

Faculty of Civil and Environmental Engineering						
Study programme:	Construction and Building Systems Engineering		Degree level:	full-time:	Bachelor's degree	
Specialization			Diploma path:			
Module name:	General Construction					
Module type:	obligatory/elective	Semester:	III	ECTS	6	Module ID: CBSE3125
No. of hrs in semester:	L - 30 C - 15		P - 30			
Prerequisites:	<i>Complete with prerequisites or "-"</i>		Technical drawing & engineering graphics, Civil engineering materials, Strength of materials			
Aims and objectives:	<i>Description of the assumed knowledge, skills and social competence the student should have acquired after the completion of the module:</i>		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 built from bricks.			
Forms of teaching activities:	<i>lecture, class, project</i>		Assessment:		Evaluation must be relevant to the intended learning outcomes	
			L - written exam; C - written evaluation; P – completion of the student's project, written evaluation, defense of the student's project;			
Module content:	<i>Complete with the module content: (max. 1000 characters)</i>		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. Excavations. Foundations. Building walls in traditional technology. Chimney walls. Ceilings. Staircases. Steep and flat roofs. Roofings. Windows and doors. Insulations. Finishing elements. C: Load combinations, calculation of loads. Simplified calculations of selected building elements. P: Specification and technical drawings of a building built from bricks			
Teaching methods:	A series of lectures to provide students with an overview of the issues relating to the main elements and systems of building constructions, principles of load combinations; construction of selected elements of buildings. A series of classes covering actions on buildings, load calculations and design and calculation of simple structural elements. Project consisting in specification and technical drawings of a building built from bricks.					
Learning outcome	<i>Specify min. 4, max. 8 learning outcomes in the following order: knowledge – skills – competence. Each learning outcome must be verifiable</i>				<i>Reference to the programme learning outcomes</i>	
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 construction objects				K_B1_U02	
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_U07	
LO6	Student (graduate) prepares specification and technical drawings of simple construction objects				K_B1_U04	
LO7	Student (graduate) uses Internet and other data bases				K_B1_U23	
LO8						

No. of learning outcome	Methods of assessing the learning outcome	Type of teaching activities (if more than one) 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	
LO7	written exam, completion of the student's project, written evaluation	L, C, P	
LO8			
Student workload (in hours)	lecture attendance	15x2h	30
	participation in classes, laboratory classes, etc.	15x3h	45
	preparation for classes, laboratory classes, projects, seminars, etc.		30
	working on projects, reports, etc.		30
	participation in student-teacher sessions related to the classes/seminar/project		5
	implementation of project tasks		
	preparation for and participation in exams/tests		25
		TOTAL:	165
Quantitative indicators	Student workload – activities that require direct teacher participation: 30+45+5+2=82h	82	ECTS 3,0
	Student workload – practical activities: 45+30+30+5=110h	110	4,0
Basic references:	<p>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.</p> <p>2. Allen E., Iano J.: <i>Fundamentals of building construction: materials and methods</i>. Hoboken, NJ: Wiley & Sons, 2004</p> <p>3. Eurocodes: EC0, EC1, EC5</p>		
Supplementary references:			
Unit:	Department of Construction and Road Engineering	Group instructors:	Dorota Małaszkiwicz, Eng., PhD
Date of issuing the programme:	12.01.2017	Author of the programme:	Dorota Małaszkiwicz, Eng., PhD