## MODULE INFORMATION SHEET

Name of Module Unit	Civil engineering and constructions		
Name in polish language	Budownictwo i konstrukcje inżynierskie		
Module type	compulsory / elective		
Form of studying	full-time day courses		
Level of study	undergraduate course (B.Sc. level)		
Type of study ( for extra-mural courses)	-		
Programme	Environmental Engineering		
Speciality	Environmental Engineering		
Responsible department	Environmental Engineering Faculty		
Responsible person	Dr inż. Agnieszka Machowska, Dr inż. Paweł Falaciński		

Semester	Lectures(E)	Tutorials	Laboratory	Computer Exercises	Projects	ECTS
3	30 (Exam)				15	4

## **Objectives** (summary)

Student is able to recognize basic terminology, definitions and standards concerning construction, basic load bearing systems of constructions and their elements, criteria for their selection, work of construction systems and their elements, typical technologies, general rules for working and finishing activities as well as the materials provided for these stages.

## **Prerequisites**

Subject is run with an assumption of students having knowledge from "General Mathematics and Physics" Subject

## Rules for integrated grade definition

Maximum number of students in a tutorial group is 15.

During term, students complete projects – Constructional project of the building in a typical technology and drawings e.g. cross sections and constructional details. Project should be submitted (after min. 3 corrections) no later than on the last meeting before the end of semester.

Lectures are followed by the written exam.

### **Recommended readings**

- 1. Materials for civil construction Mamlouk Michael
- 2. Building construction handbook Chudley Roy
- 3. Fundamentals of building construction Allen Edward
- 4. Environmental handbook for building and civil engineering Venables Roger
- 5. Polish construction law
- 6. Building Standards

# **Contents of lectures (syllabus)**

	Topics	Time	Scope
		(hrs.)	(S / Ex)
1	•general terminology, definitions and standards of buildings •requirements for buildings and building products in the frame of law •protection and construction part of the building – loads working on the building •types of building constructions, load bearing systems •bulding materials •construction details: roof, floor, wall, staircase, foundation •insulation: damp, waterproof, thermal	30	S
	Total	30	hours

S – topics listed in the legal study programme standards from 12.07.2007

Ex – extended topics

#### Lecturers

Dr inż. Agnieszka Machowska, Dr inż. Paweł Falaciński

### **Assessment method**

Lectures are followed by the written exam.

# **Contents of guided projects**

	Topics		Time	Scope
			(hrs.)	(S/Ex)
1	Project of a masonry building:		15	S
	1. Wood construction of the roof			
	2. Design of ceiling			
	3. Thermal insulation of selected part of the building			
	4. Foundation design			
	5. Cross section of the building (scale: 1:50)			
		Total	15	hours

S – topics listed in the legal study programme standards from 12.07.2007

 $Ex-extended\ topics$ 

## Persons responsible for guided projects

Dr inż. Agnieszka Machowska, Dr inż. Paweł Falaciński

## **Assessment method for guided projects**

Till the end of term; every project should have 3 corrections. Total project must be printed in scale 1:50.