## Module title

Theory of Industrial Organization 1

### Abbreviation

12-M-TI1-161-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)

- --

### Duration

- 1 semester

### Module level

- graduate

### Other prerequisites

- --

### Contents

Theory of industrial organisation:

1. Monopoly pricing
   - Nonlinear pricing and mechanism design
   - Dynamic pricing: experience goods, durable goods
2. Oligopoly pricing
   - Static price and quantity competition in homogeneous and differentiated goods markets
   - Comparative statics
   - Equilibrium market structure
3. Dynamic competition in oligopoly markets
   - Repeated games and collusion
   - Markov perfect equilibrium and models of dynamic competition
4. Strategic behaviour by incumbent firms
   - Entry deterrence and predation
   - Signalling and reputation
5. Auctions
   - Second price auctions
   - First price auctions
6. Advertising and product design

The course will be taught in English.

### Intended learning outcomes

Students which complete this class will acquire a working knowledge of advanced theoretical models of competition in oligopoly markets as well as sophisticated pricing techniques in monopoly markets. They will learn the conditions under which the predictions of these models are valid. They will become familiar with applications of advanced game theoretic tools, such as dynamic models of competition and auction theory, for studying interactions between firms in markets. By means of comprehensive exercises, they will apply the methods they learn in class to practically relevant problems. They will be in a position to read academic papers on related topics, assess the strengths and weaknesses of approach, summarize and comment on these papers and suggest possible extensions.

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

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<tr>
<th>Type</th>
<th>Number of Weekly Contact Hours</th>
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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)

- a) written examination (approx. 60 to 120 minutes) or b) term paper (approx. 15 to 20 pages)
- Language of assessment: German and/or English
- Creditable for bonus

### Allocation of places

- --

### Additional information

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

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<thead>
<tr>
<th>Module appears in</th>
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<tbody>
<tr>
<td>Master's degree (1 major) Economathematics (2016)</td>
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<tr>
<td>Master's degree (1 major) Business Information Systems (2016)</td>
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<tr>
<td>Master's degree (1 major) Business Management (2015)</td>
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<td>Master's degree (1 major) China Business and Economics (2016)</td>
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