### Analytic Geometry (virtual course)

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<th>Module title</th>
<th>Abbreviation</th>
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<td>Analytic Geometry (virtual course)</td>
<td>10-M-VHBAnG-191-m01</td>
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#### Module coordinator
Dean of Studies Mathematik (Mathematics)

#### Module offered by
Institute of Mathematics

#### ECTS
3

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

#### Duration
1 semester

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<tr>
<th>Module level</th>
<th>Other prerequisites</th>
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### Contents
The module gives a brief introduction to the history of geometry, discusses analytic geometry in Euclidean vector spaces (including Hessian normal forms) and finishes with the analysis and classification of quadrics.

### Intended learning outcomes
The students gain an overview over the development of geometry and learn to translate geometric problems to the language of linear algebra. They consolidate certain aspects of linear algebra by applying them to geometric questions. Moreover, the course is suitable for preparation for the final state exam.

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

| Ü (2) |

### Method of assessment
(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

| project (web-based, 15 to 20 hours) |
| Assessment offered: Once a year, summer semester |
| Other: E-Learning, Vhb |

### Allocation of places
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### Additional information
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### Referred to in LPO I
(examination regulations for teaching-degree programmes)

§ 22 II Nr. 3 f)

### Module appears in
First state examination for the teaching degree Gymnasium Mathematics (2019)