

# Business Intelligence 1 Business Intelligence 1

7.5 credits7.5 högskolepoäng

Ladok Code: 22BI3D Version: 10.0 Established by: Committee for Education in Librarianship, Information, and IT 2023-05-30 Valid from: Autumn 2023

Education Cycle: Second cycle Main Field of Study (Progressive Specialisation): Informatics (A1N) Disciplinary Domain: Natural sciences Prerequisites: Degree of Bachelor of Science in Informatics. Subject Area: Informatics/Computer and Systems Sciences Grading Scale: Seven-degree grading scale (A-F)

### Content

The course consists of two parts:

The first part is a general introduction to decision analysis. The first part gives an overview of the area of Business Intelligence with focus on decision analysis and decision processes. The second part is an introduction to data warehousing. This part of the course describes how data warehouses can be a central element in an organizations' Business Intelligence solution and as such be a tool for report-generation and further analysis.

### **Learning Outcomes**

After passing the course the student should be able to, concerning:

#### Knowledge and understanding

- 1.1. give a detailed account of and discuss fundamental concepts and theories within Business Intelligence,
- 1.2. give a detailed account of and discuss fundamental concepts, theories and methods within data warehousing,
- 1.3. know about how decision analysis and decision processes can be carried out in businesses,
- 1.4. know about the possible relationships of data warehouses to production and operational systems,

#### Competence and skills

- 2.1. create a decision support system report,
- 2.2. perform Business Intelligence analysis with the help of a BI platform,

Judgement and approach

- 3.1. discuss fundamental concepts and theories within Business Intelligence,
- 3.2. discuss fundamental concepts and theories within data warehousing,
- 3.3. critically examine a decision support system report.

# Forms of Teaching

The teaching consists of lectures, seminars and assignments.

The language of instruction is English.

### Forms of Examination

The course is examined through:

- Assignment 1 (group work) Learning objective 1.1, 1.3 Credits: 1 Grading scale: Pass/Fail

- Assignment 2 (group work) Learning objective 2.1, 3.3 Credits: 1.5 Grading scale: Pass/Fail

- Examination: Written individual examination Learning objective 1.2, 1.4, 3.1, 3.2 Credits: 5,0 Grading scale: A-F

For a passing grade (A-E) on the entire course, the grade Pass (G) is required on *Assignment 1* and *Assignment 2* together with at least grade E on *Examination: Written individual examination*. A higher grade on the entire course is thereafter determined by the grade on *Examination: Written individual examination*.

If the student has received a decision/recommendation regarding special pedagogical support from the University of Borås due to disability or special needs, the examiner has the right to make accommodations when it comes to examination. The examiner must, based on the objectives of the course syllabus, determine whether the examination can be adapted in accordance with the decision/recommendation.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

# Literature and Other Teaching Materials

The course literature is in English.

Sharda, R., Delen, D., & Turban, E. (2016 or the most recent version). Business intelligence, analytics, and data science: a managerial perspective. Pearson. Chapter 1-3, 6-7 (287 p.)

Ponniah, P. (2010 or the most recent version). Data warehousing fundamentals for IT professionals. Hoboken, N.J.: John Wiley & Sons. Chapter 1-4 (369 s.)

Solberg Søilen, K. (2005 or the most recent version). Introduction to private and public intelligence. Lund: Student Literature.

### **Student Influence and Evaluation**

The course is evaluated in accordance with the current guidelines for course evaluations at the University of Borås, where students' views should be sought. The course evaluation report will be published and disseminated to participating and prospective students in accordance with the current guidelines, and forms the basis for future development of courses and training programs. It is the course coordinator's responsibility that the evaluation is performed according to current guidelines.

### Miscellaneous

The course is part of the Master Programme (One Year) in Informatics - Data-driven IT Management and a freestanding course.