



Faculty of Arts and Social Sciences
Information Systems

Syllabus

Business Simulation and Analytics

Course Code:	ISGB25
Course Title:	Business Simulation and Analytics <i>Affärssimulering och dataanalys</i>
Credits:	7.5
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has less than 60 credits in first-cycle course/s as entry requirements (G1F)

Major Field of Study:
IKA (Information Systems)

Course Approval

The syllabus was approved by the Faculty of Arts and Social Sciences 2026-02-24, and is valid from the Autumn semester 2026 at Karlstad University.

Prerequisites

30 credits completed in Information Systems or 30 credits completed in Business Administration, or a total of 30 credits completed in a combination of Information Systems and Business Administration.

Learning Outcomes

Upon completion of the course, students should be able to

1. give an account of basic concepts used in business analytics,
2. give an account of how business analytics is used to formulate, analyse, and solve business problems,
3. conduct data analyses and interpret the results in an analytics system in order to improve a business situation,
4. reflect upon how data analysis can influence decision-making within an organisation, and
5. critically reflect upon ethical issues related to data processing.

Content

The course covers the theoretical and practical analysis of data produced in various operational systems.

The course addresses the data-analysis process, data preparation, and data analysis for businesses. Basic descriptive, diagnostic, and predictive analytics, as well as the basics of prescriptive analytics, are introduced using basic statistics for business analytics and data visualisation.

Instruction is in the form of lectures, laboratory sessions for work with analytics and simulation tools, as well as a group project including several supervision sessions.

Reading List

See separate document.

Examination

Learning outcomes 1-4 are assessed through an on-campus written exam.

Learning outcome 3 is also assessed through a written group assignment, presented and discussed in a seminar.

Submissions for assessment must clearly indicate individual contributions.

Learning outcome 5 is assessed through an individual written assignment.

If there are special circumstances, or if the student did not attend the group work seminar, the oral presentation may be replaced with an alternative assignment, subject to approval by the examiner.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades

One of the grades Pass with Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.