### Module title
Managerial Problem Solving

### Abbreviation
12-MPS-132-m01

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
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<tbody>
<tr>
<td>holder of the Chair of Information Systems Engineering</td>
<td>Faculty of Business Management and Economics</td>
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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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<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
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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**

The course offers an introduction to computer-based techniques for modelling and solving quantitative business problems. We will use Excel and R software packages.

**Intended learning outcomes**

- Prepare, visualize and analyze data sets using Excel and R
- Select and forecast different time series problems
- Understand simple, multiple and dummy regressions
- Implement and solve linear optimization problems using the Excel Solver

**Courses**

V (no information on SWS (weekly contact hours) and course language available)

**Method of assessment**

a) written examination (approx. 60 minutes) or b) completion of exercises during lecture period (approx. 12 exercise sheets, approx. 3 pages each)

Language of assessment: German, English

**Allocation of places**

Number of places: 40. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in the respective degree subject; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25% of places): allocation by lot. In this procedure, applicants who already have successfully completed at least one module component of the respective module will be given preferential consideration. Places on all courses of the module component with a restricted number of places will be allocated in the same procedure. A waiting list will be maintained and places re-allocated as they become available.

**Additional information**

Referred to in LPO I (examination regulations for teaching-degree programmes)

**Module appears in**

Bachelor’ degree (1 major) Business Management and Economics (2013)
Bachelor’ degree (1 major) Business Information Systems (2014)
Bachelor’ degree (1 major) Business Information Systems (2013)