Wood - Innovation

Programme course

6 credits

Träteknik - Innovation

TMKA04

Valid from: 2017 Spring semester

Determined by
Board of Studies for Mechanical Engineering and Design

Date determined
2017-01-25

Offered for the last time
Spring semester 2021

Replaced by
TMKA13

Main field of study
Product Development, Mechanical Engineering

Course level
Second cycle

Advancement level
A1X

Course offered for
- Design and Product Development
- Industrial Engineering and Management, M Sc in Engineering
- Industrial Engineering and Management - International, M Sc in Engineering
- Mechanical Engineering, M Sc in Engineering

Entry requirements
Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

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

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

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

Department
Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent
Peter Hallberg

Examiner
David Eklöf

Education components
Preliminary scheduled hours: 0 h
Recommended self-study hours: 160 h