# Module description

**Module title**  
Analytic Geometry (virtual course)  

**Abbreviation**  
10-M-VHBAnG-191-m01  

**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  

**Module level**  
undergraduate  

**Other prerequisites**  
--  

## 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**  
(2)  

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

## Allocation of places

--  

## Additional information

--  

## Referred to in LPO I

§ 22 II Nr. 3 f)  

## Module appears in

First state examination for the teaching degree Gymnasium Mathematics (2019)