			Faculty of Architecture									
Study programme:	Interior Design			Degree level: full-time/part-time programme:	Bachelor's degree full-time and part-time							
Specialization				Diploma path:	_							
Module name:	Structural Mechanics 2			Module ID:	AWI 5053 AWIN 5053		3					
Module type:	obligatory		Semester: 4	ECTS	4							
No. of hrs in semester:	L - 15 C- 30 LC-			-0 P-0 SW-0	S- 0							
Prerequisites:				_								
Teaching methods:	lecture, class	A	ssessment: tutorials	Evaluation must be rele lectures - written and oral ex - six written ordinary tests ar	vant to the intended learning outcomes am (theory and tasks) nd three written correction tests							
Aims and objectives:	After the course, students should learn the principles of composition and shaping of statically indeterminate systems in scale of detail, furniture and building from various materials. They should master skills in creative application of these systems in different functions and develop the design intuition.											
Module content:	Statically and kinematically indeterminate, bar and surface systems as systems which adapt to their environment; single-span and multiple-span bending beams; frames; static schemes as models of reality; models of dead and live loads, supports and structural connections; realizations of schemes of structure – monolithic, thin-walled, solid and with holes, frame and truss schemes; realizations of materials – stone, concrete, glass, ceramics, ice, wood, metals, laminated and reinforced composites, prestressed and post-tensioned concrete.											
Learning outcomes	Write min. 4, max. 8 learning outcomes in the following order: knowledge - skills - competences. Each learning outcome must be verifiable.					nce to the programme learning outcomes						
LO1	student has knowledge of synthesis and analysis of statically K_W0 indeterminate systems					2, K_W03, K_W07, K_W17, K_U13						
LO2	they are able to use statically determinate systems in different K_U0 functions and scales, from different materials					2, K_U06, K_U09, K_U15, K_W10						
LO3	they have ability to build static schemes of these systems, assum loads, determine mechanical quantities required for design					<_U03, K_U09, K_U15						
LO4	they have ability to shape optimal statically determinate structures K_U06, K_					K_U06, K_L	J15					
dent workload	lecture attendance participation in classes, laboratory classes, etc. work on homeworks participation in student-teacher sessions related to the class preparation for exam					15 x 1h = 15x 2h = 6 x 3h = 6 x 2h =	15 30 18 12 15					

stu	preparation for tests		15x 2h =	30					
		RAZEM:	120						
quantitative indicators	Student workload - activities t		ECTS						
	15h+	57	2						
	Student workload - practical s	90	3,5						
basic references:	Kolendowicz T.: Mechanika budowli dla architektów. Warszawa, Arkady, 1996. Pyrak S., Szulborski K.: Mechanika konstrukcji: przykłady obliczeń. Warszawa, Arkady, 2004.								
supplementary references:	Shaeffer R.E.: Building Structures: elementary analysis and design. Englewood Cliffs, Prentice-Hall, 1980. Salvadori M.: Structure in architecture: the building of buildings. Englewood Cliffs, Prentice-Hall, 1975.								
learning outcomes	methods of asse	type of class (if more than one) where the outcomes are assessed							
EK1	written tests, written and oral exam	L, C							
EK2	written tests, written and oral exam	L, C							
EK3	written tests, written and oral exam	L	, C						
EK4	written tests, written and oral exam	L, C							
Department:	Engineering Design Studio	Group instructors:	A	Agata Kozikowska					
Date:	15.04.2016	Coordinator:	Coordinator: Agata Kozikowska, PhD						

L - lecture C - class LC - laboratory class P-project SW - specialization workshop S - seminar