

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Wooden construction</b>		Code <b>1010102121010106021</b>
Field of study <b>Civil Engineering second-cycle studies</b>	Profile of study (general academic, practical) <b>general academic</b>	Year /Semester <b>1 / 2</b>
Elective path/specialty <b>Costruction Engineering and Management</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>Second-cycle studies</b>	Form of study (full-time,part-time) <b>full-time</b>	
No. of hours Lecture: <b>30</b> Classes: <b>-</b> Laboratory: <b>-</b> Project/seminars: <b>15</b>		No. of credits <b>3</b>
Status of the course in the study program (Basic, major, other) <b>other</b>		(university-wide, from another field) <b>university-wide</b>
Education areas and fields of science and art		ECTS distribution (number and %)
<b>Responsible for subject / lecturer:</b>  Piotr Rapp email: piotr.rapp@put.poznan.pl tel. 61 6652094 Faculty of Civil and Environmental Engineering 60-965 Poznan, ul. Piotrowo 5		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	The basic knowledge on structural mechanics and strength of materials.
2	<b>Skills</b>	Determining of the static model of a structure, determining of inner and support forces, determining of stresses and deflections in structural members.
3	<b>Social competencies</b>	Team work ability.
<b>Assumptions and objectives of the course:</b> The aim of the subject is to introduce the participants into timber structure development from the earliest historical periods to the present time.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
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]		
<b>Skills:</b>		
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]		
<b>Social competencies:</b>		
1. Team work ability. - [K_K01]		
<b>Assessment methods of study outcomes</b>		

<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>		
<b>Course description</b>		
<p>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.</p>		
<b>Basic bibliography:</b>		
<ol style="list-style-type: none"> <li>1. Witruwiusz: O architekturze ksią dziesięć. PWN Warszawa 1956</li> <li>2. Kopkowicz F.: Ciesielstwo polskie. Wyd. Arkady 1958</li> <li>3. Praca zbiorowa: Drewniane kościoły Wielkopolski. Poznań 2003</li> <li>4. Rapp P. : Historyczny rozwój ciesielskich konstrukcji dachowych w polskich kościołach [w R. Ganowicz: Historyczne więźby dachowe polskich kościołów, Wyd. Akademii Rolniczej w Poznaniu, Poznan 2000]</li> <li>5. Wiśniewska M.: Osadnictwo wiejskie. Wyd. Politechniki Warszawskiej, Warszawa 1999</li> <li>6. Strona internetowa: <a href="http://fast10.vsb.cz/temtis/en/">http://fast10.vsb.cz/temtis/en/</a> [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</li> </ol>		
<b>Additional bibliography:</b>		
<ol style="list-style-type: none"> <li>1. Gloger Z.: Budownictwo drzewne i wyroby z drzewa w dawnej Polsce. Warszawa 2006 (reprint)</li> <li>2. Matlakowski W.: Budownictwo ludowe na Podhalu. (reprint z roku 1892)</li> <li>3. Jankowski A.: Kościoły drewniane o zdwojonej konstrukcji scian w Wielkopolsce. Wyd. Uniwersytetu Kazimierza wielkiego w Bydgoszczy, Bydgość 2009</li> <li>4. Ostendorf F.: Die Geschichte des Dachwerks. Hannover 1908 (reprint)</li> </ol>		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. Preparation for passing lectures	30	
2. Making projects	95	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	75	3
Contact hours	50	2
Practical activities	40	2