KONSTFACK - UNIVERSITY OF ARTS, CRAFTS AND DESIGN
Department of Design, Interior Architecture and Visual Communication

COURSE SYLLABUS

Industrial Design with focus on sustainable development

30.0 Credits

Code: IDK222
Established by: 2025-04-24, Prefekt
Valid from: Spring semester 2026 (2026-01-19)
Level within study regulation: First cycle
Subject group: DE1 Design
Disciplinary domain: DE Design 100%
Grading scale: UG Two-grade scale

Course modules

Module 1: Design in collaboration with students from another program at Konstfack, 4.5 Credits
Module 2: Designers' professional contexts, 6.0 Credits
Module 3: Design for sustainable development in relation to living organisms and processes in nature, 9.0 Credits
Module 4: Reflections on design history, 1.0 Credits
Module 5: Specialization within visualization and communication, 2.0 Credits
Module 6: Design with an artistic focus, 7.5 Credits

Main course content

Module 1: Design in collaboration with students from another program at Konstfack, 4,5 credits

Students from Industrial Design, design proposals together with students from another programme at Konstfack, based on a theme that provides students from different programmes the opportunity to approach the task based on their respective knowledge, background and skills. The students are trained in the ability to

interact and collaborate with other disciplines. They will also describe, analyse and interpret form, as well as critically reflect on their own and others' artistic approach and exhibit their results.

Module 2: Designers' professional contexts, 6 credits

A project is carried out with an organisation, a company, or within a specific field of work for the purpose of offering the student insights into various types of work that a designer performs, as well as forms of collaborations and stakeholders that a designer will encounter. This module introduces key concepts, methods, and techniques used in marketing, and the student develop both a design proposal and a marketing plan. The module also includes a basic orientation in different needs and possibilities for design in a global marketplace. In addition the student is introduced to various perspectives on the market, sustainability and community-at-large to gain an increased understanding of the role of design in society.

Module 3: Design for sustainable development in relation to living organisms and processes in nature, 9 credits

In this module, the student is introduced to the complexity of nature-inspired design methods and the reasons why they are critical for achieving ecological design solutions. The student develops and learns basic frameworks for nature-inspired sustainable design in relation to design ecology, a product's life cycle, and biomimicry. Based on nature's strategies, the student engages in exercises to develop design proposals inspired by nature by applying methods on three levels: form, process and system. In addition, the student should develop the ability to engage in critical reflection and thinking, along with awareness about sustainable design. By iterative prototyping, the student generates ideas inspired by nature for the purpose of developing ecological design proposals.

Module 4: Reflections on design history, 1 credit

The module focuses on how trends within the design historical field are activated within the students artistic process and development.

Module 5: Specialization within visualization and communication, 2 credits

The student chooses a specialisation to immerse themselves in from one of the primary areas of visualisation and communication: 2-D, 3-D, photo or video. By means of the chosen specialisation, the student explores ways to visually communicate a selected project with relevance to the subject area.

Module 6: Design with an artistic focus, 7,5 credits

In this module practical and theoretical knowledge and skills are woven together in the design process, with both aesthetic and semiotic concepts in focus. The module includes an exercise in distinguishing and applying concepts and an artistic, product-designed process. The student will engage in exercises to learn how to work in a collective process during the active formation of physical models, and in an evaluation of the design process in relation to the results.

Exercises are engaged to develop the student's capability to run an exploration of form, space, techniques and materials. The student will also engage in exercises to map out product areas and developing scenarios along with 2-D and 3-D sketching/model building. The student is encouraged to develop a high degree of independence and collaborative skills.

Intended learning outcomes

Module 1: Design in collaboration with students from another program at Konstfack, 4,5 credits

After completing this module, the student shall be able to:

- collaborate with other disciplines,
- orally and in writing, or in other manners, present and discuss one's own activities and artistic issues with different groups,
- describe, analyse and interpret form, technique and content, and critically reflect on their own artistic approach along with that of others,
- show a basic understanding of how an exhibition can be designed and carried out.

Module 2: Designers' professional contexts, 6 credits

After completing this module, the student shall be able to:

- describe and explain the areas and contexts in which designers operate,
- reflect on the stakeholders a designer works together with and their different roles,
- reflect on how marketing techniques and design relate to communication,
- develop a design proposal that is related to a marketing plan,
- make assessments taking relevant societal and environmental aspects into account,
- describe and critically discuss marketing concepts, methods and techniques,
- show the capability to transform ideas into design and form where products, services and systems are taken into consideration and relate to each other,
- present relevant design proposals from a holistic perspective, and in relation to various stakeholders.

Module 3: Design for sustainable development in relation to living organisms and processes in nature, 9 credits

After completing this module, the student shall be able to:

- describe and explain relevant contemporary points of view, concepts and principles in relation to design for sustainable development,
- critically reflect and discuss the complexity of design for sustainable development in relation to nature,
- apply design methods related to living organisms and ecological processes,
- create nature-inspired design proposals taking design for sustainable development into account,
- critically review another student's design proposals in relation to sustainable development,
- adequately show knowledge of sustainable development via the design and form of relevant design proposals.

Module 4: Reflections on design history, 1 credit

After completing this module, the student shall be able to:

- show an understanding of how historical ideas and strands within design influences the students own artistic process.

Module 5: Specialisation within visualisation and communication, 2 credits

After completing this module, the student shall be able to:

- explore in depth a specialisation in one of the main areas in visualisation and communication: 2-D, 3-D, photo or video,
- describe and explain how the choice of focus and specialisation is relevant to the industrial designer, communicate a design proposal by means of the selected visualisation method,
- identify their need for further knowledge and to develop their skills.

Module 6: Design with an artistic focus, 7,5 credits

After completing this module, the student shall be able to:

- define, evaluate and work with concepts of design and form, and apply these to physical models,

- define the primary categories and several selected concepts within a given 3-D aesthetic taxonomy,
- integrate semiotic concepts into a design process that results in physical prototypes which relate to technology, usage and expression, and describe the design proposal,
- work collectively to develop a joint design process,
- critically discuss the usage and application of form-theories in the design work,
- in an in-depth manner describe, analyse and interpret form, technology and content.

Entry requirements

General entry requirements.

Forms of examination

The final grade is based on:

- written, oral and visual presentations, including a physical model in certain course modules,
- individual tutoring and joint discussions,
- presentations during all parts of the course.

The examiner is responsible for providing grading criteria for the examination and ensuring that these are made available in the course description.

Students who receive the grade Fail (underkänd) in an examination are entitled to take a further five tests as long as the course is given, in order to achieve the grade Pass (godkänd). Students who fail an examination twice by an examiner are entitled to request that another examiner is appointed to decide grades for the test. A request should be made to the Head of Department.

If there are special reasons, or a need for adaptation for a student with an approved decision on special educational support for disability, the examiner may decide to deviate from the course syllabus regulations regarding the form of examination.
This may include options such as substitute assignments or exemptions from compulsory course components. Content and learning outcomes, expected skills, knowledge and abilities may not be altered.

Reading list and other study material

Reading lists are presented in the module descriptions.

Additional information

The department is responsible for other essential information, such as detailed teaching methods and grading criteria, to be available for students before the start of the course.

This course may not be credited towards a degree together with similar courses taken and passed, where the content is completely or partly the same as the content of this course.

Students may request that examination according to this syllabus is conducted no more than twice during one two-year period after it has expired.

The course is a mandatory part of the Bachelor’s Programme in Industrial Design.

During the course of the education, the student must have completed a certain number of credits or a certain course in order to start the next semester. The following requirements apply to students studying according to this syllabus:

- to begin studies in year two, a passing grade in courses corresponding to at least 45 credits is required.
- to begin studies in year three, a passing grade in courses corresponding to at least 105 credits is required, of which at least 45 credits must be from year two.

This course is conducted primarily in Swedish, however teaching in English may occur.

This syllabus replaces the syllabus for IDK220 Industrial Design with focus on sustainable development.