**Module title**  
Mathematical Methods of Physics

**Abbreviation**  
11-M-MR-152-m01

**Module coordinator**  
Managing Director of the Institute of Theoretical Physics and Astrophysics

**Module offered by**  
Faculty of Physics and Astronomy

<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>6</td>
<td>(not) successfully completed</td>
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**Duration**  
2 semester

**Module level**  
undergraduate

**Other prerequisites**  
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**Contents**

Principles of mathematics and basic calculation methods beyond the school curriculum, especially for the introduction to and preparation of the modules of Theoretical Physics and Classical or Experimental Physics.

**Intended learning outcomes**

The students have knowledge of the principles of mathematics and elementary calculation methods which are required in Theoretical and Experimental Physics.

**Courses**

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

V (2) + Ü (1) + V (2) + Ü (1)

Module taught in: 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) exercises (successful completion of approx. 50% of approx. 13 exercise sheets) or b) talk (approx. 15 minutes)

**Allocation of places**  
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**Additional information**  
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**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

§ 53 I Nr. 1 a)  
§ 77 I Nr. 1 a)

**Module appears in**

Bachelor’ degree (1 major) Physics (2015)  
Bachelor’ degree (1 major) Nanostructure Technology (2015)  
Bachelor’ degree (1 major) Mathematical Physics (2015)  
Bachelor’s degree (1 major, 1 minor) Physics (Minor, 2015)  
First state examination for the teaching degree Grundschule Physics (2015)  
First state examination for the teaching degree Realschule Physics (2015)  
First state examination for the teaching degree Gymnasium Physics (2015)  
First state examination for the teaching degree Mittelschule Physics (2015)  
Bachelor’ degree (1 major) Mathematical Physics (2016)  
First state examination for the teaching degree Grundschule Physics (2018)  
First state examination for the teaching degree Realschule Physics (2018)  
First state examination for the teaching degree Gymnasium Physics (2018)  
First state examination for the teaching degree Mittelschule Physics (2018)