



Subject card

Subject name and code	HISTORY OF BRIDGE STRUCTURES DEVELOPMENT, PG_00041248							
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			1.0			
Learning profile	general academic profile	Assessment form			assessment			
Conducting unit	Department of Railway Engineering -> Faculty of Civil and Environmental Engineering							
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Krzysztof Żółtowski						
	Teachers	dr hab. inż. Krzysztof Żółtowski						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM	
	Number of study hours	15.0	0.0	0.0	0.0	0.0	15	
	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	15	5.0		5.0		25	
Subject objectives	The aim of the course is to familiarize students with the history of the development of bridge construction, paying special attention to building materials and construction methods.							
Learning outcomes	Course outcome	Subject outcome			Method of verification			
	[K7_W02] knows principles of analysis, design and dimensioning of complex constructions and its elements	Use of knowledge of basic theories and construction methods in understanding the success of historical bridge structures			[SW1] Assessment of factual knowledge			
	[K7_K04] understands the necessity of dissemination civil engineering knowledge in the society and to support the professional ethos of a civil engineer	Knowledge about development of historical bridge construction. Ideas, materials, structures.			[SK5] Assessment of ability to solve problems that arise in practice			
Subject contents	Overview through historic bridge structures. Antiquity, Greece, Rome. Brick structures and wooden and concrete. Middle Ages, brick and wooden structures. Technical revolution, steel, concrete, suspension bridges and trusses, prestressed structures.							
Prerequisites and co-requisites	Knowledge of building materials, the basics of statics and strength of materials							
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade			
	written exam	60.0%			100.0%			
Recommended reading	Basic literature	David J. Brown. Bridget. Tree thousand years of defying nature						
		Judith Dupre. Bridges. A history of the world's famous and important spans						
	Supplementary literature	Jan Biliszczyk. Bridges in the history of Poland. A. Rosset. Ancient roads and bridges						
	eResources addresses	Adresy na platformie eNauczanie:						
Example issues/ example questions/ tasks being completed	Mosty kamienne, murowane, stalowe, metalowe, drewniane/ Stone, brick, cast steel, metal and wooden bridges							
Work placement	Not applicable							