

Annex SFB

Studienfachbeschreibung (subject description, SFB) for Module studies (Master) Mathematics

Responsible: Faculty of Mathematics and Computer Science

Responsible: Institute of Mathematics

Examination regulations version: 2019

Examination regulations version: 2019

Abbreviations used: Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions for the modules in this SFB: Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Information on assessment procedures: Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with the general regulations governing the degree subject described in this module catalogue:

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

15-May-2019 (2019-36)

27-Jun-2019 (2019-41)

14-Nov-2019 (2019-52)

22-Jan-2020 (2020-13)

06-May-2020 (2020-39)

22-Jul-2020 (2020-57)

17-Dec-2020 (2020-110)

10-Mar-2021 (2021-17)

09-Jun-2021 (2021-58)

22-Dec-2021 (2021-85)

05-Jul-2022 (2022-52)

31-Jan-2023 (2022-86)

15-Jun-2023 (2023-58)

13-Dec-2023 (2023-107)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

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|--------------|----------------------|--|--|----------------|-------------------|--|--------------|
| Abbreviation | Module title | | | | | | |
| | ECTS | | Duration | (in semesters) | Method of grading | | Module level |
| | Courses | | To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y | | | | |
| | Method of assessment | | | | | | |

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| | Only after successful completion of | if applicable |
| | Other prerequisites | if applicable |
| | Participants and allocation of places | if applicable |
| | Additional information | if applicable |
| | Referred to in LPO I | if applicable (examination regulations for teaching-degree programmes) |

| Winter Term 2019 (o ECTS credits) | | | | | | | | |
|-----------------------------------|---|--|----------|------------|-------------------|-----------------|-------------|----------|
| 10-M=GDF-Q-161-m01 | Research in Groups - Deformation Quantization | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | V (2) + S (2) Module taught in: German and/or English | | | | | | |
| | Method of assessment | talk (60 to 120 minutes) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English | | | | | | |
| 10-M=SN-LA-161-m01 | Seminar in Non-linear Analysis | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | S (2) Module taught in: German and/or English | | | | | | |
| | Method of assessment | talk (60 to 120 minutes) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English | | | | | | |
| Summer Term 2019 (o ECTS credits) | | | | | | | | |
| 10-M=VAZ-T-192-m01 | Algorithmic Number Theory | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | V (4) + Ü (2) Module taught in: German and/or English | | | | | | |
| | Method of assessment | 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 Assessment offered: Only when announced in the semester in which the courses are offered and in the subsequent semester creditable for bonus | | | | | | |
| Winter Term 2021 (o ECTS credits) | | | | | | | | |
| 10-M=VAZ-T-192-m01 | Algorithmic Number Theory | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | V (4) + Ü (2) Module taught in: German and/or English | | | | | | |
| | Method of assessment | 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 Assessment offered: Only when announced in the semester in which the courses are offered and in the subsequent semester creditable for bonus | | | | | | |

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| 10-M=AAAN-161-mo1 | Applied Analysis | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | V (4) + Ü (2) Module taught in: German and/or English | | | | | | |
| | Method of assessment | 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) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English creditable for bonus | | | | | | |
| 10-M=GAL-G-161-mo1 | Research in Groups - Algebra | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | V (2) + S (2) Module taught in: German and/or English | | | | | | |
| | Method of assessment | talk (60 to 120 minutes) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English | | | | | | |
| 10-M=GDF-Q-161-mo1 | Research in Groups - Deformation Quantization | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | V (2) + S (2) Module taught in: German and/or English | | | | | | |
| | Method of assessment | talk (60 to 120 minutes) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English | | | | | | |
| 10-M=GD-GE-161-mo1 | Research in Groups - Differential Geometry | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | V (2) + S (2) Module taught in: German and/or English | | | | | | |
| | Method of assessment | talk (60 to 120 minutes) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English | | | | | | |
| 10-M=VA-NA-161-mo1 | Selected Topics in Analysis | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | V (4) + Ü (2) Module taught in: German and/or English | | | | | | |
| | Method of assessment | 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) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English creditable for bonus | | | | | | |

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| 10-M=VGFT-192-mo1 | Geometric Complex Analysis | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (4) + Ü (2) Module taught in: German and/or English | | | | | |
| | Method of assessment | | 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 Assessment offered: Only when announced in the semester in which the courses are offered and in the subsequent semester creditable for bonus | | | | | |
| 10-M=VPD-P-161-mo1 | Partial Differential Equations of Mathematical Physics | | | | | | | |
| | ECTS | 10 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (4) + Ü (2) Module taught in: German and/or English | | | | | |
| | Method of assessment | | 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) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English creditable for bonus | | | | | |
| 10-M=SM-SC-161-mo1 | Seminar Mathematics in the Sciences | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | S (2) Module taught in: German and/or English | | | | | |
| | Method of assessment | | talk (60 to 120 minutes) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English | | | | | |