

Course Descriptions Bachelor 2013-2014

Course Title Quantitative Business
 Course Code EBC2025
 ECTS Credits 6,5
 Assessment None

| Period | Start | End | Mon | Tue | Wed | Thu | Fri |
|--------|-----------|----------|-----|-----|-----|-----|-----|
| 5 | 14-4-2014 | 6-6-2014 | | | X | | X |

Level Intermediate
 Coordinator Christian Kerckhoffs For more information: c.kerckhoffs@maastrichtuniversity.nl
 Language of instruction English

Goals Learn to recognize the opportunities to apply basic tools from mathematics and inferential statistics in business.
 Learn to implement statistical tools using the statistical software package SPSS, and to correctly interpret the results.

Description This course is devoted to refreshing, extending and actively applying the mathematical and statistical tools introduced in the first year quantitative methods courses.
 In the mathematics part we pay attention to a number of applications of first-year mathematical tools to business economics, such as: investment under uncertainty, the CAPM-model, industrial organisation, Game Theory a.o. The purpose is twofold: to repeat and extend the first-year methods and show how they are applied on the one hand, and to get acquainted with some basic quantitative business models on the other hand.
 In the statistics part we repeat, apply and extend all the inferential tools discussed in the first year: a.o. the one-sample t-test, the independent-samples t-test, the paired sample t-test, oneway-ANOVA, the chi-square test and regression analysis. Some new techniques, e.g. non parametric tests, logistic regression and factor analysis will be introduced. Case studies using real-life datasets that reflect business problems from a.o. marketing and finance are examined extensively. The empirical analyses are performed with SPSS, a statistical software package widely used in professional practice.

Literature Sydsaeter, Knut, and Peter J. Hammond (2012), Essential Mathematics for Economic Analysis, 4th ed., Harlow: Pearson Education.
 Sharpe, Norean R., De Veaux, Richard D., and Paul F. Velleman (2012): Business Statistics, 2nd. Intern. Ed., New York: Pearson Education International.

Prerequisites
 Teaching methods PBL / Presentation / Lecture / Assignment / Groupwork
 Assessment methods Participation / Written Exam

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

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| This course belongs to the following programme / specialisation | Bachelor Economics and Business Economics Specialisation Economics and Management of Information | QE Electives |
| | Bachelor Economics and Business Economics Specialisation International Business Economics | Compulsory Courses |
| | SBE Exchange Bachelor | Bachelor Courses |
| | SBE Exchange Master | Bachelor Courses |
| | SBE Non Degree Courses | Bachelor Courses |