

Course syllabus

Designerns verktyg Designer Tools

IDEA35, 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: MD2

Language of instruction: The course will be given in Swedish

Aim

The aim of the course is to practice the essential techniques for the design process and the ability to be able to present a design concept. The aim is furthermore to give a firm understanding for the relation shape/technique/material on the basis of a contemporary industrial design context.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- demonstrate a thorough understanding of the relationship between form, technique and materials.

Competences and skills

For a passing grade the student must

- present a design concept of a smaller product with the help of freehand sketches and with 2D techniques
- build a sketch model of the equivalent design concepts
- computer generate an artefact for numerically controlled manufacturing and/or 3D printing.

Judgement and approach

For a passing grade the student must

- be sensitive to adequate precision level and attention to detail.

Contents

The course starts with a general review of modern industrial design history.

Sketching and 2D techniques are introduced and practiced.

The training in engineering workshop is increased with special techniques for model building. Graphical design is introduced and trained with the emphasis on production graphic.

After general reviews of theory and knowledge the course is based on the training of the student on its own of different stages in the operation under guidance.

Lectures and practical application are given in the CAD tool to demonstrate the possibilities of generating prototypes in the form of 3D printing or by using other numerically controlled machines.

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)

Assessment: The grades awarded range from 5 to 3 wherein 3 equals "passed", depending on participation and completion of 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

The course overlaps following course/s: IDE180, IDEA01

Reading list

- Wim Muller: Order and meaning in Design. Lemma, ISBN: 90 5189 6298.
- Andersson, N: Skissteknik, En Handbok i visualisering av designförslag. Umeå.
- Andersson, N: Perspektivlära. Umeå.
- Scott Robertson: How to Draw, Drawing and Sketching Objects and Environments from Your Imagination. 2013, ISBN: 9781933492759.
- Scott Robertson: How To Render, Communicating Form and Rendering a Wide Range of Materials. ISBN: 9781933492834.
- John Montague: Basic Perspective Drawing. John Wiley And Sons Ltd. Sverige., 2004, ISBN: 9780471472742. Paperback.

Contact and other information

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Course homepage: <http://www.industridesign.lth.se>