

SYLLABUS

Business Intelligence 7.5 credits D7044E

Business Intelligence

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2020-12-03**

Business Intelligence 7.5 credits D7044E

Business Intelligence

Second cycle, D7044E

| Education level | Grade scale | Subject | Subject group (SCB) |
|-----------------|-------------|-----------------|---|
| Second cycle | U G VG * | Systemvetenskap | Informatics/Computer and Systems Sciences |

Main field of study

Information Systems Sciences

Entry requirements

In order to meet the general entry requirements for the course, you must have accomplished a minimum of 120 ECTS of university studies, out of which 60 ECTS in the areas of computer or system science. The studies shall have included Introductory Programming (for example D0009E Introduction to Programming or D0007N Objectoriented programming) and Fundamentals of Databases (for example D0004N Database Systems I or D0018E Database Technology) .

Knowledge in English, equivalent to English 6.

Selection

The selection is based on 30-285 credits

Course Aim

The objective of the course is for the student to develop their knowledge and skills in Business Intelligence. After passing the course, the student should be able to:

- [1]. Explain and use the concepts in business intelligence
- [2]. Describe the business intelligence evolution and components
- [3]. Explain how decisions are made in organizations
- [4]. Evaluate a business intelligence system
- [5]. Analyze and reflect on the relationship between its components, current and future
- [6]. Plan how to manage a business intelligence project

Contents

The course is an introduction to the multidisciplinary field of data science. The focus of the course is on organizational decision making and how they should be supported, while doing so the course takes into account various viewpoints and paradigms. The course covers a wide spectrum of topics such as: data warehousing, big data, type of data, type of decisions, and how to manage a business intelligence project.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures, labs, assignments, case studies and/or project work. Laboratory work requires access to very high computational capacity. During the course, the students work with individual tasks and/or group work. Some assignments or case studies in the course might contain work in contact with or about the industry. The student uses different methods and techniques, and it is important to choose the right method, technique or computer support for each task. Before and after the tasks are solved, there are lectures to present and discuss different solutions.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Through individuals tests, as well as individual and group/project assignments, different student abilities are examined. Those are: the ability to explain and use business intelligence tools and frameworks and the ability to address business problems using business intelligence individually and in groups.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Remarks

Technical Requirements: access to PC with Windows XP, microphone, Web cam and permission to install software. Internet connection (minimum 0,5 Mbps).

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

| Code | Description | Grade scale | Cr | Status | From period | Title |
|------|--------------------|-------------|-----|-----------|-------------|-------|
| 0001 | Individual exam | U G VG * | 4 | Mandatory | A19 | |
| 0002 | Individual tasks | U G# | 1.5 | Mandatory | A19 | |
| 0003 | Group/Project work | U G# | 2 | Mandatory | A19 | |

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Jonny Johansson HUL, SRT 2020-12-03

Syllabus established

by Jonny Johansson, HUL SRT 2018-11-21