

# Design, Master's Programme

120 credits

Design, masterprogram

6MDES

Valid from: 2017 Spring semester

**Determined by**

Faculty Board of Institute of Technology

**Date determined**

2017-01-25

## Purpose

The purpose of design is to make alternative futures possible through systematic, experimental, human-centered, aesthetic and critical exploration. Expressive work requiring conscious aesthetic choices forms a central part of the design of material and immaterial artifacts, such as products, services and systems. Design practice comprises the perspectives of technology and materials, form and experience, engineering and craftsmanship, and utility and ethics. Moreover, design practice is contingent on the intertwining of multiple competencies, stakeholders, values, and goals. In academic terms, therefore, design is an interdisciplinary subject combining perspectives from engineering, behavioral science, social science and the arts.

## Aim

A MSc in Design from LiU is able to identify, analyze and address complex interdisciplinary design challenges and possibilities, and to develop and communicate potential solutions, in a variety of contexts including industry, entrepreneurship, public sector and non-profit organizations. The design contribution in terms of knowledge, skills and values is integrated with other practices as dictated by the situation at hand.

The design contribution brought to the situation is human-centered, in the sense that it emphasizes design for people and by people as complex, idiosyncratic individuals. Moreover, it is strongly interdisciplinary, which is to say that it is applicable in multi-competent teams, in various kinds of organizations, on strategic as well as tactical and operational levels, in complex and challenging situations where a mono-disciplinary design approach would be inadequate.

A MSc in Design from LiU has acquired the knowledge, skills and values needed to work as a designer in a changing professional landscape and to become a scholar in the academic field of design research.

After completion of the master program the student is expected to have acquired the following:

Knowledge and understanding

A MSc in Design from Linköping University shall:

- demonstrate knowledge and understanding in Design, including broad knowledge and understanding of Design as an interdisciplinary field and practice, as well as a considerable degree of specialized knowledge in one area of the field
- demonstrate insight into current research and development work
- demonstrate specialised methodological knowledge in design as well as design approaches, methods and techniques, and an understanding of the responsibility, limitations and possibilities when used in different contexts
- demonstrate specialized knowledge of materials in design, in design processes as well as in design outcomes, its role in varying situations and their qualities in use
- demonstrate knowledge of a broad repertoire of design examples, and their relationship to the individual design practice developed

### Competence and skills

A MSc in Design from Linköping University shall:

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
- develop forms of design expression as well as to reflect critically on his or her design approach and that of others
- demonstrate the ability in speech, writing and design both nationally and internationally to clearly report and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences
- demonstrate the skills required for participation in research, design and development work or autonomous employment in some other qualified capacity
- demonstrate skills and competence to collaboratively and independently formulate and reframe given or emerging issues and problems, in collaborative processes
- demonstrate skills and competence to engage with and engage stakeholders, users, professionals, and other developers, in iterative and co-creative processes
- demonstrate skills to engage the five senses in playfully bringing multiple alternative solutions and ideas to life, and competence to do so in collaboration with others
- demonstrate skills and competence to use appropriate, critical and conceptual expressive techniques, as well as competence to develop expressive techniques suitable for different design situations

### Judgement and approach

A MSc in Design from Linköping University shall:

- demonstrate the ability to make assessments in design informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work
- demonstrate insight into the possibilities and limitations of design and research, its role in society and the responsibility of the individual for how it is used
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning
- demonstrate skills and competence in design judgment, critique and evaluation, regarding artefacts as well as processes

## Content

The core of the program consists of three studio-based interdisciplinary courses driven by a specific theme for each studio. From the first semester the students have access to a mix of joint courses and courses based on defined design tracks. From the second semester the students will also be able to choose from a set of elective courses.

## Education profiles

Within the master programme there are several design tracks. These tracks may vary over time, and each year the current tracks are described in the curriculum. The minimum requirement for character courses in a design track is 18 ECTS. If the requirements for a design track is fulfilled it will be included in the Degree Certificate. Adaptations of a design track, e.g. due to exchange studies, should be motivated and developed in collaboration with the study counsellor. Applications for adaptations of a design track is handled by the study board, where decisions also are made

## Entry requirements

- Bachelor's degree
- English corresponding to the level of English in Swedish upper secondary education (English 6/B)
- Applicants are required to submit the following:
  1. a current resumé
  2. a well structured and annotated portfolio
  3. a letter of motivation
  4. up to five samples of independently produced pieces of text

## Degree thesis

The main subject of studies, in order to receive a master's degree from the Master of Science in Design program, is Design. To be qualified to conduct a degree project, the student must be admitted to the master's programme in Design and have completed at least 72 credits from courses within the programme, of which 48 credits must be at the advanced (graduate) level within Design.

## Degree requirements

The programme is designed to give the master's degree "Master of Science in Design". The following detailed requirements apply

- a Bachelor's degree as specified in the entrance requirements
- course requirements for a total of 120 ECTS credits from courses from the curriculum of the programme, or after special decision from the programme board, and thesis work.
- passed the requirements for all compulsory courses
- courses on advancement level A (advanced) 90 ECTS credits including at least 30 ECTS credits courses from the major subject (Design)
- a 30 ECTS credits Master's Thesis in the major subject (Design) presented and passed as per Linköping Institute of Technology degree regulations.

Courses overlapping each other regarding contents are not allowed to be included in the degree. Courses used for the Bachelor's degree can never be included in the Master's degree.

## Degree in Swedish

Master of Science (120 credits) with a major in Design

## Degree in English

Master of Science (120 credits) with a major in Design

## Specific information

Certain PhD courses can be part of the Master degree in Design. These course selections are subject to formal decision by the executive committee of the Program Board.

## Curriculum

### Semester 1 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE29	Codesign, Tools and Approaches	6*	A1X	3	C
TMKA08	Studio 1	12*	A1X	1	C
TDDE28	Contemporary Perspective on Value Creation	6	A1X	2	C/E
TMKA07	Sustainable Strategies	6	A1X	2	C/E
TNM101	Advanced Visualization Design	6	A1X	2	C/E
<b>Period 2</b>					
TDDE29	Codesign, Tools and Approaches	6*	A1X	2	C
TMKA08	Studio 1	12*	A1X	2	C
TNM102	Design Research Methodology	6	A1X	3	C

### Semester 2 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE37	Studio 2	12*	A1X	2	C
TDDE38	Thinking with Representations	6*	A1X	3	C/E
TDDE39	Physical Interaction Design and Prototyping	6*	A1X	3	C/E
TNM104	Augmented Information Spaces	6*	A1X	3	C/E
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TKMJ10	Industrial Ecology	6	A1X	1	E
TMKA04	Wood - Innovation	6	A1X	1	E
<b>Period 2</b>					
TDDE37	Studio 2	12*	A1X	2	C
TRTE20	Norm Creative perspectives on Design, Power and Change	6	A1X	1	C
TDDE38	Thinking with Representations	6*	A1X	3	C/E
TDDE39	Physical Interaction Design and Prototyping	6*	A1X	3	C/E
TNM104	Augmented Information Spaces	6*	A1X	3	C/E

### Semester 3 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TNM105	Studio 3	12*	A1X	3	C
TDDE40	Transformation for Design	6*	A1N	4	C/E
TMKA09	Disruptive Technologies	6*	A1X	4	C/E
TNM106	Immersive Information Spaces	6*	A1X	4	C/E
TEIO90	Innovation Management	6	A1X	2	E
TKMJ14	Large Technical Systems and the Environment	6	A1X	4	E
<b>Period 2</b>					
TNM105	Studio 3	12*	A1X	3	C
TDDE40	Transformation for Design	6*	A1N	4	C/E
TMKA09	Disruptive Technologies	6*	A1X	4	C/E
TNM106	Immersive Information Spaces	6*	A1X	4	C/E
TDDD61	Design - Strategy and Management	6	A1X	1	E
TMKT81	Wood - Realisation	6	G2X	1	E

### Semester 4 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C
<b>Period 2</b>					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C

ECV = Elective / Compulsory / Voluntary

\*The course is divided into several semesters and/or periods