

# **Advanced Academic Studies**

Single subject and programme course

3 credits

Akademiska studier på avancerad nivå

732A60

Valid from: 2016 Autumn semester

**Determined by**The Quality Board at the Faculty of Arts and Sciences

**Date determined** 2017-02-03

# Main field of study

**Statistics** 

#### Course level

Second cycle

#### Advancement level

A<sub>1</sub>N

#### Course offered for

• Master's Programme in Statistics and Machine Learning

### **Entry requirements**

- Bachelor's degree equivalent to a Swedish Kandidatexamen of 180 ECTS credits in one of the following subjects:
  - statistics
  - mathematics
  - applied mathematics
  - o computer science
  - engineering
- · Passed courses in
  - o calculus
  - o linear algebra
  - statistics
  - programming
- English corresponding to the level of English in Swedish upper secondary education (Engelska 6/B) (Exemption from Swedish)

# Intended learning outcomes

After completion of the course, the students should be able to:

- write a disposition of written technical/scientific reports
- summarize scientific publications
- correctly indicate and use citations and references in written reports
- account for the principles of reviewing the technical/scientific reports
- account for the opportunities and limitations of Statistics and research and discuss responsible usage of Statistics
- account for and follow the basic rules and regulations for advanced studies at Swedish universities, especially at LiU.



#### Course content

The aim of the course is to prepare the students for advanced academic studies and also to let the students learn the academic culture in general. A basic ambition is to supply essential tools to the students on the master's level in Sweden. The course should facilitate the transition from the consumption of science to the production of science.

- Academic writing
- Statistics and research, their role in society and responsible usage of statistics
- Review of scientific works
- Constructive criticism
- University rules, organization and ethical rules
- Rules on citation and reference
- Academic culture
- Equal opportunities
- Introduction to LiU
- Library facilities.

### Teaching and working methods

The course has scheduled lectures, seminars and project works. Homework and independent study are a necessary complement to the course. Language of instruction: English.

#### **Examination**

Attendance at least 90% of the lectures and seminars. Written reports on the project works. Detailed information about the examination can be found in the course's study guide.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it. If the coordinator has instead recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

#### Grades

Two-grade scale, U, G



### Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is carried out in such a way that both men's and women's experience and knowledge is made visible and developed.

## Department

Institutionen för datavetenskap

