



## Course syllabus

Faculty of Technology  
Department of Informatics

4IK504 Big Data i verksamheter och samhälle, 15 högskolepoäng  
Big Data in Organizations, Business, and Society, 15 credits

**Main field of study**  
Information Systems

**Subject Group**  
Informatics/Computer and Systems Sciences

**Level of classification**  
Second Level

**Progression**  
A1N

**Date of Ratification**  
Approved by Faculty of Technology 2015-04-28  
The course syllabus is valid from spring semester 2016

**Prerequisites**  
General entry requirements for second cycle studies and specific entry requirements:

- English B/6 or the equivalent.

### Objectives

After the course the student:

- Should understand the design, organization and coordination of data in a data warehouse
- Should understand the information seen from the data analytic lifecycle perspective
- Should understand the characteristics of methods, techniques and tools for the analysis of Big Data.
- Should understand the use of Big Data and how it can support the decision making process
- Should understand certain ethical issues involving the impact of Big Data on the public and private sectors in society
- Should understand the current as well as prospective challenges in Informatics research relevant to the topic of interest in connection with organisations, business and society

### Content

The course contains:

- Data Warehouse Design/OLAP

- Designing and Planning Business Intelligence Processes
- The decision making process
- Business Intelligence and Big Data Analytics
- Strategic value of Decision support and Big Data systems
- Big Data and its impact on Society, Organisations, and the Individual
- Ethical issues and their impact on the public and private sectors in society as well as on the individual
- Trends and future directions

### Type of Instruction

The teaching consists of lectures, seminars and both individual and group assignments. During the group assignments the student needs rely on individual effort. The participation in the seminars is compulsory.

### Examination

The course is assessed with the grades A, B, C, D, E, Fx or F. Grade A constitutes the highest, the remaining grades follow in the descending order in which grade E is the lowest grade to be approved. Grades F mean that the student's performance is assessed as failed.

Assessment of student performance is made through written and oral exams and presentation of the assignments.

### Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

### Other

Grading criteria based on the A-F scale will be communicated to the student through a special document. The student will have been informed about the grading criteria by the start of the course.

### Required Reading and Additional Study Material

Scientific journal papers, Compendium, and digital materials, Linnaeus University. approximately 500 pages.