

Basic data of the subject	
<b>Academic Unit:</b>	Faculty of Architecture, Design and Wood Technology
<b>Program:</b>	Design and Construction of Wooden Products
<b>Subject title:</b>	Drying and Protection of Wood
<b>Study level:</b>	Bachelor
<b>Subject status:</b>	Mandatory
<b>Years of study:</b>	II
<b>Number of hours per week:</b>	3
<b>Value of credits - ECTS:</b>	5
<b>Lecturer of the subject:</b>	Ligj. MSc. Bujar Jashari
<b>Contact details:</b>	bujar.jashari@ushaf.net
<b>Subject description:</b>	<p>While pursuing this course, students will be able to analyze and understand ways of hydrothermal processing and wood protection through the application of various natural and artificial ways.</p> <p>During the follow-up of this material, the anatomy of the wood and its importance for achieving a good drying of the wood will be elaborated.</p> <p>The material clarifies the importance of drying wood and adjusting the equilibrium humidity (EMC), shows the types of water found in the wood, the possible aggregate condition, the transfer of water through the wood, etc.</p> <p>In the wood protection module students will learn about the main pests of wood, the types of antiseptics, the methods of their application and the techniques of introducing the chemical into the wood.</p>
<b>Purpose of subject:</b>	The purpose of this subject is for the student to gain general knowledge in the preservation of wood, as well as the use of chemical antiseptics for protection.
<b>Expected learning outcomes:</b>	<p>After completion of this module, students will be able to:</p> <ul style="list-style-type: none"> <li>• Dry it in equilibrium moisture conditions;</li> <li>• Lead the application of work from the starting point to the end of drying;</li> <li>• Know about insecticide, fungicide and ignifug antiseptic types.</li> </ul>

<b>Contribution to student workload (which should correspond to the students learning outcomes)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Days/week</b>	<b>Total</b>
Lectures	2	15	30
Theoretical / laboratory exercises	1	15	15
Practical work			
Contacts to the Lecturer / Consultations	1	15	15
Field exercises	2	4	8
Tests, student seminars	2	1	2
Home work			
Time of self-study (in the library or home)	3	5	15
Final preparation for the exam	2	15	30
Time spent in assessment (tests, quiz, final exam)	3	3	9
Projects, presentations, etc.	2	1	2
<b>Total</b>			<b>126</b>
<b>Teaching methodology:</b> Lectures, team work, lab work, practical visit			
<b>Assessment methods:</b> Final Exam 90% Attendance 10%			
<b>Literature</b>			
<b>Basic literature:</b>	<ol style="list-style-type: none"> <li>1. KTH V. Imprenjimi i drurit</li> <li>2. Tharja e drurit, Tiranë 2006</li> <li>3. Chemical Impregnation of Trees and Poles for Wood Preservation Hardcover - October 6, 2018 by Bill Howard Wilford (Author)</li> </ol>		

<b>Designed plan of teaching:</b>	
<b>Weeks</b>	<b>Lecture to be held</b>
<i>Week 1:</i>	Introduction
<i>Week 2:</i>	Heat carriers
<i>Week 3:</i>	Influence of physico-mechanical properties of wood during drying
<i>Week 4:</i>	Wood evaporation
<i>Week 5:</i>	Timber boiling

<b>Week 6:</b>	Softening wood for bending
<b>Week 7:</b>	Primar wood evaporation
<b>Week 8:</b>	Wood drying
<b>Week 9:</b>	Theory of wood drying
<b>Week 10:</b>	Drying speed and duration
<b>Week 11:</b>	Natural wood drying
<b>Week 12:</b>	Artificial drying of wood
<b>Week 13:</b>	Preservation of wood material
<b>Week 14:</b>	Cure wood treatment
<b>Week 15:</b>	Wood antiseptics
<b>Academic Policies and Rules of Conduct:</b>	
<i>Regular attendance, keeping calm and active engagement in dialogue during lectures and exercises is mandatory.</i>	