

COURSE SYLLABUS

Collaborative Design Studio, 7.5 credits*Kollaborativ designstudio, 7.5 högskolepoäng*

Course Code:	TKDS26	Education Cycle:	Second-cycle level
Confirmed:	Feb 01, 2025	Disciplinary domain:	Technology
Valid From:	Aug 31, 2026	Subject group:	Design
		Specialised in:	A1F Second cycle, has second-cycle course/s as entry requirements
		Main field of study:	Product Development

Intended Learning Outcomes (ILO)

On completion of the course the student shall:

Knowledge and understanding

- demonstrate an understanding of the principles and practices of collaborative design in a professional setting.
- demonstrate comprehension of the relationship between product design, materials, and manufacturing processes, and how these elements influence design decisions in real-world projects.

Skills and abilities

- demonstrate the ability to effectively communicate and coordinate with team members to integrate diverse perspectives into cohesive design solutions.
- demonstrate the ability to engage with clients and stakeholders, incorporating their feedback into the design process.
- demonstrate the ability to apply advanced industrial design tools and methods in a collaborative context, including sketching, surface modelling, rendering, and prototyping.

Judgment and approach

- demonstrate the ability to critically evaluate and refine design solutions based on stakeholder feedback and project requirements.
- demonstrate an understanding of professional practices in industrial design consultancy, including project management, client interaction, and iterative design refinement.

Content

In this course, students will work collaboratively on real-world design projects, functioning as an industrial design consultancy. They will develop the ability to apply industrial design methodologies to address real-world challenges, focusing on teamwork, communication, and coordination within a group setting. Students will enhance their skills in managing group dynamics, delegating tasks, and synthesizing diverse perspectives to create cohesive design solutions, also considering manufacturability, and product functionality.

Students will gain experience working in a professional environment, interacting with clients, and navigating the iterative design process, incorporating feedback to refine their designs. The course will emphasize self-sufficiency, with students expected to take the initiative in seeking guidance from teachers and industry experts as needed.

The course will culminate in a final presentation where teams will showcase their design solutions, demonstrating their ability to work collaboratively and independently while meeting client needs. This

experience will not only provide valuable insights into professional design practices but also help students enhance their portfolios with tangible, real-world projects.

The course includes the following elements:

- Collaborative project work addressing real-world design challenges
- Effective communication, task delegation, and team integration
- Advanced use of industrial design tools: sketching, surface modelling, rendering, and prototyping in order to communicate with a client
- Client and stakeholder interaction, presentation, and feedback incorporation
- Self-directed learning and problem-solving
- Tutoring and expert consultation

Type of instruction

Teaching consists of collaborative group work, project-based learning, client and stakeholder interactions, peer-to-peer learning sessions, expert consultations, and final presentation.

Language of instruction is in English.

Entry requirements

Passed courses of at least 210 credits in the program Industrial Product Realisation, or passed courses of at least 90 credits in Mechanical Engineering, Civil Engineering, Industrial Design, Product Development, Innovation, Production Engineering, Industrial Engineering or the equivalent. The bachelor's degree should comprise a minimum of 15 credits in Mathematics. Taken course Industrial design communications, 7,5 credits, or the equivalent. Proof of English proficiency is required.

Examination and grades

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

Group work for presentation, individual work for project.

Registration of examination:

Name of the Test	Value	Grading
Presentation	3.5 credits	G/U
Project	4 credits	G/U

Course literature

Please note that changes may be made to the reading list up until eight weeks before the start of the course.

Title: Product Design and Development, Seventh Edition

Author: Karl T. Ulrich. Steven D. Eppinger. Maria C. Yang

ISBN: 978-1-260-566-43-7

Name: Research Methods for Product design

Author: Alex Milton & Paul Rodgers

ISBN: 978-1-78067-302-8