

# Course Descriptions Exchange 2019-2020

Course Title Quantitative Methods III (IBE/INF)

Course Code EBS2027

ECTS Credits 4,0

Assessment Whole/Half Grades

| Period | Start     | End       | Mon | Tue | Wed | Thu | Fri |
|--------|-----------|-----------|-----|-----|-----|-----|-----|
| 3      | 13-1-2020 | 24-1-2020 | L   | X   |     | X   |     |

Level Introductory

Coordinator Stan van Hoesel For more information:s.vanhoesel@maastrichtuniversity.nl

Language of instruction English

Goals Students learn how to:  
 (1) detect from a business case the decision variables, objective, and constraints of a decision problem;  
 (2) formulate the decision problem as a linear program;  
 (3) translate the mathematical program into an Excel spreadsheet and solve it with the build-in solver of Excel;  
 (4) identify typical patterns of mathematical programs.

Description Linear Programming is one of the most important tools for decision making in business. It helps us whenever we want to optimize a decision under a set of constraints, like maximizing profit under limited resources, minimizing cost while satisfying demand, or deciding on an optimal financial investment plan. Two types of mathematical programming models are studied: linear programs and integer linear programs. Also, problems that have an interpretation as flows in networks are discussed. Models have to be implemented in Excel. That's why tutorial meetings take place in computer rooms.

Literature Reader provided on Eleum

Prerequisites Familiarity with EXCEL.  
 This is an obligatory skill for IBE and Infonomics students

Teaching methods PBL / Lecture / Assignment

Assessment methods 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>

This course belongs to the following programme / specialisation

|   |                            |
|---|----------------------------|
| Bachelor Economics and Business Economics - Economics and Management of Information | Year 2 Compulsory Skill(s) |
| Bachelor Economics and Business Economics - International Business Economics        | Year 2 Compulsory Skill(s) |
| SBE Exchange Bachelor   | Bachelor Exchange Skills   |
| SBE Exchange Master   | Bachelor Exchange Skills   |
| SBE Non Degree Courses  | Bachelor Skills            |