## Module description

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>Competition and Strategy 1</td>
<td>12-S&amp;W1-F-132-m01</td>
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<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
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<tbody>
<tr>
<td>holder of the Chair of Industrial Economics</td>
<td>Faculty of Business Management and Economics</td>
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<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
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<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>--</td>
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<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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### Contents

Outline of syllabus:
1. Static games with complete information
   - Concept of a game
   - Solution concepts and the Nash equilibrium
   - Continuous strategy sets
   - Nash equilibrium in mixed strategies
2. Dynamic games with complete information
   - Subgame perfect Nash equilibrium
   - Repeated games
3. Static games with incomplete information: Bayesian Nash equilibrium
4. Dynamic games with incomplete information
   - Perfect Bayesian Nash equilibrium
   - Signaling games

### Intended learning outcomes

Students which complete this course will be able to
(i) explain different equilibrium concepts (Nash equilibrium, subgame perfect equilibrium, bayesian equilibrium, perfect bayesian equilibrium);
(ii) explain for which kind of strategic situation each of these equilibrium concepts were developed;
(iii) apply these concepts to simple realistic strategic situations;
(iv) choose the appropriate equilibrium concept which fits best to a given strategic situation.

### Courses

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

<table>
<thead>
<tr>
<th>Method of assessment</th>
<th>(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)</th>
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<tbody>
<tr>
<td>written examination</td>
<td>(approx. 60 minutes) Language of assessment: German, English</td>
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### Allocation of places

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### 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 (2013)
- Bachelor’ degree (1 major) Business Information Systems (2014)
- Bachelor’ degree (1 major) Business Information Systems (2013)