AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Construction Strength of the Materials								
Course Code	İNA114		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	3	Workload	75 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	With this course, the student will be able to determine the effect of section properties on the strength of the body in the design of the bearing systems and perform cross-section analysis for the effects that occur according to the appropriate section.								
Course Content	The coordinates of the center of gravity of the structural element section, the presence of the moment of inertia, the effect of tensile, compression, shear (shear) and section analysis analysis of structural elements subjected to bending								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Individual Study, Problem Solving								
Name of Lecturer(s)	Ins. Hasan BARIŞIK								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Resistant Strength (Dr. Hanifi BİNİCİ)
2	Resistance with Resolved Samples (Yasar KALTAKÇI, Associate Professor)

Week	Weekly Detailed Course Contents	
1	Theoretical	Center of gravity
2	Theoretical	Center of gravity
3	Theoretical	Moment of Inertia
4	Theoretical	Moment of Inertia
5	Theoretical	Tensile Stress
6	Theoretical	Tensile Stress
7	Theoretical	Pressure Stress
8	Theoretical	Pressure Stress
9	Intermediate Exam	Midterm
10	Theoretical	Pressure Stress
11	Theoretical	Shear Stress
12	Theoretical	Shear Stress
13	Theoretical	Uniaxial Bending
14	Theoretical	Uniaxial Bending
15	Theoretical	Uniaxial Bending
16	Final Exam	Semester final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Seminar	4	0	5	20
Project	3	0	5	15
Midterm Examination	1	5	1	6

Final Examination	1	5	1	6
			Total Workload (Hours)	75
			[Total Workload (Hours) / 25*] = **ECTS**	3
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Calculations of the coordinates of the center of gravity of the structural element section
2	Calculation of the moments of inertia of the structural element section
3	Cross-sectional analysis calculations of structural elements in tension
4	Cross-sectional analysis calculations of structural elements under pressure
5	Analysis of the section analysis of the structural elements subject to shear (shear) effect
6	Will be able to calculate the cross section analysis of the structural elements subjected to bending.

Programme Outcomes *(Construction Technology)*	
1	Being able to have professional knowledge and skills as a result of being supported by the application on vocational qualifications gained in secondary education
2	To choose and use building materials
3	Building installations can be done
4	Applying concrete technology
5	Construction of roads
6	To be able to make professional computer applications
7	Technical drawings
8	Making professional drawing
9	Bidding and contracting
10	To be able to organize the site
11	Control and documentation of manufacturing
12	Can make application of building repair and strengthening works
13	To be able to determine soil types and make soil tests
14	Can control water supply and transmission activities
15	Making waste treatment facilities for polluting resources
16	Projecting of construction elements
17	Being able to make a professional project
18	Make land measurements
19	To be able to make professional practices

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5	L6
P1	5	5	5	5	5	5
P5	3	4	2	3	4	3
P7	2	2	3	3	2	2
P8	3	3	3	3	3	3
P12	4	4	4	4	4	4
P16	4	4	4	4	4	4
P17	3	3	3	3	3	3
P19	3	3	3	3	3	3