

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Wood construction in terms of historical and cultural		Code 1010115111010116280
Field of study Civil Engineering Extramural Second-cycle	Profile of study (general academic, practical) general academic	Year /Semester 1 / 1
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) part-time	
No. of hours Lecture: 15 Classes: - Laboratory: - Project/seminars: -		No. of credits 1
Status of the course in the study program (Basic, major, other) major		(university-wide, from another field) from field
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 1 100% 1 100%
Responsible for subject / lecturer: Piotr Rapp email: piotr.rapp@put.poznan.pl tel. 61 6652094 Faculty of Civil and Environmental Engineering 60-965 Poznan, ul. Piotrowo 5		
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 learn structure, elasticity and strength properties of wood, carpentry joints, timber fasteners (nails, bolts, screws, tooth-plate connectors, shear plates), glued joints, methods of wood structure designing, methods of joint designing, beam structures, purlin roof structures, collar-beam roof structures.		
Study outcomes and reference to the educational results for a field of study		
Knowledge: 1. Knowing of specific properties of wood against a background of other materials - [-] 2. Knowing of thermal and moisture working conditions for a designed structure - [-] 3. Knowing of timber joint designing methods resulting from wood properties - [K_W07]		
Skills: 1. Determining data, structural analysis and strength analysis of wood structures - [K_U14] 2. Designing 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		

<p>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)</p>		
Course description		
<p>Wood as a building material. Structure, elasticity and strength properties of wood. Carpentry joints. Timber fasteners (nails, bolts, screws, toot-plate connectors, shear plates). Glued joints. Methods of wood structure designing. Methods of joint designing. Beam structures. Purlin roof structures. Collar-beam roof structures.</p>		
Basic bibliography:		
<ol style="list-style-type: none"> 1. Witruwiusz: O architekturze ksiąg 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 kościołów, Wyd. Akademii Rolniczej w Poznaniu, Poznań 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:		
<ol style="list-style-type: none"> 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. ankowski A.: Kościoły drewniane o zdwojonej konstrukcji ścian w Wielkopolsce. Wyd. Uniwersytetu Kazimierza wielkiego w Bydgoszczy, Bydgoszcz 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	25	1
Contact hours	15	0
Practical activities	0	0