### Module title

**Competition and Strategy 1**

### Abbreviation

12-S&W1-F-152-m01

### Module coordinator

holder of the Chair of Industrial Economics

### Module offered by

Faculty of Business Management and Economics

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>--</td>
</tr>
</tbody>
</table>

### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

--

### 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

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

V (2) + Ü (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)**

written examination (approx. 60 minutes)

Language of assessment: German and/or English

### Allocation of places

--

### Additional information

--

### Referred to in LPO I

(examination regulations for teaching-degree programmes)

--

### 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)
- Bachelor's degree (1 major, 1 minor) Business Management and Economics (Minor, 2015)
- Master's degree (1 major) China Business and Economics (2016)
- Bachelor' degree (1 major) Business Information Systems (2016)
Bachelor's degree (1 major) Economathematics (2017)
Master's degree (1 major) China Business and Economics (2019)
Bachelor's degree (1 major) Business Information Systems (2019)
Bachelor's degree (1 major) Business Management and Economics (2019)
Bachelor's degree (1 major, 1 minor) Business Management and Economics (Minor, 2019)
Bachelor's degree (1 major) Business Information Systems (2020)