

COURSE DESCRIPTION CARD – SPECIMEN

Faculty of Civil Engineering and Environmental Sciences									
Field of study	Civil engineering							Degree level and programme type	Bachelor's degree
Specialization/ diploma path								Study profile	academic
Course name	General Building Engineering							Course code	EN-B1S31020
								Course type	
Forms and number of hours of tuition	L	C	LC	P	SW	FW	S	Semester	winter
	30	30		30				No. of ECTS credits	6
Entry requirements	Technical drawing & engineering graphics, Civil engineering materials, Strength of materials								
Course objectives	The purpose of this module is to present students with: main elements and systems of buildings construction; principles of loads combinations; construction of selected elements of buildings; principles of preparation of engineering drawings of buildings with brick walls.								
Course content	<p>L: Traditional building engineering. Classification of buildings. Elements of buildings and building structures. Spatial rigidity of buildings. Expansion joints. Technical specifications for buildings and their location according to Polish building law. Foundations. Building with brick walls. Chimney walls. Ceilings. Staircases. Steep and flat roofs. Roofings. Windows and doors. Insulations. Finishing elements.</p> <p>C: Load combinations, calculation of loads. Simplified calculations of selected building elements.</p> <p>P: Specification and technical drawings of a building built from bricks</p>								
Teaching methods	A series of lectures to provide students with an overview of the issues relating to the main elements and systems of building construction, principles of load combinations; construction of selected elements of buildings. A series of classes covering actions on buildings, load calculations and calculation of simple structural elements. Project consisting in specification and technical drawings of a building built from bricks.								
Assessment method	L - written exam; C - written evaluation; P – completion of the student's project, written evaluation, defense of the student's project;								
Symbol of learning outcome	Learning outcomes							Reference to the learning outcomes for the field of study	
LO1	Student (graduate) has a basic knowledge regarding designing and construction of selected objects							K_B1_W05, K_B1_U02	
LO2	Student (graduate) knows standard rules, regulations and building codes							K_B1_W07, K_B1_W11	
LO3	Student (graduate) recognizes and classifies different							K_B1_U02	

	construction objects		
LO4	Student (graduate) determines and combines loads acting on elements of construction objects	K_B1_U03	
LO5	Student (graduate) selects and applies construction materials in designed objects	K_B1_U05, K_B1_U07	
LO6	Student (graduate) prepares specification and technical drawings of simple construction objects	K_B1_U04, K_B1_U08	
Symbol of learning outcome	Methods of assessing the learning outcomes	Type of tuition during which the outcome is assessed	
LO1	written exam, written evaluation of class and project, completion and defense of the student's project, completion of the calculation exercise	L, C, P	
LO2	written evaluation of class and project, completion and defense of the student's project, completion of the calculation exercise	C, P	
LO3	written exam	L	
LO4	completion of a calculation exercise, written evaluation	C	
LO5	completion and defense of the student's project, written evaluation	P	
LO6	completion and defense of the student's project, written evaluation	P	
Student workload (in hours)		No. of hours	
Calculation	lecture attendance	30	
	participation in classes, projects, etc.	45	
	preparation for classes, projects, seminars, etc.	30	
	working on projects, reports, etc.	30	
	participation in student-teacher sessions related to the classes/seminar/project	5	
	participation in examination	2	
	preparation for and participation in exams/tests	25	
	TOTAL:	167	
Quantitative indicators		HOURS	No. of ECTS credits
Student workload – activities that require direct teacher participation (30+45+5+2)		82	3,0
Student workload – practical activities		110	4
Basic references	1. Rozporządzenia Ministra Infrastruktury z dnia 12 kwietnia 2002 r. w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie, (Dz. U. Nr 75, poz. 690), z późniejszymi zmianami. 2. Allen E., Iano J.: Fundamentals of building construction: materials and methods. Hoboken, NJ: Wiley & Sons, 2004 3. Eurocodes: EC0, EC1, EC5		
Supplementary			

references		
Organisational unit conducting the course	Department of Construction and Road Engineering	Date of issuing the programme
Author of the programme	Dorota Małaszkiwicz, PhD, Eng, Natalia Stankiewicz, PhD, Eng,	10.03.2021

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work, S – seminar