**Module title**  
Mathematical Imaging

**Abbreviation**  
10-M=VMBVin-152-m01

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

**Module offered by**  
Institute of Mathematics

**ECTS**  
5

**Method of grading**  
numerical grade

**Duration**  
1 semester

**Module level**  
graduate

**Other prerequisites**  
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**Contents**
Mathematical fundamentals of image processing and computer vision such as elementary projective geometry, camera models and camera calibration, rigid and non-rigid registration, reconstruction of 3D objects from camera pictures; algorithms; module might also include an introduction to geometric methods and tomography.

**Intended learning outcomes**
The student masters the mathematical methods in the theory of image processing and knows about their main fields of application.

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

V (3) + Ü (1)
Module taught in: 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. 60 to 90 minutes, usually chosen) or b) oral examination of one candidate each (approx. 15 minutes) or c) oral examination in groups (groups of 2, approx. 10 minutes per candidate)
Assessment offered: In the semester in which the course is offered and in the subsequent semester
Language of assessment: 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**
Master’s degree (1 major) Mathematics International (2015)