

Wood - Innovation

Programme course

6 credits

Träteknik - Innovation

TMKA04

Valid from: 2021 Spring semester

Determined by

Board of Studies for Mechanical Engineering
and Design

Date determined

2020-09-29

Main field of study

Product Development, Mechanical Engineering

Course level

Second cycle

Advancement level

A1X

Course offered for

- Design and Product Development, M Sc in Engineering
- Industrial Engineering and Management - International, M Sc in Engineering
- Industrial Engineering and Management, M Sc in Engineering
- Mechanical Engineering, M Sc in Engineering
- Energy - Environment - Management, M Sc in Engineering

Prerequisites

A course in Product Development or Innovation.

Intended learning outcomes

The aim of this course is for the student to obtain thorough knowledge of innovative product development in the wood and forest sector. The purpose of the course is to develop innovative wood products/technologies for a sustainable society, and after completing the course the student should:

- be familiar with the most common product development processes within the Swedish wood manufacturing industry;
- understand the significance of all of the process involved parties
- have an understanding of the design work; its extent, importance and challenges.
- be able to assess different qualities and functions of wood products.
- have knowledge of ergonomics as well as various methods to increase products' usability
- be able to argue for and against wooden material in different kinds of products

Course content

The course consists of lectures, guest lectures, workshops and study visits. Parallel to these the students will work with a project. Resources such as the material library and the wood workshop will be used in both the laboration work but also in the project. The course is offered to many different programs which allow a natural training in communication between professionals/engineers as well as a scope for exciting results and depth of the projects.

Teaching and working methods

Lectures, laboratory work and field studies. Project assignment.

Examination

PRA1	Project assignment	U, 3, 4, 5	5 credits
LAB1	Laboratory work	U, G	1 credits

Grades

Four-grade scale, LiU, U, 3, 4, 5

Department

Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent

Mikael Axin

Examiner

David Eklöf

Education components

Preliminary scheduled hours: 64 h

Recommended self-study hours: 96 h