### Module description

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>Computer Lab in Regression Analysis</td>
<td>12-CQW-152-m01</td>
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<table>
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<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
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<tbody>
<tr>
<td>holder of the Chair of Econometrics</td>
<td>Faculty of Business Management and Economics</td>
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<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Other prerequisites</th>
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<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
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<table>
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<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
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<tr>
<td>1 semester</td>
<td>undergraduate</td>
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### 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

(type, number of weekly contact hours, language — if other than German)

P (2)

### Method of assessment

(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or b) term paper (approx. 10 pages) and presentation (approx. 20 minutes), weighted 2:1

### Allocation of places

20 places. (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

### Additional information

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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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### Module appears in

Bachelor' degree (1 major) Business Management and Economics (2015)
Bachelor' degree (1 major) Economathematics (2015)
Bachelor' degree (1 major) Business Information Systems (2015)
Master's degree (1 major) China Business and Economics (2016)
Bachelor' degree (1 major) Business Information Systems (2016)
Bachelor' degree (1 major) Economathematics (2017)
Master's degree (1 major) China Business and Economics (2019)
Bachelor' degree (1 major) Business Information Systems (2019)