Faculty of Civil and Environmental Engineering					
Study programme:		Degree level: full-time programme: **Bachelor's degree**			
Specialization		Diploma path: **-**			
Module name:	**Building materials**				
Module type:	**obligatory/elective**	Semester: **2**	ECTS **4**	Module ID: **B02321**	
No. of hrs in semester:	L - 30 C - LC- 30 P- SW- S-				
Prerequisites:	*Complete with prerequisites or "-"*				
Teaching methods:	*lecture, class, laboratory class, project, seminar, specialization workshop*	*Assessment:*	*Evaluation must be relevant to the intended learning outcomes*		
		L - written exam; LC - completion of experimental task, evaluation of reports and written evaluation			
Aims and objectives:	*The purpose of this module is to: introduce classification and technical properties of construction materials, present methods of testing technical properties of construction materials, prepare students for selection of proper construction materials for the specified application.*				
Module content:	*Construction products regulations. Classification of construction materials. Basic technical properties of construction materials: terms and definitions, test methods. Durability of construction materials. Natural stone materials and stone products. Building ceramics. Bituminous materials. Glass materials. Wood and wood-based construction materials. Construction materials from metals. Construction materials from polymers. Paints and adhesives used in construction industry.*				

Learning outcomes	*Write min. 4, max. 8 learning outcomes in the following order: knowledge - skills - competences. Each learning outcome must be verifiable.*	*Relevance to the programme learning outcomes*
LO1	Student (graduate) applies construction products regulations	K_W15, K_W16, K_U20
LO2	Student (graduate) classifies and identifies construction materials	K_W08
LO3	Student (graduate) evaluates technical properties of construction materials	K_W08, K_W15, K_U07
LO4	Student (graduate) interpretates laboratory test results	K_U08
LO5	Student (graduate) selects construction materials for the speciffied application	K_W08, K_U07
LO6	Student (graduate) uses Internet and other data bases	K_U23
LO7	Student (graduate) works in taeam	K_K03

LO8			
student workload	lecture attendance	15x2h	30
	participation in classes, laboratory classes, etc.	15x2h	30
	preparation for classes, laboratoratory classes, projects, seminars, etc.		15
	work on projects, reports, etc.		9
	participation in student-teacher sessions related to the class / seminar / project		1
	implementation of project tasks		
	preparation for and participation in exams/tests		15
		TOTAL:	100
quantitative indicators	Student workload - activities that require direct teacher participation 30+30+2+1 = 63h	63	ECTS
			2,5
	Student workload - practical skills activities 30+15+9+1=55	55	2,2
basic references:	*1. Peter Domone P., Illston J., Construction Materials. Their nature and behaviour, Fourth edition, Spon Press, 2010*		
supplementary references:			

learning outcomes	*methods of assessing learning outcomes*	type of class (if more than one) where the outcomes are assessed
LO1	written exam, completion of experimental task, evaluation of reports	L, LC
LO2	written exam, completion of experimental task, evaluation of reports and written evaluation	L, LC
LO3	completion of experimental task, evaluation of reports and written evaluation	LC
LO4	completion of experimental task, evaluation of reports and written evaluation	LC
LO5	written exam, completion of experimental task, evaluation of reports	L, LC
LO6	written exam, completion of experimental task, evaluation of reports and written evaluation	L, LC
LO7	completion of experimental task in a team	LC
LO8		

Department:		Group instructors:	dr inż. Dorota Małaszkiewicz
Date:	10.06.2016	Coordinator:	dr inż. Dorota Małaszkiewicz

L - lecture C - class LC - laboratory class P-project
SW - specialization workshop S - seminar