GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Modern Wooden Structures, PG_00044330		
Field of study	Civil Engineering		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
Education level	second-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	2	Language of instruction	Polish
Semester of study	3	ECTS credits	3.0
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		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	10.0	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	45.0	75

Subject objectives

Acquiring knowledge in the construction of residential and communal buildings as well as the basics of designing buildings and construction as well as managing construction; acquainting with technologies, principles and organization of construction, computer techniques and modern technologies; developing the ability to identify significant problems in the construction industry; preparing the graduate for work as independent as well as in a team and education at the second level of studies.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W15] has deep and adequate knowlege of civil engineering, within offered specialization and profile	The student has structured and in-depth knowledge in the field of construction within the offered specialties and diploma profiles.	[SW1] Assessment of factual knowledge
[K7_U15] has advanced skills in civil engineering within offered specialization/profile	The student has advanced skills in the field of construction within the offered specialties and diploma profiles.	[SU2] Assessment of ability to analyse information
[K7_W10] knows modern building materials as well as technologies and methods of its manufacturing and production of construction elements	The student knows the currently used building materials as well as the technologies and principles of industrial production of building materials and elements.	

Subject contents

Wood as a building material. Ecological aspects of the use of wood. Wood species, timber production, sawn timber defects, timber range, sorting and strength grades of wood. Wood materials. Protection of wood against fire, biological corrosion and insects. Structural elements made of glued wood. Fasteners in wooden constructions. Connection design. Ceiling and roof trusses. Systems and technologies used in wooden constructions (mullion-transom and skeletal structures).

Prerequisites and co-requisites

Completing the General Construction course.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Semester assignment	60.0%	50.0%
Test	60.0%	50.0%

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 2004.10. Zobel H.,Alkhafaji T.: Mosty drewniane:WKŁ, Warszawa 2006 11.Green M.:The Case forTall Wood Buildings: LMDG Ltd BTY Group 2012.
	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	