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Course (compulsory, elective)

obligatory

3

2/3

Year /Semester

No. of credits

Name of the module/subject

Elective path/specialty

18

Field of study

Cycle of study:

No. of hours

Lecture:

**Civil Engineering Extramural Second-cycle** 

Second-cycle studies

other

Classes:

Status of the course in the study program (Basic, major, other)

Wood construction in terms of historical and cultural

**Construction Engineering and Management** 

Laboratory:

Education areas and fields of science and art			ECTS distribution (number and %)		
Res	ponsible for sub	ect / lecturer:			
en tel Fa	inż. Marcin Chybiński nail: marcin.chybinski@ I. 61 665 20 91 aculty of Civil and Envir . Piotrowo 5 60-965 Po	onmental Engineering			
		ns of knowledge, skills and social competer	ncies:		
1	Knowledge	The basic knowledge on structural mechanics and strength of materials.			
2	Skills	Determining of the static model of a structure, determining of inner and support forces, determining of stresses and deflections in structural members.			
3	Social competencies	Team work ability.			
Ass	sumptions and ob	jectives of the course:			
	aim of the subject is to resent time.	introduce the participants into timber structure developmen	nt from the earliest historical periods to		
	Study outco	omes and reference to the educational resul	ts for a field of study		
Kno	wledge:		-		
Ability to differentiate structure types and styles from respective historical periods [-]					
2. Knowing of ideas which led to creation of new timber structure types, mainly roof structures [-]					
3. Kn	nowing of timber joint de	esigning methods resulting from wood properties [K_WC	07]		
Skil	ls:				
Drawing sketches and static schemes of selected roof structure types [K_U14]					
2. Designing specific elements of structure joints [K_U07]					
3. Ma	aking technical drawing	s of wood structures [K_U14]			
Soc	ial competencies	•			
1. Te	eam work ability [K_K	01]			
		Assessment methods of study outcome			

STUDY MODULE DESCRIPTION FORM

Profile of study (general academic, practical)

general academic

**Polish** 

(university-wide, from another field)

part-time

10

university-wide

Subject offered in:

Form of study (full-time,part-time)

Project/seminars:

# Faculty of Civil and Environmental Engineering

Passing the course involves passing project seminars and lectures.

Passing project seminars involves preparation and oral project defence.

Passing lectures involves written final exam.

Exam marks scale in %:

90 very good (A)

85 good plus (B)

75 good (C)

65 satisfactory plus (D)

55 satisfactory (E)

below 54 unsatisfactory/ failed (F)

## **Course description**

The aim is to make students familiar with the following issues: Beginnings of timber structure constructions in early historical and ancient periods. Construction ideas in Middle Ages illustrated with examples of roof structures. Beginning and development of purlin, collar-beam, hanger and strut structures and roofs with tilted columns. Specific regional and sacral types of timber structures in Poland.

### Basic bibliography:

- 1. Witruwiusz: O architekturze ksią dziesięć. PWN Warszawa 1956
- 2. Kopkowicz F.: Ciesielstwo polskie. Wyd. Arkady 1958
- 3. Praca zbiorowa: Drewniane kościoły Wielkopolski. Poznań 2003
- 4. Rapp P.: Historyczny rozwój ciesielskich konstrukcji dachowych w polskich kościołach [w R. Ganowicz: Historyczne więźby dachowe polskich kościuołów, Wyd. Akademii Rolniczej w Poznaniu, Poznan 2000]
- 5. Wiśniewska M.: Osadnictwo wiejskie. Wyd. Politechniki Warszawskiej, Warszawa 1999

#### Additional bibliography:

- 1. Gloger Z.: Budownictwo drzewne i wyroby z drzewa w dawnej Polsce. Warszawa 2006 (reprint)
- 2. Matlakowski W.: Budownictwo ludowe na Podhalu. (reprint z roku 1892)
- 3. Jankowski A.: Kościoły drewniane o zdwojonej konstrukcji scian w Wielkopolsce. Wyd. Uniwersytetu Kazimierza wielkiego w Bydgoszczy, Bydgość 2009
- 4. Ostendorf F.: Die Geschichte des Dachwerks. Hannover 1908 (reprint)

### Result of average student's workload

Activity	Time (working hours)
1. Participation in lectures	18
2. Current preparation for lectures (repeat material)	10
3. Preparation for the final exam and the attendance at the exam	15
4. Participation in projects	10
5. Work on a project at home	17
6. Preparation for a defence of the project and its defend	5

# Student's workload

Source of workload	hours	ECTS		
Total workload	75	3		
Contact hours	28	1		
Practical activities	47	2		