### Module title
Mathematics 2 for Students of Physics and Nanostructure Technology

### Abbreviation
10-M-PHY2-152-m01

### Module coordinator
Dean of Studies Mathematik (Mathematics)

### Module offered by
Institute of Mathematics

<table>
<thead>
<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>8</td>
<td>numerical grade</td>
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### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
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### Contents
Linear maps and systems of linear equations, matrix calculus, eigenvalue theory, differential and integral calculus in several variables, differential equations, Fourier analysis.

### Intended learning outcomes
The student gets acquainted with fundamental concepts of advanced mathematics. He/She learns to apply these methods to simple problems in natural and engineering sciences, in particular in the field of physics and nanostructure technology, and is able to interpret the results.

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

V (5) + Ü (2)

Module taught in: Ü: German or English

### 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. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate)

Language of assessment: German and/or English
creditable for bonus

### 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) Physics (2015)
Bachelor' degree (1 major) Nanostructure Technology (2015)
Bachelor' degree (1 major) Physics (2020)
Bachelor' degree (1 major) Nanostructure Technology (2020)