School of Economics and Management

DABN22, Data Analytics and Business Economics: Introduction to Programming , 3.5 credits

Dataanalys och ekonomi: Introduktion till programmering , 3,5 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Board of the Department of Economics on 2023-10-17. The syllabus comes into effect 2023-10-17 and is valid from the autumn semester 2024.

General information

This is a single subject master course in data analytics and business economics. The course is mandatory in the master programme Data Analytics and Business Economics. The course is optional within a number of master programmes at Lund University.

Language of instruction: English
(Teaching may be in Swedish if all registered students have a good knowledge of Swedish.)

Main field of study	*Specialisation*
Data Analytics and Business Economics	A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

Knowledge and understanding

Students shall have an understanding of

- basic programming concepts, data structures, and statements and how to apply them in one or more programming languages,
- how to write and read a basic script written.

Competence and skills

Students shall have the ability to independently:

- convert basic algorithms into running code,
- write code that follow a proper code style,
- install and use packages,
- debug and profile a basic script,
- navigate and build scripts using a modern integrated development environment.

Judgement and approach

Students shall have the ability to pursue further studies in the subject and should be able to search for and evaluate information with a high degree of independence. Students shall also have the ability to write their own scripts and to evaluate the content of other scripts.

Course content

The following topics will be covered in the course:

- basic programming concepts, data structures, conditional statements, functions, scope, and classes, as well as the basic syntax for these concepts,
- using built-in functions,
- creating own functions,
- using basic data types, such as lists, vectors and matrices,
- using an integrated development environment,
- basic debugging procedures,
- loading and using basic packages.

Course design

1. Teaching: Teaching consists of lectures and exercises.

Assessment

1. Examination: The examination consists of online quizzes and home assignments that are peer reviewed. Other forms of examination may be used to a limited extent.

2. Limitations on the number of examination opportunities: –

The University views plagiarism and other academic dishonesty very seriously, and will take disciplinary action against students for any kind of attempted malpractice in connection with examinations and assessments. Plagiarism is considered to be a very serious academic offence. The penalty that may be imposed for this, and other unfair practices in examinations or assessments, includes suspension from the University for a specified period.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Grades

Grading scale includes the grades: U=Fail, E=Sufficient, D=Satisfactory, C=Good, B=Very Good, A=Excellent

1. Grading:

A (Excellent) A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability, and independent thought.

B (Very good) A very good result with regard to the above-mentioned aspects.

C (Good) The result is of a good standard with regard to the above-mentioned aspects and lives up to expectations.

D (Satisfactory) The result is of a satisfactory standard with regard to the above-mentioned aspects and lives up to expectations.

E (Sufficient) The result satisfies the minimum requirements with regard to the above-mentioned aspects, but not more.

F (Fail) The result does not meet the minimum requirements with regard the above-mentioned aspects.

To pass the course, the student must have been awarded the grade of E or higher.

2. Weighting grades from different parts of the course: –

3. Grading scales for different parts of the course: –

Entry requirements

Students admitted to the master programme Data Analytics and Business Economics are eligible for this course. For other students, STAA31 Statistics: Basic Course 1 or STAA36 Statistics: Fundamentals of Business Analytics, or the equivalent, is required.

Further information

1. Transitional regulations: –

2. Limitations in the period of validity: –

3. Limitations: –

4. Similar courses: –

5. Limitations in renewed examination: –