Department of Computer and Systems Sciences



Education plan

for

Master's Programme in Strategic Information Systems Management Masterprogram i strategisk ledning med informationssystem 120.0 Higher Education Credits 120.0 ECTS credits

Programme code:SSLIOValid from:Autumn 2019Date of approval:2018-05-30

Department: Department of Computer and Systems Sciences

Decision

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

Prerequisites and special admittance requirements

A Bachelor degree equal to 180 ECTS in any main field of study, including a 15 ECTS independent degree project or thesis.

Language requirements: English 6 or the equivalent.

Programme structure

The first semester provides core courses in the field of information systems, as well as a course in scientific communication and research methodology. Students without a background in IT attend an introductory course in Computer and Systems Sciences.

With these courses as a basis, in the second term, all students then attend three in-depth courses in the field of information systems. The courses are chosen from a list of four/five elective courses.

During the third semester, the student can individually deepen his/her studies by choosing elective courses from a more extensive list provided by the department. In this way, the student can specialise his/her studies towards the Computer and Systems Sciences areas that s/he considers of interest.

The fourth semester consists of a master's thesis based on the knowledge and the skills acquired by the student during the previous semesters.

After completing the programme, the student will have a solid foundation for both postgraduate studies and professional activities in the information systems area, with professional roles such as system developer, IT architect, business architect, process developer and database administrator.

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 an 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 knowledge in the theories, methods and models for the development and use of digital resources in organisations and society,
- demonstrate knowledge in the architecture of the technical infrastructure underlying organisations' digital resources,
- demonstrate in-depth knowledge in the analysis, design and development of business and digital resources, focusing on business models, processes and services,
- demonstrate the ability to apply and further develop methods and models for business development and business management with IT support, focusing on requirements engineering and project management,
- demonstrate the ability to formulate, lead and implement projects that combine business changes and system development.
- demonstrate the ability to assess ethical aspects, economic and social consequences of business changes and the use of information systems.

Courses

All courses are in the main field of study: Computer and Systems Sciences.

The introductory course (supplementary course in Computer and Systems Sciences, 15 credits) is from the first cycle; the other courses are from the second cycle.

The courses described below are mandatory within the programme. The language of instruction is English.

Alternative 1: for students without 90 credits in Computer and Systems Sciences, Informatics or the equivalent.

First Semester

- Supplementary Course in Computer and Systems Sciences, 15 credits
- Management of Global IT Resources, 7,5 credits
- Scientific Communication and Research Methodology, 7,5 credits

Second Semester

- Research Methodology for Computer and Systems Sciences, 7,5 credits Three of the following four elective courses:
- Digital Business in the area of IT, 7,5 credits
- Systems Theory, Organizations and IT, 7,5 credits
- Strategic IT Management, 7,5 credits
- Business Process Design and Intelligence within the IT area, 7,5 credits

Third Semester

- Enterprise Computing and ERP Systems, 7,5 credits
- Advanced Requirements Engineering of IT-systems, 7,5 credits

- Elective courses in Computer and Systems Sciences, from a list provided by the department, 15 credits

Fourth Semester

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

Alternative 2: for students with 90 credits in Computer and Systems Sciences, Informatics or the equivalent.

First Semester

- Enterprise Computing and ERP Systems, 7,5 credits
- Advanced Requirements Engineering of IT-systems, 7,5 credits
- Scientific Communication and Research Methodology, 7,5 credits

One of the following two courses:

- Data Warehousing, 7,5 credits
- Management of Global IT Resources, 7,5 credits

Second Semester

- Research Methodology for Computer and Systems Sciences, 7,5 credits

Three of the following five elective courses:

- Digital Business in the area of IT, 7,5 credits
- Systems Theory, Organizations and IT, 7,5 credits
- Strategic IT Management, 7,5 credits
- Business Process Design and Intelligence within the IT area, 7,5 credits
- System Integration of IT Business Information Systems, 7,5 credits

Third Semester

- Elective courses in Computer and Systems Sciences, from a list provided by the department, 30 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.