



Subject card

Subject name and code	Seminar on Structural Mechanics, PG_00041321						
Field of study	Civil Engineering						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2023/2024		
Education level	second-cycle studies	Subject group			Optional subject group		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	2	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Structural Mechanics Department -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Ireneusz Kreja					
	Teachers	dr hab. inż. Ireneusz Kreja					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	30.0	30
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours		Self-study		SUM
	Number of study hours	30	5.0		25.0		60
Subject objectives	This course prepares for individual research work in the field of Structural Analysis with a special emphasis on the preparation of MSc diploma thesis.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_W02] knows principles of analysis, design and dimensioning of complex constructions and its elements	The student provides a presentation on the analysis, construction and dimensioning of a broad field of concrete, steel, timber, masonry and composite structures			[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation		
	[K7_W04] has knowledge on advanced strength of materials, modeling and optimisation of materials and constructions; has knowledge of fundamentals of Finite Element Method and general nonlinear analysis of engineering constructions and systems	The student analyses advanced problems of strength of materials, has a background on FEM and nonlinear engineering analysis, preparing a dedicated presentation.			[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation		
	[K7_K04] understands the necessity of dissemination civil engineering knowledge in the society and to support the professional ethos of a civil engineer	The student is able to prepare and deliver a presentation on structural mechanics, based on literature.			[SK4] Assessment of communication skills, including language correctness [SK5] Assessment of ability to solve problems that arise in practice		
Subject contents	Student elaborates the literature review, formulates the specific aims of the thesis and writes the draft of the thesis.						
Prerequisites and co-requisites	Knowledge based on study programme						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	An assessment by the lecturer	60.0%			100.0%		
Recommended reading	Basic literature	Books, hand-books, research reports and journal papers related to Structural Analysis					
	Supplementary literature	Guidelines for writing a master thesis in structural engineering					
	eResources addresses	Adresy na platformie eNauczenie: Seminarium z Mechaniki Konstrukcji - 2023/2024 - Moodle ID: 21055 https://enauczenie.pg.edu.pl/moodle/course/view.php?id=21055					

Example issues/ example questions/ tasks being completed	Presentation and discussion of the selected scientific paper from the international journal. Presentation of scope of the thesis/draft of the thesis.
Work placement	Not applicable