DEPARTMENT OF CIVIL ENGINEERING
COURSE SYLLABUS

Course Details				
Code	**Academic Year**			**Semester**
BAU463	2-3-4			Fall-Spring
Title	**T**	**A**	**L**	**ECTS**
Concrete and formwork construction	2	3	0	6

Language	German					
Level	**Undergraduate**	✓	**Graduate**		**Postgraduate**	
Department / Program	Civil Engineering					
Forms of Teaching and Learning	Formal					
Course Type	**Compulsory**		**Elective**	✓		
Objectives	After successfully participating in the module, students are able to plan and control the execution of complex construction tasks or construction processes from a technical and economic perspective.					
Content	Reinforced concrete construction, formwork construction, timing of concrete structures, optimization of the use of formwork, process and cost planning in formwork construction. Process control in concrete and formwork construction (e.g. process and formwork planning with CAD; cycle and resource planning with MS project; cost planning, process optimization, personnel planning and quality assurance					
Prerequisites	Modul BAU352					
Coordinator	Prof. Dr-Ing. Ulrich Neuhof					
Lecturer(s)	Prof. Dr-Ing. Ulrich Neuhof					
Assistant(s)						
Work Placement	no					

Recommended or Required Reading	
Books / Lecture Notes	Skript Prof. Neuhof, Schalungsplanung im Baubetrieb von Malpricht/Rupp
Other Sources	Unterlagen der Schalungshersteller PERI, Doka, Paschal und Meva

Additional Course Material	
Documents	Optionally, the international PERI construction company competition can be worked on as a project - after consultation, coordination and approval by the lecturer!
Assignments	
Exams	

Course Composition		
Mathematics und Basic Sciences		%
Engineering	100	%
Engineering Design		%

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

Assessment

Activity	Count	Percentage (%)
Midterm Exam		
Quiz		
Assignments		
Attendance		
Recitations		
Projects	1	60
Final Exam	Presentation project with colloquium	40
	Total	**100**

ECTS Points and Work Load

Activity	Count	Duration	Work Load (Hours)
Lectures	14	2	28
Self-Study	14	3	42
Assignments			
Presentation / Seminar Preparation	1	12	12
Midterm Exam			
Recitations	14	3	42
Laboratory			
Projects	7	8	56
Final Exam			
		Total Work Load	**180**
		ECTS Points(Total Work Load / Hour)	**6**

Learning Outcomes

1	
2	
3	
4	
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Weekly Content	
1	Formwork construction basics
2	Cycles in concrete and formwork construction Part 1 Floor slabs and walls
3	Cycles in concrete and formwork construction Part 2 Ceilings
4	Cycle planning with MS project and cost planning
5	Planning the concrete installation including logistics
6	Process and formwork planning with CAD
7	Project examples
8	Project processing (Midterm Exam)
9	Project processing
10	Project processing
11	Project processing
12	Project processing
13	Project processing
14	Project submission and preparation of the presentation
15	Presentation and colloquium

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

	P1	P2	P3	P4	P5	P6	P7
1							
2							
3							
4							
5							
6							
7							
8							
9							

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10							
11							
12							

Contribution Level	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High
https://obs.tau.edu.tr/oibs/bologna/progLearnOutcomes.aspx?lang=en&curSunit=5728	
Compiled by:	Prof. Dr.-Ing. Ulrich Neuhof
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