![Stockholm University logo]

Department of Computer and Systems Sciences

Stockholm University

Education plan

for

Master's Programme in Design for Creative and Immersive Technology
Masterprogram i design för kreativ och immersiv teknik

120.0 Higher Education Credits
120.0 ECTS credits

Programme code:	SDKIO
Valid from:	Autumn 2020
Date of approval:	2018-05-30
Changed:	2019-12-10
Department:	Department of Computer and Systems Sciences

Decision

This programme syllabus was approved by the Social Sciences Faculty Board 2018-05-30. Revised 2019-12-10.

Prerequisites and special admittance requirements

A Bachelor degree with at least 180 ECTS, including a 15 ECTS independent degree project or thesis.
Language requirements: English 6 or the equivalent.
Specific requirements: At least 90 ECTS of successfully completed studies in Computer and Systems Sciences, Informatics or the equivalent.

Programme structure

The programme provides in-depth and research preparatory knowledge, with both theoretical and practical skills, in the design of systems for creative and immersive technology.

The first semester provides the foundation for design for creative and immersive technology, as well as the basis for Internet of things. The semester ends with a course in scientific writing.

The second semester goes in-depth into these topics and also covers dynamic systems, qualitative data-analysis and the comparison between big data and thick data.

The third semester covers the designer's role, competencies and responsibilities in the information society. The third semester also contains an extensive project course (15 credits), where students co-operate with research groups or the industry. The semester ends with a selection between one of the following two courses: a course in future trends in creative techniques or a course in entrepreneurship.

During the fourth semester, the student writes his/her Master's thesis, 30 credits.

The student's progression in the programme intends to provide knowledge and skills that prepare for research at postgraduate level or opportunities to achieve qualified jobs in the highly-expanding IT industry, in Sweden and globally.

Goals

In addition to the general learning goals stated in chapter 1, paragraph 9 of the Swedish Higher Education Act, the following goals according to Higher Education Ordinance are applied.

Knowledge and Understanding
For a Degree of Master the student shall:
- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate specialised methodological knowledge in the main field of study.

Skills and Abilities
For a Degree of Master the student 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,
- demonstrate the ability to clearly report and discuss both orally and in writing own conclusions and the knowledge and argumentation which they are based on, in dialogue with different audiences in national and international contexts, and
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Assessment Ability and Approach
For a Degree of Master the student shall:
- demonstrate the ability to make assessments in the main field of study taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development,
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal needs for further knowledge and to take responsibility for own continuous learning.

In addition to the above mentioned goals, the following goals are applied:
For a Degree of Master the student shall:
- demonstrate in-depth knowledge in the main field of study, Computer and Systems Sciences, with specialisation towards interaction design for creative and immersive technology,
- demonstrate the ability to take into account the user's needs and situation and develop, in co-operation with the user, appropriate IT solutions,
- demonstrate an understanding of the developer's responsibilities for societal impact and societal constraints for the developer's possibilities.

Courses
All courses are in the main field of study: Computer and Systems Sciences.
The following courses are from the first cycle: Introduction to Design for Creative and Immersive Technology 15 credits, Internet of Things Services, 7,5 credits. The other courses are from the second cycle.
The courses described below are mandatory within the programme. The language of instruction is English.

First Semester
- Introduction to Design for Creative and Immersive Technology, 15 credits
- Internet of Things Services, 7,5 credits
- Scientific Communication and Research Methodology, 7,5 credits

Second Semester
- Big Data versus Thick Data I, 7,5 credits
- Design for Autonomous Processes, 7,5 credits
- Big Data versus Thick Data II, 7,5 credits
- Design for Complex and Dynamic Contexts, 7,5 credits

Third Semester
- Design and Information Society, 7,5 credits
- Project Course in Creative and Immersive Technology, 15 credits
One of the following two courses:
- Tendencies and Trends in Creative Technology, 7,5 credits
- Entrepreneurship in the Digital Society, 7,5 credits.

Fourth Semester
- Master's Thesis in Computer and Systems Sciences, 30 credits

Degree

The programme leads to a Degree of Master of Science in the main field of study: Computer and Systems Sciences.

Misc

Admitted students, who have not completed their studies within the planned academic years, may complete the programme even after the programme syllabus has expired. In this case, the limitations stated in the syllabi for the courses included in the programme apply.