### Module title
Computer Lab in Quantitative Methods

### Abbreviation
12-CQM-F-082-m01

### Module coordinator
holder of the Chair of Econometrics

### Module offered by
Faculty of Business Management and Economics

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<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
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<tr>
<td>5</td>
<td>numerical grade</td>
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### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
By way of exception, additional prerequisites are listed in the section on assessments.

### Contents
This module builds on the lectures "Grundlagen der Statistik" ("Descriptive Statistics and Introduction to Probability") and "Grundlagen der QWF" ("Introduction to Statistical Inference and Regression Analysis"). It introduces students to the simulation of different distributions and the application of linear regression analysis.

In the first part of the course, different distributions are introduced, simulated with Excel and their theoretical moments are estimated. In the second part, linear regression analysis is introduced, different specifications are estimated and interpreted and potential pitfalls are pointed out.

### Intended learning outcomes
After finishing this course students acquired several skills. They
(i) get an overview of several distributions;
(ii) know how to simulate those distributions in MS Excel and are able to estimate and interpret the related theoretical moments;
(iii) can perform smaller simulations in Excel;
(iv) get to know a variety of different Excel commands which are important for statistical working;
(v) are introduced to the linear regression analysis, can perform it in Excel and Gretl, and know how to interpret the results.

### Courses
This module comprises 2 module components. Information on courses will be listed separately for each module component.

- 12-CQM-F-1-082: P (no information on SWS (weekly contact hours) and course language available)
- 12-CQM-F-2-082: P (no information on SWS (weekly contact hours) and course language available)

### Method of assessment
Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.

#### Assessment in module component 12-CQM-F-1-082: Computer Lab in Regression Analysis
- 3 ECTS, Method of grading: numerical grade
  - a) written examination (approx. 60 minutes) or b) term paper (approx. 20 pages) or presentation (approx. 20 minutes), weighted 1:1
- Other prerequisites: Modules 12-QWF-G, 10-M-MMW1, 10-M-MMW2 are recommended.

#### Assessment in module component 12-CQM-F-2-082: Computer Lab Fortran
- 2 ECTS, Method of grading: numerical grade
  - a) written examination (approx. 60 minutes) or b) term paper (approx. 20 pages) or presentation (approx. 20 minutes), weighted 1:1
- Other prerequisites: Modules 12-QWF-G, 10-M-MMW1, 10-M-MMW2 are recommended.

### Allocation of places
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### Additional information
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Referred to in LPO I (examination regulations for teaching-degree programmes)

Module appears in
Bachelor’ degree (1 major) Business Management and Economics (2008)