STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Wooden construction**		Code **1010102121010106021**
Field of study **Civil Engineering Second-cycle Studies**	Profile of study (general academic, practical) **(brak)**	Year /Semester **1 / 2**
Elective path/specialty **Structural Engineering**	Subject offered in: **Polish**	Course (compulsory, elective) **obligatory**
Cycle of study: **Second-cycle studies**	Form of study (full-time,part-time) **full-time**	
No. of hours Lecture: **30** Classes: **-** Laboratory: **-** Project/seminars: **15**		No. of credits **3**
Status of the course in the study program (Basic, major, other) **(brak)**	(university-wide, from another field) **(brak)**	
Education areas and fields of science and art		ECTS distribution (number and %)

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

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.

Assumptions and objectives of the course:

The target of the course is to introduce the participants into timber structure development from the earliest historical periods to the present time.

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. 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. Knowing of timber joint designing methods resulting from wood properties. - [K_W07]

Skills:

1. Drawing sketches and static schemes of selected roof structure types. - [K_U14]
2. Designing specific elements of structure joints. - [K_U07]
3. Making technical drawings of wood structures. - [K_U14]

Social competencies:

1. Team work ability. - [K_K01]

Assessment methods of study outcomes

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
6. Strona internetowa: http://fast10.vsb.cz/temtis/en/ [1] Podręcznik 1. Konstrukcje drewniane. Projekt Leonardo TEMTIS, Opole 2008 [2] Handbook 2. Design of timber Structures According to E C 5. Projekt Leonardo TEMTIS, Opole 2008

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. Preparation for passing lectures	30
2. Making projects	95

Student's workload

Source of workload	hours	ECTS
Total workload	75	3
Contact hours	50	2
Practical activities	40	2