### 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

### ECTS

5

### Method of grading

numerical grade

### Only after succ. compl. of module(s)

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### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

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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

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

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### 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

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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 (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)
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<thead>
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