

Mathematics for Business I-A (F710219)

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 1)	Dutch	Gent	lecture seminar
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Lecturers in academic year 2025-2026

Vandenboer, Kristine	EB21	staff member
Carette, Philippe	EB21	lecturer-in-charge
Neyt, Yannick	EB21	co-lecturer
Van der Stricht, Geert	EB21	co-lecturer
Van Ooteghem, Saskia	EB21	co-lecturer

Offered in the following programmes in 2025-2026

Bachelor of Science in Business Administration	crdts	offering
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3 A

Teaching languages

Dutch

Keywords

Mathematics, functions.

Position of the course

To provide students with a basic education in mathematics that is used in business economics. The mathematical concepts and techniques are presented in a rigorous way, with emphasis on the logic and coherence of the various concepts. The concepts are well illustrated with applications in business economics.

Contents

Functions of one variable

- General concepts: domain, image, injective function, inverse function, periodicity and symmetry.
- Special functions: polynomial functions, rational and irrational functions, exponential and logarithmic functions, trigonometric and cyclometric functions.
- Applications in business and economics: demand and supply, costs and revenues, market equilibrium, break-even point.
- Limits and continuity, asymptotes.

Initial competences

- To have thorough knowledge of the fundamental mathematical principles taught in high school: real numbers, algebra and geometry.
- To be proficient in symbolic calculation and solving equations.

Final competences

- 1 To have knowledge and understanding of the basic concepts of the univariate analysis: functions of one variable, limits, continuity, asymptotes, and their applications in economics.
- 2 To analyze and solve business economics problems in the field of comparative statics using mathematical methods from the univariate analysis.
- 3 To be able to clarify quantitative results and solutions, both graphically and in words.
- 4 To be able to critically evaluate quantitative results.

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

Extra information on the teaching methods

Interactive plenary lectures: Discussion of the theoretical concepts.

Guided exercises in small groups: Practicing the concepts covered in the lectures.

Part of the course is offered through a learning path and instructor-made video clips.

Study material

Type: Handbook

Name: Wiskunde voor bedrijfskundigen 1

Indicative price: € 45

Optional: no

Language : Dutch

Author : Philippe Carette

Available through Student Association : Yes

Additional information: Also used in course unit "F710220 - Wiskunde voor bedrijfskundigen I-B".

Type: Syllabus

Name: Oefeningenbundel Wiskunde voor bedrijfskundigen I-A

Indicative price: € 4

Optional: no

Language : Dutch

Available through Student Association : No

References**Course content-related study coaching**

- A one week refresher course in basic mathematical techniques is offered in September.
- The instructors are always available at the end of the class to answer questions about the course.
- Electronic discussion forum.
- Tutorial: Extra classroom sessions are organised in which difficult topics of the course are revisited. Students can also make individual appointments to discuss specific problems in this course.
- A simulation exam is organized with the aim of testing the study method.

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.

Calculation of the examination mark

periodic evaluation (100%)

