



COURSE SYLLABUS

Design Methodology in Industrial Design Project, 7.5 credits

Design metodik i industriell design projekt, 7,5 högskolepoäng

Course Code: TDMS22	Education Cycle: Second-cycle level
Confirmed by: Dean Mar 1, 2021	Disciplinary domain: Technology
Revised by: Director of Education Oct 15, 2024	Subject group: DE1
Valid From: Jan 1, 2025	Specialised in: A1F
Version: 3	Main field of study: Product Development

Intended Learning Outcomes (ILO)

After a successful course, the student shall;

The student will gain an in-depth knowledge in design methodology and design history. The student will gain a historical perspective to be able to analyze current and future trends. The assignments are intended for the student to practice the influence of form, colors, and shape in human psychology.

Knowledge and understanding

- display knowledge of color schemes , color schemes and product graphics
- display knowledge of photo render digital models
- demonstrate comprehension of understanding of shape and form problems
- demonstrate comprehension of how to present and communicate designs orally.

Skills and abilities

- demonstrate the ability and skill, without supervision, sketch and illustrate product suggestions.
- demonstrate the ability to give shape proposals and solve form problems
- demonstrate skills of rendering digital models.
- demonstrate the ability to develop 3D models of the FFF machines.

Judgement and approach

- demonstrate the ability to create their own expressions and mannerisms.

Contents

The course includes the mixture of theoretical and practical elements. Focus of the course is to give students the ability to visualize your design through sketches, illustrations, rendered images and physical models.

The course includes the following elements:

- Color Theory
- Animation

- Imaging
- Model Technique
- Aesthetics
- Design Methodology
- Product Methodology
- Sketching
- Rhetoric and Communication

Type of instruction

The course is implemented through lectures, supervision, assignments and projects.

The teaching is conducted in English.

Prerequisites

The applicant must hold the minimum of a bachelor's degree (i.e., the equivalent of 180 ECTS credits at an accredited university) with at least 90 credits within the major subject Mechanical Engineering or Civil Engineering (with relevant courses in construction and design), and 15 credits Mathematics, or equivalent. Passed the course Advanced CAD 7.5 credits. Proof of English proficiency is required.

Examination and grades

The course is graded Fail (U) or Pass (G).

Registration of examination:

Name of the Test	Value	Grading
Assignments	3 credits	U/G
Project work	4.5 credits	U/G

Course literature

The literature list for the course will be provided one month before the course starts.