Course Syllabus

Business Intelligence 7.5 Credits*, Second Cycle

Learning Outcomes

The overall goal of the course is for students to gain knowledge about the concepts and methods behind the implementation of business intelligence. Upon completion of the course, students shall be able to:

- implement the decision making process and the role of decision support tools for BI
- design and implement the key elements of a successful BI program
- design and implement storage facilities
- extract and transform data from operational databases to data warehouses
- use tools for business analysis and benchmarking
- integrate BI into daily business decisions
- use algorithms to optimise processes
- apply a BI meta-model that transforms outcomes into actions

Course Content

The course provides an introduction to Business Intelligence, analytics and decision support. It shows how problems in business can be solved by collecting business data and converting these into data warehouse form. Data warehousing, together with data integration, extraction and transformation (ETL), will be presented. Data mining tools, such as classification, clustering and association rule, will be covered in the course. There will be study of predictive models, such as neural networks. The course will also cover text analytics such as text mining, sentiment analysis and web mining. Automated decision systems and expert systems will form part of this course. Knowledge management will also be presented.

Assessment

Case study and project that are submitted in the form of a report and an oral presentation 3 credits
Labs 3 credits
Seminars and written reflections 1.5 credits

Forms of Study

Lectures, labs and project.

* 1 Credit = 1 ECTS

Grades
The Swedish grades U–VG.

Labs, seminars and written reflections U-G
The final grade is determined by the grade for the case study and project.

Prerequisites
Bachelor's degree in Statistics, Economics, Business Administration, Computer Science, Information Science or Informatics comprising at least 180 credits and English 6

Other Information
Replaces DT3018.

Subject:
Microdata Analysis

Group of Subjects:
Other Interdisciplinary Studies

Disciplinary Domain:
Natural Science, 100%

This course can be included in the following main field(s) of study:
1. Microdata Analysis

Progression Indicator within (each) main field of study:
1. A1N

Approved:
Approved 29 August 2019
Valid from 8 November 2019

* 1 Credit = 1 ECTS