

MODULE SPECIFICATION

Module code	
Module title in Polish	Wybrane zagadnienia technologii robót budowlanych
Module title in English	Selected Issues of Building Works Technology
Module running from the academic year	2016/2017

A. MODULE IN THE CONTEXT OF THE PROGRAMME OF STUDY

Field of study	Civil Engineering
Level of qualification	First cycle <i>(first cycle, second cycle)</i>
Studies profile	Academic <i>(academic/practical)</i>
Mode of study	Full-time <i>(full-time / part-time)</i>
Specialism	Building Engineering Technologies and Organization
Organisational unit responsible for module delivery	The Department of Building Engineering Technologies and Organisation
Module co-ordinator	Ryszard Dachowski, PhD hab., Eng., Professor of the University
Approved by	Marek Iwański, Professor

B. MODULE OVERVIEW

Module type	Core module <i>(core/programme-specific/elective HES*)</i>
Module status	Compulsory module <i>(compulsory / non-compulsory)</i>
Language of module delivery	English
Semester in the programme of study in which the module is taught	Semester 6
Semester in the academic year in which the module is taught	Summer semester <i>(winter / summer)</i>
Pre-requisites	None <i>(module code/module title, where appropriate)</i>
Examination required	No <i>(yes / no)</i>
ECTS credits	2

Mode of instruction	lectures	classes	laboratories	project	others
Total hours per semester	15			30	

* elective HES – elective modules in the Humanities and Economic and Social Sciences

C. LEARNING OUTCOMES AND ASSESSMENT METHODS

Module aims	The aim of the module is to familiarise students with the abilities and competences as regards preparing and conducting optimal technological process in system and traditional civil engineering at the stage of shell construction (and following OHS regulations).
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Module outcome code	Module learning outcomes	Mode of instruction (l/c/lab/p/ others)	Corresponding programme outcome code	Corresponding discipline-specific outcome code
W_01	A student has fundamental knowledge on the technologies of works and realisation as regards building structures.	l/p	B_W12	T1A_W02 T1A_W03 T1A_W04 T1A_W05 T1A_W07
W_02	A student is knowledgeable about the technology of building works, particularly as regards designing building processes. In addition, a student has basic knowledge on the selected constructional technologies.	l/p	B_W13	T1A_W02 T1A_W03 T1A_W06 T1A_W08
U_01	A student can use basic norms and guidelines with respect to designing and realizing building structures and their elements.	l/p	B_U13	T1A_U05 T1A_U07 T1A_U11 T1A_U15 T1A_U16
U_02	A student can design building processes as regards the technology of building works with the elements of technical and economical optimisation.	p	B_U20	T1A_U03 T1A_U05 T1A_U09 T1A_U12 T1A_U13 T1A_U16
K_01	A student can work individually and co-operate in a team on the assigned task.	p	B_K01	T1A_K01 T1A_K03 T1A_K04
K_02	A student can formulate conclusions and is responsible for the reliability of the results.	p	B_K02	T1A_K02 T1A_K05 T1A_K07
K_03	A student draws particular attention to OHS principles during works.	p	B_K04	T1A_K01 T1A_K07

Module content:

1. Topics to be covered in the lectures

No.	Topics	Module outcome code
1.	Specialist technologies of earth-moving, hydromechanisation.	W_01 W_02 U_01 U_02
2.	Technological and constructional methods of protecting deep excavations.	W_01 W_02 U_01 U_02
3.	The technologies of linear anchors.	W_01 W_02

		U_01 U_02
4.	The technologies of underground objects.	W_01 W_02 U_01 U_02
5.	The technologies of specialist shuttering (pneumatic and lost formwork).	W_01 W_02 U_01 U_02
6.	The technology of erecting building objects with the method of elevating ceilings and floors.	W_01 U_01
7.	The technologies of energy-saving and passive objects.	W_01 W_02 U_01
8.	A final test.	W_01 W_02 U_01 U_02

2. Topics to be covered in the classes
3. Topics to be covered in the laboratories
4. Topics to be covered in the projects

Project number	Topics	Module outcome code
1.	Determining technological and constructional solutions for the selected technologies in a multi-criteria approach (hydrological, ground, roofing, and renovation works, etc.).	W_01 W_02 U_01 U_02 K_01 K_02
2.	Calculating labour consumption of building works, a detailed description of technologies, indispensable calculations.	W_02 U_01 U_02 K_01 K_02
3.	Making drawings concerning the selected technology of works.	W_02 U_01 U_02 K_01 K_02

Assessment methods

Module outcome code	Assessment methods <i>(Method of assessment; for module skills – reference to specific project, laboratory and similar tasks)</i>
W_01	A test
W_02	A test and a project
U_01	A project
U_02	A project
K_01	A test and a project
K_02	A test and a project

C. STUDENT LEARNING ACTIVITIES

ECTS summary		
	Type of learning activity	Study time/ credits
1	Contact hours: participation in lectures	15
2	Contact hours: participation in classes	
3	Contact hours: participation in laboratories	
4	Contact hours: attendance at office hours (2-3 appointments per semester)	1
5	Contact hours: participation in project-based classes	30
6	Contact hours: meetings with a project module leader	1
7	Contact hours: attendance at an examination	1
8		
9	Number of contact hours	48 <i>(total)</i>
10	Number of ECTS credits for contact hours <i>(1 ECTS credit =25-30 hours of study time)</i>	1.6
11	Private study hours: background reading for lectures	2
12	Private study hours: preparation for classes	
13	Private study hours: preparation for tests	2
14	Private study hours: preparation for laboratories	
15	Private study hours: writing reports	
16	Private study hours: preparation for a final test in laboratories	
17	Private study hours: preparation of a project/a design specification	6
18	Private study hours: preparation for an examination	2
19		
20	Number of private study hours	12 <i>(total)</i>
21	Number of ECTS credits for private study hours <i>(1 ECTS credit =25-30 hours of study time)</i>	0.4
22	Total study time	60
23	Total ECTS credits for the module <i>(1 ECTS credit =25-30 hours of study time)</i>	2
24	Number of practice-based hours <i>Total practice-based hours</i>	38
25	Number of ECTS credits for practice-based hours <i>(1 ECTS credit =25-30 hours of study time)</i>	1.3