30.01.2024

## Curriculum at LAB University of Applied Sciences 2024-2025

# Bachelor of Engineering, Wood Technology 24S, Double Degree, Lahti

| Code | Name | 1 y | ECTS total |
|---|---|---|---|
| **TLTIWOODDD24S-1001** | **Professional Core Competences** | | **28** |
| **TLTIWOODDD24S-1002** | **Engineering studies** | | **23** |
| K200CE69 | Finnish 1 | 3 | 3 |
| AL00CE39 | Logistics and Supply Chain Management | 5 | 5 |
| AT00CT26 | Production Management | 5 | 5 |
| AT00BZ14 | R&D Project | 5 | 5 |
| AT00BZ12 | Plywood and LVL technology | 5 | 5 |
| AT00CU23 | Global wood business | 5 | 5 |
| **TLTIWOODDD24S-1007** | **Basic studies in design** | | **5** |
| AM00CN27 | Ergonomics and Accessibility | 5 | 5 |
| AM00CV26 | Future foresight | 5 | 5 |
| AM00CV20 | Introduction to sustainable design methods | 5 | 5 |
| **TLTIWOODDD24S-1003** | **Complementary Competences** | | **7** |
| **TLTIWOODDD24S-1004** | **Virtual Wood University** | | **7** |
| **TLTIWOODDD24S-1005** | **Practical Training** | | **10** |
| HA00CE82 | Practical Training | 10 | 10 |
| **TLTIWOODDD24S-1006** | **Thesis** | | **15** |
| AO00CE85 | Thesis Planning | 5 | 5 |
| AO00CE86 | Thesis Research and Writing | 5 | 5 |
| AO00CE87 | Thesis Publication | 5 | 5 |

## TLTIWOODDD24S-1001 Professional Core Competences: 28 ECTS

## TLTIWOODDD24S-1002 Engineering studies: 23 ECTS

## K200CE69 Finnish 1: 3 ECTS

**Learning outcomes**
The student is able to
- identify and use the course vocabulary and phrases for common everyday situations
- tell about oneself and understand basic questions
- read and write simple sentences related to the course topics.

Proficiency level: A1

## AL00CE39 Logistics and Supply Chain Management: 5 ECTS

**Learning outcomes**
Student is able to

-use basic concepts of logistics and supply chain management.
- the principles of value chain formation.
- identify the impact of logistics and supply chains on the company's profitability and competitiveness.
- describe the importance of customer orientation and stakeholder cooperation throughout the supply chain.

## AT00CT26 Production Management: 5 ECTS

**Learning outcomes**
The student is able to:
- define key concepts and development methods related to production and production strategy
- development of production strategy and methods
- development of production infrastructure
- development a supply chain strategy

## AT00BZ14 R&D Project: 5 ECTS

**Learning outcomes**
The student is able to:
- make a project plan including time schedule, responsibilities and target setting
- learn customer communication
- search for professional literature to support the project
- report on the project results and analyse them
- make seminar presentation to customer

## AT00BZ12 Plywood and LVL technology: 5 ECTS

**Learning outcomes**
The student is able to:
- describe the manufacturing processes of plywood and LVL board products
- know the main end uses of both board type
- define the technical properties of both board types
- know the further processing possibilities of both board types
- produce plywood in laboratory environment and make standard quality tests

## AT00CU23 Global wood business: 5 ECTS

**Learning outcomes**
Student understands
- the global nature of modern wood products business.
- the combination of local nature of production through raw materials against varying demands in different parts of the globe

- competitive product and service offerings
- logistic options and challenges
- future trends and possibilities for the industry

## TLTIWOODDD24S-1007 Basic studies in design: 5 ECTS

## AM00CN27 Ergonomics and Accessibility: 5 ECTS

**Learning outcomes**
The student is able to
- apply the basics of ergonomics in their design work
- apply the principles of accessibility and design-for-all in their design work

## AM00CV26 Future foresight: 5 ECTS

**Learning outcomes**
Students will be able to
- apply the concepts and principles of futures studies in their chosen field
- describe tools and methods of futures studies
- anticipate changes in the operating environment both at the general level and specific to their chosen field- apply foresight methods in research and development

## AM00CV20 Introduction to sustainable design methods: 5 ECTS

**Learning outcomes**
- As a designer recognize the sustainable design methods.
- Has the knowledge the possibilities of implementation of the methods.

## TLTIWOODDD24S-1003 Complementary Competences: 7 ECTS

**Learning outcomes of the study module**
Virtual Wood University course

## TLTIWOODDD24S-1004 Virtual Wood University: 7 ECTS

## TLTIWOODDD24S-1005 Practical Training: 10 ECTS

## HA00CE82 Practical Training: 10 ECTS

**Learning outcomes**
The student is able to
- describe work-related phenomena and use related concepts
- act in a productive way, following the practices of the workplace and the ethical principles of the profession
- use the techniques, work methods, models and processes that they have learnt
- act in a customer-oriented way in interactive situations in the workplace and in the cooperation network
- evaluate and develop their own competence int the work done in practical training

## TLTIWOODDD24S-1006 Thesis: 15 ECTS

## AO00CE85 Thesis Planning: 5 ECTS

**Learning outcomes**
The student is able to:
- describe the objectives and core contents of their thesis
- plan and describe the stages of the thesis process
- take into account the possible research permit and copyright issues.

## AO00CE86 Thesis Research and Writing: 5 ECTS

**Learning outcomes**
The student is able to:
- implement the thesis on the basis of an approved thesis plan.

## AO00CE87 Thesis Publication: 5 ECTS

**Learning outcomes**
The student is able to:
- present the results or output of their thesis
- report on their thesis in writing in accordance with the thesis guidelines of LAB University of Applied Sciences
- write a maturity test.