Statistics for Business II (F710231)

Course size   *(nominal values; actual values may depend on programme)*

    Credits 3.0   **Study time 90 h**

Course offerings and teaching methods in academic year 2025-2026

A (semester 2)	Dutch	Gent	lecture
			seminar
B (semester 1)	Dutch	Gent	seminar
			lecture

Lecturers in academic year 2025-2026

De Vos, Odile	EB21	staff member
Bleys, Brent	EB21	lecturer-in-charge

Offered in the following programmes in 2025-2026	**crdts**	**offering**
Bachelor of Science in Business Administration	3	A
Linking Course Master of Science in Business Administration	3	B
Preparatory Course Master of Science in Business Administration	3	B

Teaching languages

Dutch

Keywords

Statistics, Statistical Analysis

Position of the course

This course is the second in a series of three courses on statistics in the bachelor programme for students in Business Administration. It introduces how one can make use of data from a sample / samples to estimate unknown parameters in (a) population(s) or to test specific hypotheses about these parameters. The set-up of the course is rather practical as the emphasis is put on understanding and interpretation. The underlying concepts are extensively illustrated by applications and examples in economic settings. The main goal is to make students familiar with the fundamental cornerstones of statistical analysis.

Contents

The following topics will be reviewed:
- Sample variables and theoretical distributions
- Confidence intervals
- T-tests (null hypothesis, type I and II errors, p values, 1 sample vs. 2 samples)
- Analysis of variance (ANOVA)
- Chi-quare tests
- Regression and correlation

Initial competences

1 Insights in the procedures and tools (measures and graphical representation) of descriptive statistics
2 Understanding and being able to apply the basic concepts in probability theory
3 Being able to calculate chances for the binomial and normal distribution functions
4 Understanding sample distributions and the importance of the central limit theorem

Final competences

1 Gaining insights in the fundamental concepts underlying statistical analysis.
2 Being able to use sample data to describe a population (estimates and confidence intervals or testing hypotheses).
3 Being able to compare two or more populations using multiple samples in independent and dependent settings.
4 Being able to determine whether a qualitative variable follows a specific distribution, and whether two qualitative variables are independent of each other.
5 Being able to estimate a population parameter using one independent variable.
6 Problemsolving capacity - i.e. being able to formulate hypotheses in a proper way, or being able to identify the most appropriate statistical tool for a specific (research) problem.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

Access to this course unit via an exam contract is unrestricted

Teaching methods

Seminar, Lecture, Independent work

Extra information on the teaching methods

Plenary lectures (theoretical background).
Supervised exercises (sometimes following an online learning pathway independently).

Study material

Type: Handbook

Name: Statistiek. 14de editie
Indicative price: € 65
Optional: no
Language : Dutch
Author : McClave, Sincich & Knypstra
ISBN : 978-9-04303-346-6
Number of Pages : 454
Oldest Usable Edition : All previous editions can be used.
Online Available : No
Available in the Library : Yes
Available through Student Association : Yes
Usability and Lifetime within the Course Unit : intensive
Usability and Lifetime within the Study Programme : intensive
Usability and Lifetime after the Study Programme : occasionally
Additional information: This textbook is also used for "Statistiek voor Bedrijfskundigen I" (1st Bachelor), so students in Ba 2 will already have purchased this in the past. Students in Linking course should buy the textbook (which is also used in Onderzoeksmethoden II)..

Type: Syllabus

Name: Statistiek voor Bedrijfskundigen II - Oefeningenbundel
Indicative price: € 3
Optional: no
Language : Dutch
Number of Pages : 80
Available on Ufora : No
Online Available : No
Available in the Library : No
Available through Student Association : Yes

References

Course content-related study coaching

Questions during and after the lectures, through the forum on Ufora and during organized Q&A sessions.

Assessment moments

end-of-term assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment

Examination methods in case of periodic assessment during the second examination period

Written assessment

Examination methods in case of permanent assessment

Possibilities of retake in case of permanent assessment

not applicable

Extra information on the examination methods

Written exam that consists of both open questions (exercises, 80% of the final score) and multiple choice questions (theory, 20% of the final score). The emphasis is put on the exercises.

Calculation of the examination mark

periodic evaluation (100%)