

DEPARTMENT OF CIVIL ENGINEERING

Course Details				
Code	Academic Year			Semester
BAU454	4			Fall
Title	T	A	L	ECTS
Structural Engineering III	3	1	1	6
Language	German			
Level	Undergraduate	✓	Graduate	Postgraduate
Department / Program	Civil Engineering			
Forms of Teaching and Learning	Formal			
Course Type	Compulsory		Elective	✓
Objectives	This module completes the cross-material teaching of the basics of design and construction that started in modules KI I and KI II.			
Content	<ul style="list-style-type: none"> - Local failure of steel cross sections (dents) - Stability problems mainly due to the bending of stressed components (bending twist) - Stability problems of pressure-stressed components (buckling of multi-part rods) - Serviceability of solid components, verification of crack widths - Fatigue strength, basics and evidence 			
Prerequisites	Desirable requirements for participation in the courses: Structural engineering, I and II Mandatory requirements for registering for module exams: no			
Coordinator				
Lecturer(s)				
Assistant(s)				
Work Placement				
Recommended or Required Reading				
Books / Lecture Notes	Grundlagen der Tragwerklehre, Band 226. September 2011 von Franz Krauss und Wilfried Führer			
Other Sources				
Additional Course Material				
Documents				
Assignments				
Exams				
Course Composition				
Mathematics und Basic Sciences				%
Engineering	100			%

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Engineering Design		%
Social Sciences		%
Educational Sciences		%
Natural Sciences		%
Health Sciences		%
Expert Knowledge		%

Assessment

Activity	Count	Percentage (%)
Midterm Exam	2	40
Quiz		
Assignments		
Attendance		
Recitations		
Projects		
Final Exam	1	60
Total		100

ECTS Points and Work Load

Activity	Count	Duration	Work Load (Hours)
Lectures	14	5	70
Self-Study	13	3	42
Assignments			
Presentation / Seminar Preparation			
Midterm Exam	2	1	10
Recitations			
Laboratory			
Projects			
Final Exam	1	2	15
Total Work Load			137
ECTS Points (Total Work Load / Hour)			6

Learning Outcomes

1	The result is the mastery of further basics of essential topics in constructive engineering. The module is indispensable for all those who want to dedicate themselves to the tasks of "constructive engineering" or who choose the focus on "design and construction" in the master's program.
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Weekly Content

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Contribution of Learning Outcomes to Program Objectives (1-5)

	P1	P2	P3	P4	P5	P6	P7
1							
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11							
12							
Contribution Level	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High						
Compiled by:	Research Assist. Dr. ÖmerFaruk Aydın						
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