE 371 "Hydromechanics (3-2)4"	CF476	Groundwater Monitoring and Assessment	3 (3+0)	5	Pre CE 371 "Hydromechanics (3-2)4"
	CE477	Planning and Development of Hydropower	3 (3+0)	5		CE477	Planning and Development of Hydropower	3 (3+0)	5	(52)
	CL4//	Characteries and Development of Hydropower	e (a)			CL4//	Characterize	e (e .)		
		Structures					Structures			

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# Transportation

Í	CE478	Introduction to GIS applications in Water	3 (3+0)	5		CE478	Introduction to GIS applications in Water	3 (3+0)	5	
		Engineering					Engineering			
[	CE479	Coastal Hydraulics	3 (3+0)	5		CE479	Coastal Hydraulics	3 (3+0)	5	
[	CE480*	Design of Coastal Structures	3 (3+0)	5		CE480*	Design of Coastal Structures	3 (3+0)	5	
	CE482*	Design of Coastal Protection Structures	3 (3+0)	5	Pre.CE479 "Coastal Hydraulics (3-0)3"	CE482*	Design of Coastal Protection Structures	3 (3+0)	5	Pre.CE479 "Coastal Hydraulics (3-0)3"

# Structural Mechanics

Program	Code	Course Name	Credits	Ects	Prerequisite	Code	Course Name	Credits	Ects	Prerequisite
	CE422*	Structural Design: Concrete Structures	3 (3+0)	5	Pre.CE 324 "Fundamentals of Reinforced Concrete Design(3-0)3"	CE422*	Structural Design: Concrete Structures	3 (3+0)	5	Pre.CE 324 "Fundamentals of Reinforced Concrete Design(3-
	CE423	Introduction to Structural Dynamics	3 (3+0)	5	Pre.CE 222 "Engineering Mechanics II: Dynamics (3-0)3"	CE423	Introduction to Structural Dynamics	3 (3+0)	5	Pre.CE 222 "Engineering Mechanics II: Dynamics (3-0)3"
	CE424*	Introduction to Earthquake Resistant Design	3 (3+0)	5		CE424*	Introduction to Earthquake Resistant Design	3 (3+0)	5	
	CE425	Structural Analysis	3 (3+0)	5		CE425	Structural Analysis	3 (3+0)	5	
CIVIL	CE426	Theory of Matrix Structural Analysis	3 (3+0)	5	Pre.CE 301 "Numerical Methods in Engineering (3-0)3"	CE426	Theory of Matrix Structural Analysis	3 (3+0)	5	Pre.CE 301 "Numerical Methods in Engineering (3-0)3"
ENGINEERING	CE428*	Structural Design: Steel Structures	3 (3+0)	5	Pre.CE 224 "Mechanics of Materials (3-0)3"	CE428*	Structural Design: Steel Structures	3 (3+0)	5	Pre.CE 224 "Mechanics of Materials (3-0)3"
	CE429	Computer Applications in Structural Engineering				CE429	Computer Applications in Structural	3 (3+0)	5	
		computer Applications in Structural Engineering	3 (3+0)	5			Engineering			
	CE430	Reinforced Concrete				CE430	Reinforced Concrete	3 (3+0)	5	Pre.CE 324 "Fundamentals of Reinforced Concrete Design (3-
			3 (3+0)	5	Pre.CE 324 "Fundamentals of Reinforced Concrete Design (3-0)3"					0)3"

Tablo

# \* Design Elective Courses

NOT : Değişiklikleri teklif edilen dersler önerilen tablosunda farklı renk veya kalın yazı tipi ile gösterilmelidir. Türkçe ve İngilizce olarak 2 ayrı tablo şeklinde hazırlanmalıdır.