

TOROS ÜNİVERSİTESİ

Faculty Of Fine Arts, Design And Architecture
Architecture

Course Information

STATICS II					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
ARC148	Spring	2	0	2	2

Prerequisites and co-requisites	
Language of instruction	Turkish
Type	Required
Level of Course	Bachelor's
Lecturer	Lect. Hüseyin SAÇ
Mode of Delivery	Face to Face
Suggested Subject	
Professional practise (internship)	None
Objectives of the Course	1. Introducing and establishing carrier systems, understanding of rules. 2. Calculation of internal forces of the system components. 3. To learn the development of solutions on the structural system of buildings.
Contents of the Course	Power and moment balance; solution methods of isostatic systems; Gerber beams; three-joint systems; frames; influence lines; inertia moment account of cross sections

Learning Outcomes of Course

#	Learning Outcomes
1	Defines isostatic systems and solution methods, solves isostatic systems
2	Solves isostatic frame systems
3	Calculate the cross-section effects of isostatic systems and draw internal force diagrams
4	Draw the transport diagram of Gerber beams and make the necessary static calculations
5	Calculates moment of inertia and moment of strength

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Introduction, properties, force and moment balance	Teaching with theory and practice
2	Introduction of isostatic systems	Teaching with theory and practice
3	Solution methods of isostatic systems	Teaching with theory and practice
4	Digital applications	Teaching with theory and practice
5	Three-joint systems and solution methods	Teaching with theory and practice
6	Numerical applications related to three-joint systems	Teaching with theory and practice
7	Introduction of Gerber beams and removal of transport diagrams	Teaching with theory and practice
8	Numerical applications of Gerber beam systems	Teaching with theory and practice
9	Midterm Exam	
10	Calculation of internal forces in isostatic systems	Teaching with theory and practice
11	Computational applications of internal forces in isostatic systems	Teaching with theory and practice

12	Introduction to isostatic frame systems and solution methods	Teaching with theory and practice
13	Numerical applications related to isostatic frame system solutions	Teaching with theory and practice
14	Of inertia the moment of inertia and resistance introduction to	Teaching with theory and practice
15	Numerical applications related to moment of inertia and strength moment	Teaching with theory and practice
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1			
2			
3			

Method of Assessment

#	Weight	Work Type	Work Title
1	20%	Mid-Term Exam	Mid-Term Exam
2	10%	Mid-Term Practise	Mid-Term Practise
3	10%	Homework	Homework
4	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Defines isostatic systems and solution methods, solves isostatic systems	10	1
2	Solves isostatic frame systems	10	1,2
3	Calculate the cross-section effects of isostatic systems and draw internal force diagrams	10	3,4
4	Draw the transport diagram of Gerber beams and make the necessary static calculations	10,12	4
5	Calculates moment of inertia and moment of strength	10	1,4

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	2	28
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	1	14
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	1	4	4
8	Midterm Exam	1	1	1
9	Quiz	0	0	0
10	Homework	1	4	4
11	Midterm Project	0	0	0
12	Midterm Exercise	1	2	2

13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	6	6
16	Final Exam	1	1	1
				60