

Course syllabus

# Verkstadsintroduktion Introduction to Workshop Training

## IDEA95, 6 credits, G1 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED ID

**Date of Decision:** 2023-03-16

### **General Information**

Main field: Technology. Compulsory for: MD1

Language of instruction: The course will be given in Swedish

#### **Aim**

The purpose of the course is to in a secure way introduce the students to the possibilities and restrictions in the use of a workshop. 3D-printing is introduced.

## Learning outcomes

Knowledge and understanding
For a passing grade the student must

- be able to distinguish between different processing principles
- be able to identify the most common tools.
- be able to explain the principles behind additive manufacturing

Competences and skills

For a passing grade the student must

- under supervision be able to operate the traditional workshop machines, such as band saw, lathe and milling machine.
- be able to handle a basic 3D-printer

Judgement and approach

For a passing grade the student must

- be motivated to comply with specific security rules.
- be able to relate to the adequate level of precision with a minimum of 0.1 mm.

#### **Contents**

From the start the students are trained hands-on in traditional workshop machinery under supervision. Lectures cover topics like working methods, security regulations, tools and materials.

Further individual training is implemented, particularly regarding turning and milling. 3D-printing is introduced and practised. As a preparation for the course IDEA35 "Designers' tools", a creative exercise in building a simple sketch model is realized.

#### **Examination details**

Grading scale: UG - (U,G) - (Fail, Pass)

Assessment: Based on individually realized exercises.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

#### **Admission**

The number of participants is limited to: No

## **Reading list**

- Karlebo: Handbok. Liber, 2000, ISBN: 91 47 01558 6.
- Hallgrimsson, B.: Prototyping and modelmaking for product design. Laurence King Publishing Ltd, London, 2012, ISBN: 978 1 85669 876 4.

#### Contact and other information

Course coordinator: Therese Eklund, therese.eklund@design.lth.se