## Module description

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tr>
<td>Operations Research</td>
<td>10-M-ORS-072-m01</td>
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### Module coordinator

Dean of Studies Mathematik (Mathematics)

### Module offered by

Institute of Mathematics

<table>
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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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### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.

### Contents

Linear programming, duality theory, transport problems, integral linear programming, graph theoretic problems.

### Intended learning outcomes

The student is acquainted with the fundamental methods in operations research, as required as a central tool for solving many practical problems especially in economics. He/She is able to apply these methods to practical problems, both theoretically and numerically.

### Courses

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

### Method of assessment

written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes)

Language of assessment: German, English if agreed upon with the examiner

### Allocation of places

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### Additional information

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

§ 73 (1) 5. Mathematik Angewandte Mathematik

### Module appears in

- Bachelor' degree (1 major) Computer Science (2007)
- Bachelor' degree (1 major) Computer Science (2010)
- Bachelor' degree (1 major) Mathematics (2008)
- Bachelor' degree (1 major) Mathematics (2007)
- Bachelor' degree (1 major) Economathematics (2009)
- Bachelor' degree (1 major) Economathematics (2008)
- Bachelor' degree (1 major) Mathematical Physics (2009)
- Bachelor' degree (1 major) Computational Mathematics (2009)
- Bachelor' degree (1 major) Nanostructure Technology (2011)
- Master's degree (1 major) Nanostructure Technology (2010)
Bachelor's degree (1 major, 1 minor) Mathematics (Minor, 2008)
First state examination for the teaching degree Gymnasium Mathematics (2009)