DEPARTMENT OF CIVIL ENGINEERING
COURSE SYLLABUS

Course Details				
Code	**Academic Year**			**Semester**
BAU202	2			1
Title	**T**	**A**	**L**	**ECTS**
Structural Analysis I	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	The students learn the basics and working techniques of classical statics and use them for typical calculations of statically determined beam structures.					
Content	Elements for the modeling of beam structures are defined, static and geometrical properties of load-bearing systems are explained, the basic equations for calculation according to first order theory are derived under static influences. To calculate statically determined beam structures, the construction principle, the cutting principle and the working principles of mechanics as methods as well as the principle of virtual path variables and the principle of virtual force quantities are learned and applied. With these methods, students determine the state and influence lines of force and displacement variables as well as deformations of statically determined load-bearing systems.					
Prerequisites						
Coordinator						
Lecturer(s)						
Assistant(s)						
Work Placement						

Recommended or Required Reading	
Books / Lecture Notes	
Other Sources	

Additional Course Material	
Documents	
Assignments	
Exams	

Course Composition		
Mathematics und Basic Sciences		%
Engineering		%

DEPARTMENT OF CIVIL ENGINEERING
COURSE SYLLABUS

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

Assessment

Activity	Count	Percentage (%)
Midterm Exam	1	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	14	3	42
Assignments			
Presentation / Seminar Preparation			
Midterm Exam	1	2	10
Recitations			
Laboratory			
Projects			
Final Exam	1	2	15
		Total Work Load	**137**
		ECTS Points(Total Work Load / Hour)	**6 ECTS**

Learning Outcomes

1	Basic principles and techniques of classical static, statically calculates specific rod structures.
2	Future engineers gain the ability to grasp the basics of structural behavior, translate the min to static models, choose the right method for a static calculation, interpret and evaluate critically.
3	
4	
5	

DEPARTMENT OF CIVIL ENGINEERING
COURSE SYLLABUS

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12	
Weekly Content	
1	
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14	
15	

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

	P1	P2	P3	P4	P5	P6	P7
1							
2							
3							
4							
5							
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8							
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10							

DEPARTMENT OF CIVIL ENGINEERING
COURSE SYLLABUS

11							
12							

Contribution Level	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High
Compiled by:	
Date of Compilation:	