GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Modern Wooden Structures, PG_00044407		
Field of study	Civil Engineering		
Date of commencement of studies	October 2021	Academic year of realisation of subject	2023/2024
Education level	first-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
Mode of study	Part-time studies	Mode of delivery	at the university
Year of study	3	Language of instruction	Polish
Semester of study	6	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Building Structures and Material Engineering -> Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Mateusz Sondej	
	Teachers	dr inż. Mateusz Sondej	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	10.0	15.0	0.0	0.0	0.0	25

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	25	5.0	70.0	100

Subject objectives

Provide students with the knowledge necessary to design simple wooden structures.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W02] knows the rules of descriptive geometry and technical drawing, which is needed to read and understand architecture, construction and geodesy plans and making them using CAD tools.	The student knows the principles of descriptive geometry and technical drawing for saving and reading architectural, construction and geodetic drawings, as well as their preparation with the use of CAD.	
[K6_W10] Has basic knowledge on design, construction and maintenence of roads and railroads	The student has a basic knowledge of the design, construction and maintenance of roads and rails.	
[K6_U02] is able to define basic calculation models used in computer calculations	The student is able to correctly define the basic computational models adopted in computer calculations.	

Subject contents

Wood as a building material. Ecological aspects of using wood. Wood species, production sawn timber, lumber defects, lumber assortment, wood sorting and strength classes. Materials wood-based. Protection of wood against fire, biological corrosion and insects. Structural elements z glued wood. Fasteners in wooden structures. Designing connections. Ceiling trusses i roofing. Systems and technologies used in wooden structures (mullion-transom structures and skeletal).

Prerequisites and co-requisites

Completion of the General Construction course.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Term work	60.0%	30.0%
Written credit	60.0%	70.0%

Recommended reading	Basic literature	1. Michalak H., Pyrak S., Domy jednorodzinne konstruowanie i obliczenia: Arkady 2005. 2. Mielczarek Z.: Budownictwo drewniane. Warszawa: Arkady1994. 3. Matyskiewicz J.: Konstrukcja budynków w szkielecie drewnianym. Gdańsk: Amerykańsko-Polski Instytut Budownictwa 1995. 4. Wajdzik Cz.: Więźby dachowe. Wrocław: Wydawnictwo Akademii Rolniczej we Wrocławiu 2000. 5. Miedziałowski Cz., Malesza M.: Budynki o szkielecie drewnianym z poszyciem. Warszawa-Białystok 2006. 6. Nożyński W.: Przykłady obliczeń konstrukcji budowlanych z drewna. Warszawa: Wydawnictwa Szkolne i Pedagogiczne Spółka Akcyjna 1994. 7. Byrda Cz.: Dachy i stropodachy ocieplone i nieocieplane. Kraków: Politechnika Krakowska 2003. 8. Kotwica J.: Konstrukcje drewniane w budownictwie tradycyjnym. Warszawa: Arkady 2004. 9. Neuhaus H.: Budownictwo drewniane. Rzeszów: Polskie Wydawnictwo Techniczne 2004.
	Supplementary literature	1. Praca zbiorowa: Poradnik majstra budowlanego. Warszawa: Arkady 1985. 2. Praca zbiorowa: Poradnik inżyniera i technika budowlanego, t. V. Warszawa: Arkady 1986. 3. Żenczykowski W.: Budownictwo ogólne, t. 2/1. Warszawa: Arkady 1990 4. Ważny J., Karyś J.: Ochrona budynków przed korozją biologiczną. Warszawa: Arkady 2001.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	