

SYLLABUS

Processes for Wood Construction Components 7.5 credits W7009T

Processer för träbyggkomponenter

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2022-02-14**

Processes for Wood Construction Components 7.5 credits W7009T

Processer för träbyggkomponenter

Second cycle, W7009T

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Träteknik	Wood Physics and Wood Technology

Main field of study

Wood Technology

Entry requirements

Basic knowledge of wood as a material, its anatomy, structure and mechanical properties of sawn wood products characteristics and the relationship of wood and moisture or equivalent courses W0009T W0010T

Selection

The selection is based on 30-285 credits

Course Aim

After completion of the course, the student should be able to:

- Identify and design the processes needed for a wood based product/component for an environmentally sustainable wood construction
- Identify your needs of new knowledge and capability to find the information needed for a specific process
- Present results at a scientific level similar to what is expected at an international research conference

See the study guide for a more detailed description of the course goals and content.

Contents

The course consists of a short introduction and three main modules:

-Module 1 Wood drying processes:

Lectures, case studies and lab activities relating to convective-drying, control of the drying process parameters and product quality. 1.75 credits

-Module 2 Engineered Wood Products:

Lectures, case studies and lab activities around essential process parameters for a chosen engineered wood product, as well as production processes, logistics and property requirements of the raw materials. 1.75 credits

-Module 3 Project:

Literature study, planning and writing of a project essay, as well as oral presentation of the results. 4 credits

Modules 1 and 2 follow a strict plan that is described in more detail in the course's study guide. Module 3 is more flexible and it is planned and set up in detail in each specific case.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

This education is based on self-study with individual supervision where the progression of the student is regularly monitored and reviewed together with the supervisor.

The student is expected, especially in the optional parts of the courses, to take active part in identifying the knowledge needs, as well as in planning and acquisition of new knowledge.

For a detailed description of the course activities, see the course's study guide, which includes the following:

- Definition of the theoretical area and intended learning outcomes
- Plan of activities, including time-plan, suggestion for exercises and submissions.
- Examination plan including expected performance and time-frame.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Detailed description of the examination form in the course and the examination criteria can be found in the course's study guide. A short summary is presented below:

-Modules 1 and 2

Examination: Oral or written examination in front of the teacher responsible for the module and eventually other members with relevant knowledge.

Grades: Fail (F), Pass (3), Pass with merit (4), Pass with distinction (5)

- Module 3

Part 1, Report:

Examination: Writing a project report according to the intended learning outcomes and the examination criteria.

Grades: Fail (F), Pass (3), Pass with merit (4), Pass with distinction (5)

Part 2, Presentation:

Examination: The results of the project are exposed as an oral presentation.

Grades: Fail (F), Pass (3), Pass with merit (4), Pass with distinction (5)

Self-assessment: the student should analyse and summarize his/her own work in the chosen project and choice of analytical method in order to reach the examination goal.

Grades: Fail (F), Pass (G)

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Remarks

The course is aligned with the goal Durable Wood Constructions, within the Master program in Wood Technology. The course focuses in the important production processes around durable wood constructions.

Other courses focus more in the construction or modification of wood materials with the goal of increasing the durability of the wood constructions.

The course is at the advance level.

For questions regarding the course's study guide, contact the examiner.

Course offered by

Department of Engineering Sciences and Mathematics

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0004	Wood Drying Processes: Oral or Written Exam	G U 3 4 5	2	Mandatory	A21	
0005	Engineered Wood Products: Oral or Written Exam	G U 3 4 5	2	Mandatory	A21	
0006	Project, report and presentation	G U 3 4 5	3.5	Mandatory	A21	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Niklas Lehto, Programme Director 2022-02-14

Syllabus established

by Mats Näsström 2017-02-15