

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Physics as a Master's with 1 major with the degree "Master of Science" (120 ECTS credits)

Responsible: Faculty of Physics and Astronomy

Examination regulations version: 2010

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:

ASP02007

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

21-Sep-2010 (2010-59)

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:

| Abbreviation | Module title | Module title | | | | | | | | | | |
|--------------|-----------------------------|--------------|-------------------|---|-------------------|-------------------------|--|--|--|--|--|--|
| | ECTS | | Duration | (in semesters) | Method of grading | Method of grading Modul | | | | | | |
| | Courses | | To be spe | be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y | | | | | | | | |
| | Method of as | ssessm | ent | | | | | | | | | |
| | Only after su completion of | | ıl if applica | f applicable | | | | | | | | |
| | Other prereq | uisites | if applica | if applicable | | | | | | | | |
| | Participants on of places | | ocati- if applica | if applicable | | | | | | | | |
| | Additional in | format | ion if applica | if applicable | | | | | | | | |
| | Referred to in | n LPO I | if applica | if applicable (examination regulations for teaching-degree programmes) | | | | | | | | |

| Compulsory Cours | es (40 EC | TS cre | dits) | | | | | | | | |
|-------------------------|-----------|---------|--|--|---|---|--|---|--|---------------------------------|--|
| 11-OSP-072-m01 | Advanc | ed Sen | ninar Expe | riment | tal/Theoretical P | hysics | | | | | |
| | ECTS | 4 | Duration |) | 1 semester | Method of grad | ling numerical s | grade | Modul level | graduate | |
| | Course | S | , | S (no | information on S | WS (weekly contac | hours) and cour | se language availa | ıble) | , | |
| | Method | of ass | sessment | talk w | ith discussion (a | pprox. 30 to 45 mir | utes) | | | | |
| 11-PFM-072-m01 | Advanc | ed Pra | ctical Cou | se Ma | ster | | | | | | |
| | ECTS | 6 | Duration |) | 1 semester | Method of grad | ling (not) succe | ssfully completed | Modul level | graduate | |
| | Course | S | | | Fortgeschrittenen-Praktikum Master (Advanced Practical Course Master) Part 1: P (3 weekly contact hours), German or English Fortgeschrittenen-Praktikum Master (Advanced Practical Course Master) Part 2: P (3 weekly contact hours), German or English | | | | | | |
| | | | | 1. Lab rim Per par 2. Lab rim Per par Langu Stude sessn To pa | course in part 1 ent will be consider forming and evalue an experiment of course in part 2 ent will be considered an experiment age of assessments must registe ents will be offerent component, ss this module, s | dered successfully uating the experim log (approx. 8 page (Fortgeschrittenendered successfully uating the experim log (approx. 8 page ent: German or Engler for assessment cod one opportunity of they must pass bo | Praktikum Maste completed if an o ent will be conside s). Praktikum Maste completed if an o ent will be conside s). sh mponents 1 and o retake element h elements (a ar | oral test (approx. 3c dered successfully er/Advanced Practional test (approx. 3c dered successfully 2 online (details to | cominutes) is particompleted if a second course Mas cominutes) is particompleted if a second completed if a second course details in the respective completer. | ective semester. To pass an as- | |
| | comple | ted | | 11-E1, | 11-E2 | | | | | _ | |
| 50.5 | other p | | | 11-A3 | | | | | | | |
| 11-FS-P-072-m01 | | | Specializat | | , | 1 | | | I | | |
| | | 15 | Duration | | 1 semester | | ling numerical g | | Modul level | graduate | |
| | Course | | _ | | | | • | se language availa | ible) | | |
| | | | sessment talk (approx. 30 to 45 minutes) with discussion | | | | | | | | |
| 11-MP-P-072-m01 | | | | | t Management P | <u>•</u> | | | T | | |
| | | 15 | Duration | | 1 semester | | ling numerical g | | Modul level | graduate | |
| | Course | | | R (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | | | | talk (a | approx. 30 to 45 | ninutes) with discu | ssion | | | | |
| Compulsory Electi | ves (so F | CTS cre | edits) | | | | | | | | |

Compulsory Electives (50 ECTS credits)

The area of mandatory electives (50 ECTS credits) comprises: mandatory electives area SP ("Spezialausbildung Physik" ("Special Training Physics")): 40 ECTS credits, mandatory electives area NP ("Nebenfächer Physik" ("Minors Physics")): 10 ECTS credits. Within the area SP, modules are grouped together by subject. Students may select modules worth a maximum of 40 ECTS credits from one of these module groups. Students also have the option to select modules from different module groups and

| 11-MOE-092-m01 | Opto-e | lectroni | c Material I | Properties | | | | | | | |
|----------------|---------|---------------------|--------------------|---|--|--|--|---|--|--|--|
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | V | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | d of ass | p | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) | | | | | | | |
| | other p | rerequi | to c o fo | o qualify for admis ourse. Registratio obtained the qualion or assessment int | ssion to assessment. The le in for the course will be con fication for admission to as o effect. Students who mee | ecturer will inform students a sidered a declaration of will sessment over the course o at all prerequisites will be ac | about the respective I to seek admission of the semester, the dmitted to assessme | Certain prerequisites must be met e details at the beginning of the to assessment. If students have lecturer will put their registration ent in the current or in the subsenfor admission to assessment an- | | | |
| 11-OHL-092-m01 | Organi | c Semic | onductor | | | | , , , , , , , , , , , , , , , , , , , | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | V | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | d of ass | p | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (ap- prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 1 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) | | | | | | | |
| | other p | other prerequisites | | o qualify for admis ourse. Registratio obtained the quali or assessment int | ssion to assessment. The le in for the course will be con fication for admission to as o effect. Students who mee | ecturer will inform students a sidered a declaration of will sessment over the course o at all prerequisites will be ac | about the respective I to seek admission of the semester, the dmitted to assessme | Certain prerequisites must be met e details at the beginning of the to assessment. If students have lecturer will put their registration ent in the current or in the subsenfor admission to assessment an- | | | |
| 11-A2-081-m01 | Electro | nics | | | | | | | | | |
| | ECTS | 6 | Duration | 1 semester | Method of grading | numerical grade | Modul level | undergraduate | | | |
| | Course | S | V | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | d of ass | essment w | written examination (approx. 90 minutes) | | | | | | | |

| Master's wit | h 1 major Phy | /sics (2010) |
|--------------|---------------|--------------|
|--------------|---------------|--------------|

| 11-ASI-092-m01 | Reproc | lucing S | Sensors in | Infrare | e d | | | | | | | |
|----------------|-------------------------|----------|------------|--|--|---------------------|---------------------------------|-------------|---------------|--|--|--|
| | ECTS | 3 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | undergraduate | | | |
| | Course | !S | | V + R | (no information or | SWS (weekly contact | t hours) and course language av | ailable) | | | | |
| | Method | d of ass | essment | prox. to 10 p Asses nound 2009. | Language of assessment: German, English | | | | | | | |
| | other p | orerequi | sites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-ASL-092-m01 | Applied Superconduction | | | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | R + V | R + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method of assessment | | | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 30 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: once a year, winter semester Language of assessment: German, English | | | | | | | | |
| | other p | orerequi | sites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-EBV-092-m01 | Princip | les of Image Pro | cessin | g | | | | | | | |
|----------------|-----------------------------------|------------------|--|--|----------------------------------|--------------------|-------------|---------------|--|--|--|
| | ECTS | 3 Duratio | n | 1 semester | Method of grading numerical | grade | Modul level | undergraduate | | | |
| | Courses | 5 | V + R | (no information or | n SWS (weekly contact hours) and | course language av | ailable) | | | | |
| | Method | l of assessment | prox. to 10 Asses nound | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | |
| | other p | rerequisites | tive d on to the le sessn | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |
| 11-ENT-092-m01 | Principles of Energy Technologies | | | | | | | | | | |
| | ECTS | 6 Duratio | n | 1 semester | Method of grading numerical | grade | Modul level | graduate | | | |
| | Courses | 5 | R + V | (no information or | n SWS (weekly contact hours) and | course language av | ailable) | | | | |
| | Method | l of assessment | prox. to 10 Asses nound | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulatio 2009. Language of assessment: German, English | | | | | | | |
| | other p | rerequisites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-EPP-092-m01 | Introdu | ction to | Plasmap | hysics | i | | | | | | | |
|----------------|---------|-----------|------------|--|--|---------------------|--------------------------------|-------------|----------|--|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | s | | V + R | (no information on | SWS (weekly contact | hours) and course language ava | ailable) | | | | |
| | Method | d of asse | | prox. to 10 p Asses nound 2009. | anguage of assessment: German, English | | | | | | | |
| | other p | rerequis | | on to the le | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |
| 11-HLF-092-m01 | Semico | nducto | r Lasers - | Princip | oles and Current R | esearch | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | R + V | (no information on | SWS (weekly contact | hours) and course language ava | ailable) | | | | |
| | Method | d of asse | essment | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (a prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be a nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-KVM-092-m01 | Princip | les of Cla | assificatio | on of Patterns | | | | | | | | | |
|----------------|----------------------|-------------------------|-------------|--|--|---|---|--|--|--|--|--|--|
| | ECTS | 3 | Duration | 1 semester | Method of grading numerical grade | Modul level | undergraduate | | | | | | |
| | Course | | | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | |
| | Method | d of asse | 1 2 | a) written examination (90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | | |
| | other prerequisites | | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |
| 11-LVW-092-m01 | Introdu | Introduction to LabVIEW | | | | | | | | | | | |
| | ECTS | 6 | Duration | 1 semester | Method of grading numerical grade | Modul level | graduate | | | | | | |
| | Course | S | 1 | V + Ü (no information o | on SWS (weekly contact hours) and course lar | nguage available) | | | | | | | |
| | Method of assessment | | | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) or e) prox. 60 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination reg 2009. Language of assessment: German, English | | | | | | | | | |
| | other prerequisites | | | tive details at the begi on to assessment. If st the lecturer will put the | must be met to qualify for admission to assess inning of the course. Registration for the cours tudents have obtained the qualification for ad eir registration for assessment into effect. Stu nt or in the subsequent semester. For assessn to assessment anew. | se will be considered a de dmission to assessment o udents who meet all prere | eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- | | | | | | |

| 11-TDO-092-m01 | Thermo | odynam | ics and Ed | onomi | cs | | | | | - | | |
|-----------------|---|----------|------------|--|--|--|---|--|--|---|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grad | ing numerical grade | e | Modul level | graduate | | |
| | Course | S | | R + V (| no information o | n SWS (weekly cont | act hours) and cours | se language ava | ailable) | | | |
| | Method | of asso | essment | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |
| | other p | rerequis | sites | tive de on to a the led sessm | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |
| 11-ZDR-111-m01 | Principles of two- and threedimensional Röntgen imaging | | | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grad | ing numerical grade | e | Modul level | graduate | | |
| | Course | S | • | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method of assessment | | | prox. 3 to 10 p Assess | go minutes per coages, time to co sment offered: W | andidate, for modul mplete: 1 to 4 week /hen and how often | es with less than 4 E s) or d) presentation, assessment will be o | CTS credits apply seminar presections of the contraction of the contra | prox. 20 minute entation (appro s on the metho | r oral examination in groups (apes) or c) project report (approx. 8 ox. 30 minutes) od of assessment and will be anand examination regulations) | | |
| | other prerequisites | | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-TDOE-141-mo1 | Thermo | odynam | ics and Ed | onomi | cs | | | | | | | |
| | ECTS | 3 | Duration | 1 | 1 semester | Method of grad | ing (not) successful | lly completed | Modul level | graduate | | |
| | Courses | | | V (no i | nformation on S | WS (weekly contact | hours) and course la | anguage availal | ble) | | | |
| | | | | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) | | | | | | | | |

| 11-BSV-122-m01 | Image a | and Sig | nal Proces | ssing i | n Physics | | | | | | | |
|----------------|------------------------------------|-----------|------------|--|---|--|---|--|--|--|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading n | umerical grade | Modul level | graduate | | | |
| | Course | S | | V + R | (no information on | SWS (weekly contact ho | ours) and course language ava | ailable) | | | | |
| | Method | l of asse | | minut prese Asses | a) written examination (90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) | | | | | | | |
| | other p | rerequis | | on to the le | etails at the begini assessment. If stu cturer will put thei nent in the current | ning of the course. Regis dents have obtained the r registration for assessr | stration for the course will be c e qualification for admission to ment into effect. Students who | considered a de o assessment o o meet all prerec | form students about the respec- claration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- nts will have to obtain the quali- | | | |
| 11-BMS-121-m01 | Imaging Methods at the Synchrotron | | | | | | | | | | | |
| | ECTS 4 Duratio | | | 1 | 1 semester | Method of grading n | numerical grade | Modul level | graduate | | | |
| | Courses | | | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method of assessment | | | a) written examination (90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminal presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. | | | | | | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-BMS-131-m01 | Imagin | g Meth | ods at the | Syncl | nrotron | , | | | | | | | |
|----------------|----------------------|---------|----------------|--|--|-------------------|--------------------|-------------------|-------------|--|--|--|--|
| | ECTS | 4 | Duration | 1 | 1 semester | Method of grad | ling numerical gra | ade | Modul level | graduate | | | |
| | Course | S | | V + R | (no information o | n SWS (weekly con | tact hours) and co | ourse language av | ailable) | | | | |
| | Method of assessment | | | prox. on/se Asses noun 2009 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |
| | other p | rerequi | sites | tive d on to the le | rtain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respecte details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admissito assessment. If students have obtained the qualification for admission to assessment over the course of the semester, electurer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semesters. | | | | | | | | |
| 11-BSV-131-m01 | Image | and Sig | nal Proce | ssing | ; in Physics | | | | | | | | |
| | ECTS | 6 | Duration | า | 1 semester | Method of grad | ling numerical gra | ade | Modul level | graduate | | | |
| | Course | S | - ' | V + R | (no information o | n SWS (weekly con | tact hours) and co | ourse language av | ailable) | • | | | |
| | Method of assessment | | | prox. on/se Asses noun 2009 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |
| | other prerequisites | | | tive d on to the le | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admiss on to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semesters. | | | | | | | | |
| 11-QUI-132-m01 | Quantu | ım Info | rmation Te | chnol | ogy | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grad | ling numerical gra | ade | Modul level | graduate | | | |
| | Course | S | | V + R | (no information o | n SWS (weekly con | tact hours) and co | ourse language av | ailable) | | | | |
| | Method of assessment | | | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be an nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | : 1 to 4 weeks) or d) presentati- d of assessment and will be an- | | | |

| Solid State Physics | s and Na | nostruc | tures (40 | ECTS (| credits) | | | | | | | |
|---------------------|----------------------|------------|------------|-------------------------------------|---|----------------------|-------------------------|-----------|-------------|----------|--|--|
| 11-MOE-092-m01 | Opto-e | lectroni | ic Materia | l Prop | erties | | | | | | | |
| | ECTS | 5 | Duratio | 1 | 1 semester | Method of grading | numerical grade | | Modul level | graduate | | |
| | Course | !S | | V + Ü | / + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | d of ass | essment | prox. | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) | | | | | | | |
| | other p | orerequi | sites | to qua cours obtain for as | dmission prerequisite to assessment: successful completion of approx. 50% of exercises. Certain prerequisites must be med qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the ourse. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have btained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration or assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment arw. | | | | | | | |
| 11-CRP-131-m01 | Critica | l Phenoi | mena | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | | Modul level | graduate | | |
| | Course | <u>!</u> S | | V + R | (no information o | n SWS (weekly contac | t hours) and course lar | nguage av | ailable) | | | |
| | Method of assessment | | | tion (Asses noun 2009 | a) written examination project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks), presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be an nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | |
| | other prerequisites | | | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |

| 11-ASL-092-m01 | Applied | Applied Superconduction | | | | | | | | | | | | |
|----------------|---------|-------------------------|--------------------------|--|--|---|--|--|--|--|--|--|--|--|
| | ECTS | 6 | Duration | | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | | |
| | Course | S | R | 2 + V (| no information on | SWS (weekly contact | hours) and course language av | ailable) | | | | | | |
| | Method | l of asse | p p A L | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: once a year, winter semester Language of assessment: German, English | | | | | | | | | | |
| | · | rerequis | ti o tl s fi | ive de on to a he lea essm icatio | etails at the beginr assessment. If stuc cturer will put their ent in the current n for admission to | ing of the course. Reg dents have obtained t registration for asses or in the subsequent assessment anew. | gistration for the course will be on the qualification for admission the grant into effect. Students who | considered a de o assessment o o meet all prere | form students about the respec- claration of will to seek admissi- ever the course of the semester, quisites will be admitted to as- ents will have to obtain the quali- | | | | | |
| 11-HLF-092-m01 | Semico | nducto | r Lasers - P | Principles and Current Research | | | | | | | | | | |
| | ECTS | 6 | Duration | | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | | |
| | Course | S | R | 2 + V (| no information on | SWS (weekly contact | hours) and course language av | ailable) | | | | | | |
| | Method | l of asse | p to A n | orox. 3 0 10 p Asses Iounc 2009. | 30 minutes per car pages, time to com sment offered: Wh | ididate, for modules wellete: 1 to 4 weeks) o en and how often ass der observance of Sec | with less than 4 ECTS credits ap r d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | | | | |
| | other p | rerequis | ti o ti s | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | | |

| 11-AHL-092-m01 | Applied | l Semiconduct | r Physi | CS | | | | | | | | |
|----------------|--|----------------|--|--|-------------------------------------|------------------|-------------|----------|--|--|--|--|
| | ECTS | 6 Durat | on | 1 semester | Method of grading numerical gra | ade | Modul level | graduate | | | | |
| | Courses | s | R + V | (no information o | n SWS (weekly contact hours) and co | urse language av | ailable) | | | | | |
| | Method | l of assessmer | prox. to 10 Asse noun 2009 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |
| | other p | rerequisites | tive on to the le | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-FK2-092-m01 | Solid State Physics 2 ECTS 8 Duration 1 semester Method of grading numerical grade Modul level graduate | | | | | | | | | | | |
| | ECTS | 8 Durat | on | 1 semester | graduate | | | | | | | |
| | Courses | S | R + V | R + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | l of assessmer | prox. to 10 Asse noun 2009 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in group prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulation 2009. Language of assessment: German, English | | | | | | | | |
| | other p | rerequisites | tive on to the le | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-FKS-092-m01 | Solid S | tate Sp | ectroscop | у | | | | 1 | | | | |
|----------------|-------------------------------|-----------|-----------|--|--|---|--|----------------------------------|--|---|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of gradin | g numerical grade | | Modul level | graduate | | |
| | Course | s | | R + V | (no information o | n SWS (weekly conta | ct hours) and course langua | age ava | ilable) | | | |
| | Method | d of asse | | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to cor ssment offered: W ced in due form ur | ndidate, for module nplete: 1 to 4 weeks) nen and how often a | s with less than 4 ECTS cred or d) presentation/semina ssessment will be offered d | dits app Ir presei lepends | orox. 20 minute ntation (approx s on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | |
| | other p | rerequis | | tive do on to the le sessm | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |
| 11-FKT-092-m01 | Transport Phenomena in Solids | | | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester Method of grading numerical grade Modul level graduate | | | | | | | |
| | Course | S | | R + V | (no information o | n SWS (weekly conta | ct hours) and course langua | age ava | ilable) | | | |
| | Method | d of asse | | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in group prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 30 minutes) or c) project report (approx | | | | | | es) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be an- | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-HLP-092-m01 | Semico | nductor | Physics | | | | | | | | | |
|----------------|------------------------------|-----------|----------|--|--|--|---|--|--|---|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of gradi | ng numerical grade | | Modul level | graduate | | |
| | Course | S | | R + V | (no information o | n SWS (weekly cont | act hours) and course l | language ava | ailable) | | | |
| | Method | d of asse | | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con ssment offered: W ced in due form un | ndidate, for module nplete: 1 to 4 weeks hen and how often a | es with less than 4 ECTS s) or d) presentation/se assessment will be offe | S credits appeminar prese ered depend | prox. 20 minute entation (approx Is on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-HNS-092-m01 | Semiconductor Nanostructures | | | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of gradi | ng numerical grade | | Modul level | graduate | | |
| | Course | S | | R + V | (no information o | n SWS (weekly cont | act hours) and course l | language ava | ailable) | | | |
| | Method | d of asse | | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con ssment offered: W ced in due form un | ndidate, for module nplete: 1 to 4 weeks hen and how often a | es with less than 4 ECTS or d) presentation/seassessment will be offe | S credits appeminar prese ered depend | prox. 20 minute entation (approx Is on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-LHQ-092-m01 | Lithogr | aphy in | Semicon | ductor | Technology and | Theory of Quantum Tran | sport | | | | | |
|----------------|-----------|-----------|----------|--|---|---|---|--|---------------------------------|--|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | R + V | (no information o | n SWS (weekly contact h | nours) and course language ava | ailable) | | | | |
| | Method | d of asse | | prox. to 10 p Asses nound 2009. | 30 minutes per ca pages, time to con sment offered: W ced in due form un | andidate, for modules windles windles in to 4 weeks) or hen and how often asse | ith less than 4 ECTS credits app d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | | |
| | other p | rerequis | | on to the le | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, he lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |
| 11-MAG-092-m01 | Magnetism | | | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | R + V | (no information o | n SWS (weekly contact h | nours) and course language ava | ailable) | | | | |
| | Method | d of asse | essment | prox. to 10 p Asses nound 2009. | 30 minutes per ca pages, time to con sment offered: W ced in due form un | andidate, for modules windidate, for modules windidate. 1 to 4 weeks) or hen and how often asse | ith less than 4 ECTS credits app d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-MST-092-m01 | Magnet | ism and Spi | n Transp | ort | | | | | | | |
|----------------|----------------|--------------|-----------------------------------|--|---|---------------------------------------|--|--|--|--|--|
| | ECTS | 6 Dur | ation | 2 semester | Method of grading numerical grade | | Modul level | graduate | | | |
| | Courses | S | V + | R + V (no information | on on SWS (weekly contact hours) and course | language | available) | | | | |
| | Method | l of assessm | pro. to 1 Ass nou 200 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | |
| | other p | rerequisites | tive on t the ses | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |
| 11-NAN-092-m01 | Nanoanalytics | | | | | | | | | | |
| | ECTS 6 Duratio | | | 1 semester | Method of grading numerical grade | Modul level | graduate | | | | |
| | Courses | 5 | R + | R + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | l of assessm | pro. to 1 Ass nou 200 | x. 30 minutes per ca o pages, time to co essment offered: W Inced in due form u | (approx. 90 minutes) or b) oral examination of andidate, for modules with less than 4 ECTS c mplete: 1 to 4 weeks) or d) presentation/semination and how often assessment will be offered and not observance of Section 32 Subsection 3 And and the forman, English | redits app inar prese d depends | orox. 20 minute ntation (approx s on the metho | es) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be an- | | | |
| | other p | rerequisites | tive on t the ses | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |

| 11-NDS-092-m01 | Low-Din | nensional Struct | ures | | | | | | | | |
|----------------|-----------------|------------------|--|--|----------------------------|---------------------------|-------------|----------|--|--|--|
| | ECTS | 4 Duratio | n | 1 semester | Method of grading num | nerical grade | Modul level | graduate | | | |
| | Courses | ; | R + V | (no information o | n SWS (weekly contact hour | s) and course language av | ailable) | | | | |
| | Method | of assessment | prox. to 10 Asses nound 2009 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | |
| | other pr | erequisites | tive d on to the le sessn | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |
| 11-NEL-092-m01 | Nanoelectronics | | | | | | | | | | |
| | ECTS | 6 Duratio | n | 1 semester | Method of grading num | Modul level | graduate | | | | |
| | Courses | 3 | R + V | R + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | of assessment | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in group prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 30 minutes) to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulation 2009. Language of assessment: German, English | | | | | | | | |
| | other pr | erequisites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-NOP-092-m01 | Nano-O | ptics | | | | , | | | | | | |
|----------------|----------------------|-----------|----------|--|--|--|---|---|--|--|--|--|
| | ECTS | 4 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | | | | <u>`</u> | | hours) and course language av | | | | | |
| | Method | d of asse | | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con sment offered: Wh ced in due form un | ndidate, for modules aplete: 1 to 4 weeks) c aen and how often ass | with less than 4 ECTS credits ap or d) presentation/seminar pres | prox. 20 minute entation (approx ds on the metho | d of assessment and will be an- | | | |
| | other p | rerequis | | tive do on to the le sessm | etails at the begin assessment. If stu cturer will put thei nent in the current | ning of the course. Re dents have obtained r registration for asse | gistration for the course will be the qualification for admission ssment into effect. Students wh | considered a de to assessment o to meet all prere | oform students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali- | | | |
| 11-QM2-092-m01 | Quantum Mechanics II | | | | | | | | | | | |
| | ECTS 8 Duratio | | | 1 | 1 semester | Method of grading | numerical grade | Modul level | undergraduate | | | |
| | Course | S | | R + V | R + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | d of asse | essment | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con sment offered: Wh ced in due form un | ndidate, for modules aplete: 1 to 4 weeks) c aen and how often ass | with less than 4 ECTS credits ap or d) presentation/seminar pres | prox. 20 minute entation (approx ds on the metho | d of assessment and will be an- | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-QPM-092-m01 | Quantum | Phenomena ir | electr | onic correlated N | laterials | | | | | | |
|-----------------|--------------------------|---------------|--|--|--|--|---|---|---|--|--|
| | ECTS 6 | Duratio | n | 1 semester | Method of grad | ing numerical grad | е | Modul level | graduate | | |
| | Courses | | R + V | (no information o | n SWS (weekly con | tact hours) and cour | se language ava | ailable) | | | |
| | Method o | of assessment | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to co ssment offered: W ced in due form u | andidate, for modu mplete: 1 to 4 week hen and how often | es with less than 4 I s) or d) presentatior assessment will be Section 32 Subsect | ECTS credits app n/seminar prese offered depend | orox. 20 minute entation (approx s on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | |
| | other pre | requisites | tive d on to the le sessn | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |
| 11-QVTP-092-m01 | Many Body Quantum Theory | | | | | | | | | | |
| | ECTS 8 | B Duratio | n | 1 semester | Method of grad | ing numerical grad | е | Modul level | graduate | | |
| | Courses | | R + V | (no information o | n SWS (weekly con | tact hours) and cour | se language ava | ailable) | | | |
| | Method o | of assessment | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to co ssment offered: W ced in due form u | andidate, for modu mplete: 1 to 4 week hen and how often | es with less than 4 I s) or d) presentation assessment will be Section 32 Subsect | ECTS credits app n/seminar prese offered depend | orox. 20 minute entation (approx s on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | |
| | other pre | requisites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-RMS-092-m01 | Relativi | stic Effects in N | esosco | pic Systems | | | | | | | | |
|----------------|---------------------------------|-------------------|--|--|----------------------|---------------------------------|-------------|----------|--|--|--|--|
| | ECTS | 5 Duratio | n | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | 5 | R + V | (no information o | n SWS (weekly contac | t hours) and course language av | /ailable) | | | | | |
| | Method | of assessment | prox. to 10 Asses nound 2009. | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |
| | other pi | rerequisites | tive d on to the le sessn | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-TFK-092-m01 | Theoretical Solid State Physics | | | | | | | | | | | |
| | ECTS | 8 Duratio | n | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | 5 | R + V | (no information o | n SWS (weekly contac | t hours) and course language av | /ailable) | | | | | |
| | Method | of assessment | prox. to 10 Asses nound 2009. | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (appr to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulation 2009. Language of assessment: German, English | | | | | | | | |
| | other pi | rerequisites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |

| 11-TSL-092-m01 | Theory o | of Superconduct | ion | | | | | | | | |
|-----------------|---|-----------------|--|---|---|--|---|---|--|--|--|
| | ECTS | 5 Duratio | n | 1 semester | Method of grading | g numerical grade | Modul level | graduate | | | |
| | Courses | | R + V | (no information o | n SWS (weekly contac | ct hours) and course language a | vailable) | | | | |
| | Method | of assessment | prox. to 10 Asses nound 2009 | 30 minutes per ca pages, time to cor ssment offered: W ced in due form ur | ndidate, for modules nplete: 1 to 4 weeks) hen and how often as | with less than 4 ECTS credits a or d) presentation/seminar pre | pprox. 20 minute sentation (appro ds on the metho | d of assessment and will be an- | | | |
| | other pro | erequisites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-RMFT-102-m01 | Renormalization Group Methods in Field Theory | | | | | | | | | | |
| | ECTS | 6 Duratio | n | 1 semester | Method of grading | g numerical grade | Modul level | graduate | | | |
| | Courses | | V + R | (no information o | n SWS (weekly contac | ct hours) and course language a | vailable) | | | | |
| | Method | of assessment | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in group prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (a to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and winounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regula 2009. Language of assessment: German, English | | | | | | | | |
| | other pro | erequisites | tive d on to the le sessn | etails at the begin assessment. If stu cturer will put the nent in the current | ning of the course. Rudents have obtained ir registration for asse | egistration for the course will be the qualification for admission essment into effect. Students w | e considered a de to assessment o ho meet all prere | nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali- | | | |

| 11-SPI-102-m01 | Spintro | nics | | | | | | | | | | |
|----------------|---|-----------|----------|--|---|---|---|--|---------------------------------|--|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading r | numerical grade | Modul level | graduate | | | |
| | Course | S | | V + R | (no information or | SWS (weekly contact h | ours) and course language av | ailable) | | | | |
| | Method | d of asse | | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con ssment offered: Wh ced in due form un | ndidate, for modules with plete: 1 to 4 weeks) or colon and how often assess | th less than 4 ECTS credits ap d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-MSS-102-m01 | Methods in Surface Spectroscopy ECTS 4 Duration 1 semester Method of grading numerical grade Modul level graduate | | | | | | | | | | | |
| | ECTS | 4 | Duration | | | | | | graduate | | | |
| | Course | S | | V (no | information on SW | S (weekly contact hours | s) and course language availa | ble) | | | | |
| | Method | d of asse | | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con sment offered: Wh ced in due form un | ndidate, for modules wi aplete: 1 to 4 weeks) or o en and how often asses | th less than 4 ECTS credits ap d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 11-EEW-102-m01 | Electro | n Electr | on Interac | tion | | , | | | | | | | |
|-----------------|-----------------------------------|-----------|------------|--|--|---|--|--|---------------------------------|--|--|--|--|
| | ECTS | 4 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | S | | V + R (| (no information o | n SWS (weekly contact | hours) and course language ava | ailable) | | | | | |
| | Method | l of asso | | prox. to 10 p Asses nounc 2009. | 30 minutes per ca pages, time to con sment offered: W eed in due form un | indidate, for modules v mplete: 1 to 4 weeks) o hen and how often ass | with less than 4 ECTS credits app r d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | | | |
| | other p | rerequi | | tive de on to a the lee sessm | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respecive details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, he lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-TFK2-111-m01 | Theoretical Solid State Physics 2 | | | | | | | | | | | | |
| | ECTS | 8 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | S | | V + R (| (no information o | n SWS (weekly contact | hours) and course language ava | ailable) | | | | | |
| | Method | l of asso | | prox. to 10 p Asses nounce 2009. | 30 minutes per ca pages, time to con sment offered: W ted in due form un | indidate, for modules v nplete: 1 to 4 weeks) o hen and how often ass | with less than 4 ECTS credits app r d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | | | |
| | other p | rerequi | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |

| 11-IEM-111-m01 | Introdu | ction to | Electron | Micros | scopy | | | | | | | | |
|-----------------|----------------------|----------|-----------|--|--|--|---|--|---|--|--|--|--|
| | ECTS | 4 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Course | S | | V + R | (no information on | SWS (weekly contact | hours) and course langu | uage available) | | | | | |
| | Method | d of ass | essment | prox. to 10 Asses nound 2009. | 30 minutes per car pages, time to com sment offered: Wh ced in due form un | ndidate, for modules in plete: 1 to 4 weeks) of en and how often ass | with less than 4 ECTS cre or d) presentation/semin sessment will be offered | edits approx. 20 minute ar presentation (appro depends on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) od of assessment and will be anand examination regulations) | | | | |
| | other p | · | | tive do on to the le- sessm fication | etails at the beginr assessment. If stu- cturer will put thein nent in the current on for admission to | ning of the course. Re dents have obtained r registration for asse | gistration for the course the qualification for adm ssment into effect. Stude | will be considered a de ission to assessment c ents who meet all prere | nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali- | | | | |
| 11-FTFK-112-m01 | | <u> </u> | Solid Sta | te Phy | sics | | | | | | | | |
| | ECTS | 8 | Duration | | 1 semester | Method of grading | | Modul level | graduate | | | | |
| | Course | S | | V + R | + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | d of ass | essment | prox. to 10 Asses | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) | | | | | | | | |
| | other p | · | | tive do on to the le- sessm fication | etails at the beginr assessment. If stu- cturer will put thein nent in the current on for admission to | ning of the course. Re dents have obtained r registration for asse or in the subsequent assessment anew. | gistration for the course the qualification for adm ssment into effect. Stude | will be considered a delission to assessment dents who meet all prere | nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali- | | | | |
| 11-DFT-142-m01 | Density | / Functi | onal Theo | ry and | the Physics of Ox | ide Heterostructure | | | | | | | |
| | ECTS | 4 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Course | S | | V + D | (no information on | SWS (weekly contact | t hours) and course lang | uage available) | | | | | |
| | Method of assessment | | | a) written examination (90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: approx. 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | | |

| 11-CMS-122-m01 | Compu | ıtationa | l Material | s Scie | nce | | | | | | | |
|----------------|---------------------------------|-----------|------------|--|--|--|--------------------------------------|------------------|---|--|--|--|
| | ECTS | 8 | Duration | 1 | 1 semester | Method of grading numerical grade | | Modul level | graduate | | | |
| | Course | s | • | V + R | (no information o | on SWS (weekly contact hours) and course la | anguage ava | ailable) | | | | |
| | Metho | d of asso | essment | minut prese Asses nound 2009 | tes per candidate) entation (approx. 3 ssment offered: W ced in due form ui | (90 minutes) or b) oral examination of one of or c) project report (approx. 8 to 10 pages, 30 minutes) When and how often assessment will be offer nder observance of Section 32 Subsection 3 | time to con red depend | nplete: 1 to 4 w | eeks) or d) presentation/seminar d of assessment and will be an- | | | |
| | otherp | orerequi | sites | tive d on to the le sessn | ertain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respect re details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admissing to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, re lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualication for admission to assessment anew. | | | | | | | |
| 11-CMS-131-m01 | Computational Materials Science | | | | | | | | | | | |
| | ECTS | 8 | Duration | <u> </u> | 1 semester | Method of grading numerical grade | numerical grade Modul level graduate | | | | | |
| | Course | S | | V + R | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Metho | d of asso | essment | prox. on/se Asses nound 2009 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be an nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | |
| | other p | orerequi | sites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semesters. | | | | | | | | |

| 11-UGS-131-m01 | Disorde | ered Sy | stems | | | | | | | | | |
|-----------------|---|----------|-----------|---|---|---|---|------------------|---|--|--|--|
| | ECTS | 4 | Duration | า | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | V + R | (no information or | SWS (weekly contact | t hours) and course language | available) | | | | |
| | Method | l of ass | essment | prox. on/se Asses noune 2009 | Language of assessment: German, English | | | | | | | |
| | other prerequisites Solid State Spectrosco | | | tive d on to the le | cain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respect details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission assessment. If students have obtained the qualification for admission to assessment over the course of the semester, lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assement in the current or in the subsequent semesters. | | | | | | | |
| 11-FKS2-132-m01 | Solid S | tate Sp | ectroscop | y 2 | ' | , | | | | | | |
| | ECTS 6 Duration | | | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | | | V + R | (no information or | SWS (weekly contact | t hours) and course language | available) | | | | |
| | Method of assessment | | | prox. on/se Asses noune 2009 | 30 minutes per ca eminar presentatio esment offered: Wh ced in due form un | ndidate) or c) project n (approx. 30 minute nen and how often as: | report (approx. 8 to 10 pages, s) sessment will be offered depe | time to complete | oral examination in groups (ap: 1 to 4 weeks) or d) presentatide of assessment and will be anand examination regulations) | | | |
| 11-PMM-132-m01 | Physics | s of Adv | anced Ma | terials | 5 | | | | | | | |
| | ECTS | 6 | Duration | <u> </u> | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | V + R | (no information or | SWS (weekly contact | t hours) and course language | available) | | | | |
| | Method | l of ass | essment | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |

| 11-TOPO-132-mo1 | Topolo | Topological Order | | | | | | | | | | | | |
|--------------------|---------------------|--|------------|---|---|--|--|------------------|--|--|--|--|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading r | umerical grade | Modul level | graduate | | | | | |
| | Course | S | | V + R | (no information o | | ours) and course language | available) | 10 | | | | | |
| | Method | d of ass | essment | prox. on/se Asses noun 2009 | 30 minutes per ca eminar presentation ssment offered: W ced in due form ur | ndidate) or c) project repon (approx. 30 minutes) hen and how often asses | ort (approx. 8 to 10 pages, sment will be offered depe | time to complete | oral examination in groups (ap- e: 1 to 4 weeks) or d) presentati- ed of assessment and will be an- and examination regulations) | | | | | |
| 11-TFP-132-m01 | Topolo | gy in So | olid State | Physi | sics | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading r | umerical grade | Modul level | graduate | | | | | |
| | Course | urses V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | | | | |
| | Method | a 01 u33 | essment | prox. on/se Asses noun 2009 | 30 minutes per ca eminar presentation ssment offered: W ced in due form ur | ndidate) or c) project repon (approx. 30 minutes) hen and how often asses | ort (approx. 8 to 10 pages, sment will be offered depe | time to complete | roral examination in groups (ap- e: 1 to 4 weeks) or d) presentati- od of assessment and will be an- and examination regulations) | | | | | |
| Astrophysics and F | Particle F | Physics | (40 ECTS | credit | s) | | | | | | | | | |
| 11-A4-072-m01 | Astrop | <u> </u> | | | | | | | | | | | | |
| | ECTS | 6 | Duratio | | 1 semester | Method of grading r | | Modul level | undergraduate | | | | | |
| | Course | | | | | | ours) and course language | available) | _ | | | | | |
| | | | | | ` ' | prox. 120 minutes) | | | | | | | | |
| | other prerequisites | | | Admission prerequisite to assessment: successful completion of approx. 50% of exercises. Certain prerequisites must be me to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment an ew. | | | | | | | | | | |
| | | oants ar | | Only | as part of pool of g | general key skills (ASQ): | 15 places. Places will be all | ocated by lot. | | | | | | |

| 11-ASM-131-m01 | Astrono | omical N | lethods | | | | | | | | | | |
|----------------|-------------------------------|-----------|----------|--|--|---|--|------------------------------------|--|---|--|--|--|
| | ECTS | 6 | Duration | | 1 semester | Method of gradir | g numerical grade | | Modul level | graduate | | | |
| | Course | s | | V + R | (no information or | SWS (weekly conta | ct hours) and course langu | ıage ava | ilable) | | | | |
| | Method | d of asse | | prox. on/se Asses nound 2009. | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |
| | other p | rerequis | | tive do on to the le sessm | etails at the begin assessment. If stu cturer will put the nent in the current | ning of the course. Findents have obtained registration for ass | egistration for the course was the qualification for adming essment into effect. Stude | will be c ission to ents who | onsidered a de assessment o meet all prere | form students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali- | | | |
| 11-EPP-092-m01 | Introduction to Plasmaphysics | | | | | | | | | | | | |
| | ECTS | 6 | Duration | | | | | | | graduate | | | |
| | Course | S | | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | |
| | Method | d of asse | | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to cor sment offered: Wl ced in due form ur | ndidate, for module nplete: 1 to 4 weeks) nen and how often a | s with less than 4 ECTS cree or d) presentation/semina ssessment will be offered o | dits app ar prese depends | orox. 20 minute ntation (approx s on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |

| 11-AKM-092-m01 | Cosmo | logy | | | | | | | | | | | |
|----------------|---------------------|-----------|----------|--|---|---|--|---|---|--|--|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of gradin | g numerical grade | Modul level | graduate | | | | |
| | Course | S | | R + V | (no information or | SWS (weekly conta | ct hours) and course language | e available) | | | | | |
| | Method | d of asso | | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con sment offered: Wh ced in due form un | ndidate, for modules aplete: 1 to 4 weeks) aen and how often as | s with less than 4 ECTS credits or d) presentation/seminar p ssessment will be offered dep | s approx. 20 minutoresentation (appropends on the metho | roral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) od of assessment and will be anand examination regulations) | | | | |
| | other p | rerequi | | tive d on to the le sessn | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, he lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-APL-092-m01 | Plasma-Astrophysics | | | | | | | | | | | | |
| | ECTS 6 Duratio | | | | | | | | graduate | | | | |
| | Course | S | | R + V | R + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | d of asso | essment | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in group prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and we nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulation). Language of assessment: German, English | | | | | | | | | |
| | other prerequisites | | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |

| 11-ASP-092-m01 | Introdu | ction to | Space Phy | ysics | | | | | | | | | |
|----------------|------------------------------|-----------|------------------|--|--|--|--|-----------------------------------|--|--|--|--|--|
| | ECTS | 6 | Duration | | 1 semester | Method of gradin | g numerical grade | | Modul level | graduate | | | |
| | Course | s | F | R + V (| (no information or | SWS (weekly conta | ct hours) and course langua | age ava | ilable) | | | | |
| | Method | d of asse | t H r | orox. 3 30 10 p Asses 10unc 2009. | go minutes per ca pages, time to con sment offered: Wh ed in due form un | ndidate, for module nplete: 1 to 4 weeks) een and how often a | s with less than 4 ECTS cred or d) presentation/seminar ssessment will be offered de | lits app r presei epends | orox. 20 minute ntation (approx s on the metho | oral examination in groups (aps) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | | |
| | other p | rerequis | t c t | ive de on to a the lea sessm | etails at the begin assessment. If stu cturer will put thei eent in the current | ning of the course. R dents have obtained r registration for ass | egistration for the course will the qualification for admis essment into effect. Studen | vill be cossion to to this who | onsidered a de assessment o meet all prere | form students about the respec- eclaration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- ents will have to obtain the quali- | | | |
| 11-AWP-092-m01 | Atmosphere and Space Physics | | | | | | | | | | | | |
| | ECTS | 6 | Duration | | | | | | | graduate | | | |
| | Course | S | F | R + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | |
| | Method | d of asse | r / r 2 | orox. 3 nar pro Asses nounc 2009. | 30 minutes per ca esentation (appro sment offered: Wh ed in due form un | ndidate) or c) projec x. 30 minutes) ien and how often a | t report (approx. 8 pages, tinessessment will be offered deceion 32 Subsection 3 ASPO | me to o | complete: 1 to 2 | oral examination in groups (ap- 4 weeks) or d) presentation/semi- d of assessment and will be an- and examination regulations) | | | |
| | other prerequisites | | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |

| 11-GRT-092-m01 | Group | Theory | | | | | | , | | | | | |
|----------------|-----------------------------------|-----------|----------|--|--|--|---|--|---|--|--|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Course | s | | R + V | (no information or | SWS (weekly contact | hours) and course language a | vailable) | | | | | |
| | Method | d of asse | | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con sment offered: Wh ced in due form un | ndidate, for modules w nplete: 1 to 4 weeks) on nen and how often asse | vith less than 4 ECTS credits a r d) presentation/seminar pre essment will be offered depen | pprox. 20 minute sentation (appro eds on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |
| 11-NMA-092-m01 | Numerical Methods in Astrophysics | | | | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | Modul level | graduate | | | | | |
| | Course | S | | V + Ü | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | d of asse | | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment an nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination reports). Language of assessment: German, English | | | | | | | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |

| 11-QFT2-092-m01 | Quantun | n Field Theory I | | | | | | | | | | |
|-----------------|------------------------|------------------|--|--|--|--|---|---|--|--|--|--|
| | ECTS | 6 Duratio | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | | R + V | (no information or | SWS (weekly contac | t hours) and course languag | e available) | | | | | |
| | Method | of assessment | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con sment offered: Wh ced in due form un | ndidate, for modules aplete: 1 to 4 weeks) aen and how often as | with less than 4 ECTS credit or d) presentation/seminar p sessment will be offered dep | s approx. 20 minutoresentation (appropends on the metho | r oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) od of assessment and will be anand examination regulations) | | | | |
| | other pre | erequisites | tive d on to the le sessn | etails at the begin assessment. If stu cturer will put thei nent in the current | ning of the course. Re dents have obtained r registration for asse | egistration for the course will the qualification for admiss essment into effect. Students | l be considered a d ion to assessment of s who meet all prere | nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali- | | | | |
| 11-RNT-092-m01 | Renormalization Theory | | | | | | | | | | | |
| | ECTS | 6 Duratio | | | | | | graduate | | | | |
| | Courses | | R + V | R + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | of assessment | prox. to 10 Asses nound 2009. | 30 minutes per ca pages, time to con ssment offered: Wh ced in due form un | ndidate, for modules aplete: 1 to 4 weeks) aen and how often as | with less than 4 ECTS credit or d) presentation/seminar p sessment will be offered dep | s approx. 20 minutoresentation (appropends on the metho | r oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) od of assessment and will be anand examination regulations) | | | | |
| | other pre | erequisites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about tive details at the beginning of the course. Registration for the course will be considered a declaration of will to see on to assessment. If students have obtained the qualification for admission to assessment over the course of the the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admissessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain fication for admission to assessment anew. | | | | | eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- | | | | |

| 11-RQFT-092-m01 | Relativ | istical C | Quantumfi | eld Th | eory | | | | | | | | |
|-----------------|----------------------|-----------|-----------|--|---|---|--|--|---------------------------------|--|--|--|--|
| | ECTS | 8 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Course | S | | R + V | (no information on | SWS (weekly contact | hours) and course language av | ailable) | | | | | |
| | Method | d of asse | | prox. to 10 p Asses nound 2009. | 30 minutes per car pages, time to com sment offered: Wh ced in due form und | ndidate, for modules w nplete: 1 to 4 weeks) on nen and how often ass | with less than 4 ECTS credits app r d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | | | |
| | other p | rerequis | | on to the le | ertain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, are lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualication for admission to assessment anew. | | | | | | | | |
| 11-RTT-092-m01 | Theory of Relativity | | | | | | | | | | | | |
| | ECTS 6 Duration | | | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Course | S | | R + V | (no information on | SWS (weekly contact | hours) and course language ava | ailable) | | | | | |
| | Method | d of asse | essment | prox. to 10 p Asses nound 2009. | 30 minutes per car pages, time to com sment offered: Wh ced in due form und | ndidate, for modules w nplete: 1 to 4 weeks) on nen and how often ass | with less than 4 ECTS credits app r d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | | | |
| | other p | rerequis | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |

| 11-TEP-092-m01 | Theoret | ical Elementary | Particl | e Physics | | | | | | | | |
|----------------|-------------------------------|-----------------|--|--|--|---|--|---|--|--|--|--|
| | ECTS | 8 Duratio | n | 1 semester | Method of grading nume | erical grade | Modul level | graduate | | | | |
| | Courses | | R + V | (no information o | n SWS (weekly contact hours) | and course language av | ailable) | | | | | |
| | Method | of assessment | prox. to 10 Asses nound | 30 minutes per capages, time to consisted: With the consisted of the consistency of th | indidate, for modules with les inplete: 1 to 4 weeks) or d) pro hen and how often assessme | ss than 4 ECTS credits ap esentation/seminar presont ent will be offered depend | prox. 20 minute entation (approx Is on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | | | |
| | other pr | erequisites | tive d on to the le sessn | etails at the begir assessment. If sto cturer will put the nent in the curren | ning of the course. Registrati Idents have obtained the qua Ir registration for assessment | on for the course will be alification for admission t into effect. Students wh | considered a de to assessment c o meet all prere | form students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali- | | | | |
| 11-TPE-092-m01 | Experimental Particle Physics | | | | | | | | | | | |
| | ECTS | 4 Duratio | on 1 semester Method of grading numerical grade Mod | | | | | graduate | | | | |
| | Courses | | R + V | (no information o | n SWS (weekly contact hours) | and course language av | ailable) | | | | | |
| | Method | of assessment | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project r to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination 2009. Language of assessment: German, English | | | | | | | | | |
| | other pr | erequisites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |

| 11-TPS-092-m01 | Particl | e Physi | ics (Standa | ard Mo | del) | , | | 1 | | | |
|----------------|----------------------|----------|--------------|---|--|---|---|--|---|--|--|
| | ECTS | 8 | Duration | n | 1 semester | Method of grading | numerical grade | Modul level | graduate | | |
| | Course | S | · | R + V | (no information on | SWS (weekly contac | t hours) and course language | e available) | | | |
| | Method | d of ass | sessment | prox. to 10 Asses noun 2009 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | |
| | other p | orerequ | isites | tive d on to the le sessr | etails at the beging assessment. If stu cturer will put thei nent in the current | ning of the course. Re dents have obtained r registration for asse | gistration for the course will the qualification for admission ssment into effect. Students | be considered a de on to assessment o who meet all prere | nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali- | | |
| 11-SUS-092-m01 | Supers | ymme | try I and II | | | | | | | | |
| | ECTS | 6 | Duratio | า | 1 semester | Method of grading | numerical grade | Modul level | graduate | | |
| | Course | S | | V + R | (no information on | SWS (weekly contac | t hours) and course language | e available) | | | |
| | Method of assessment | | | prox. to 10 Asses noun 2009 | 30 minutes per cal pages, time to com ssment offered: Wh ced in due form un | ndidate, for modules aplete: 1 to 4 weeks) on the nend how often as | with less than 4 ECTS credits or d) presentation/seminar posessment will be offered dep | approx. 20 minute resentation (appro ends on the metho | oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations) | | |
| | other prerequisites | | isites | tive d on to the le sessr | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | |
| 11-AST-092-m01 | Theore | tical A | strophysic | S | | | | | | | |
| | ECTS | 6 | Duratio | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | |
| | Course | | | | <u>`</u> | | t hours) and course language | e available) | | | |
| | Metho | d of ass | sessment | writte | n examination (ap | prox. 120 minutes) | | | | | |

| 11-WWB-102-m01 | Strong | Interac | tion in Ac | celera | tor Experiments | , | | | | | |
|----------------|-------------------------------|----------|------------|--|--|---|---|--|--|--|--|
| | ECTS | 3 | Duration | ı | 1 semester | Method of grading | numerical grade | Modul level | graduate | | |
| | Course | 52 | • | V + R | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | |
| | Metho | d of ass | essment | prox. to 10 Asses nound 2009 | Language of assessment: German, English | | | | | | |
| | other p | orerequi | sites | tive d on to the le sessn | etails at the begi assessment. If st cturer will put the nent in the currer | nning of the course. Reg audents have obtained t eir registration for asses | gistration for the course will be the qualification for admission t ssment into effect. Students wh | considered a de to assessment c o meet all prere | nform students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali- | | |
| 11-APP-111-m01 | Practical Course Astrophysics | | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | (not) successfully completed | Modul level | graduate | | |
| | Course | 25 | | P (no | information on S | WS (weekly contact hou | ırs) and course language availa | ble) | | | |
| | Metho | d of ass | essment | a) Preparing, performing and evaluating the experiments will be considered successfully completed if a Testat (exam) is passed. Experiments that were not successfully completed can be repeated once. Or b) discussion to test the candidate's understanding of the physics-related contents and results of the experiment (approx. 20 minutes). Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. | | | | | | | |
| | other prerequisites | | | tive d on to the le sessn | etails at the begi assessment. If st cturer will put the nent in the currer | nning of the course. Reg audents have obtained t eir registration for asses | gistration for the course will be the qualification for admission t ssment into effect. Students wh | considered a de to assessment c o meet all prere | form students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali- | | |

| 11-DTS-111-m01 | Particle Radia | tion Detectors | | | | | | | | | |
|----------------|---------------------|----------------------------------|--|---|---|--|--|--|--|--|--|
| | ECTS 4 | Duration | 1 semester | Method of grading numerical grade | Modul level | graduate | | | | | |
| | Courses | V + | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method of ass | pro to 1 Ass nou 200 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |
| | other prerequi | tive on t the ses | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-MAS-111-mo1 | Modern Astrophysics | | | | | | | | | | |
| | ECTS 4 | Duration | 1 semester | Method of grading numerical grade | Modul level | graduate | | | | | |
| | Courses | V + | R (no information o | n SWS (weekly contact hours) and course language a | available) | | | | | | |
| | Method of ass | pro to 1 Ass nou 200 | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | |
| | other prerequi | tive on t the ses | details at the begin to assessment. If stu lecturer will put the sment in the current | ust be met to qualify for admission to assessment. Ining of the course. Registration for the course will budents have obtained the qualification for admission ir registration for assessment into effect. Students we or in the subsequent semester. For assessment at a consessment anew. | e considered a do n to assessment o ho meet all prere | eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- | | | | | |

| 11-ETT-111-m01 | Introduc | tion to Ele | ementary | Particle Theory | | | | | | |
|----------------|----------------------|-------------|-----------------------|--|--|---|---|---|--|--|
| | ECTS . | 4 Dι | uration | 1 semester | Method of grading numerical grade | Mod | dul level | graduate | | |
| | Courses | | | V (no information on SWS (weekly contact hours) and course language available) | | | | | | |
| | Method | of assessr | pr to As no | ox. 30 minutes per ca 10 pages, time to con sessment offered: W | (approx. 90 minutes) or b) oral examination of andidate, for modules with less than 4 ECTS cremplete: 1 to 4 weeks) or d) presentation/semin then and how often assessment will be offered ander observance of Section 32 Subsection 3 AS and: German, English | redits approx. nar presentati d depends on i | . 20 minute: tion (approx the method | s) or c) project report (approx. 8 k. 30 minutes) d of assessment and will be an- | | |
| | other pre | erequisite | tiv or th se | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | |
| 11-QSG-102-m01 | Quantum Loop Gravity | | | | | | | | | |
| | ECTS | 4 Dι | uration | 1 semester | Method of grading numerical grade | Mod | dul level | graduate | | |
| | Courses | | V - | + S (no information o | n SWS (weekly contact hours) and course lang | guage availabl | ole) | | | |
| | Method of assessment | | | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. | | | | | | |
| | other pre | erequisite | tiv or th se | re details at the begin to assessment. If stue lecturer will put the | nust be met to qualify for admission to assessmening of the course. Registration for the course udents have obtained the qualification for admir registration for assessment into effect. Student or in the subsequent semester. For assessment anew. | e will be consi- mission to ass dents who mee | idered a de sessment o eet all prered | claration of will to seek admissiver the course of the semester, quisites will be admitted to as- | | |

| 11-ATT-111-m01 | Concepts of T | heoretical | Astrop | particle physics | , | | | | | |
|----------------|------------------------------|------------|------------------------------------|--|--|---|--|--|--|--|
| | ECTS 4 | Duratio | n | 1 semester | Method of grading | numerical grade | Modul level | graduate | | |
| | Courses | | V + R | (no information or | SWS (weekly contact | hours) and course language av | ailable) | | | |
| | Method of ass | sessment | prox. to 10 Asses | 30 minutes per ca pages, time to con ssment offered: Wh ced in due form un | ndidate, for modules v nplete: 1 to 4 weeks) o nen and how often ass | with less than 4 ECTS credits ap r d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | |
| | other prerequ | isites | tive d on to the le sessn | etails at the begin assessment. If stu cturer will put thei nent in the current | ning of the course. Reg Idents have obtained t Ir registration for asses | gistration for the course will be the qualification for admission to sment into effect. Students who | considered a de to assessment o o meet all prere | | | |
| 11-ART-112-m01 | General Theory of Relativity | | | | | | | | | |
| | ECTS 4 | Duratio | n | 1 semester | Method of grading | numerical grade | Modul level | graduate | | |
| | Courses | | V + R | (no information or | SWS (weekly contact | hours) and course language av | ailable) | | | |
| | Method of ass | sessment | prox. to 10 Asses | 30 minutes per ca pages, time to con ssment offered: Wh ced in due form un | ndidate, for modules v nplete: 1 to 4 weeks) o nen and how often ass | with less than 4 ECTS credits ap r d) presentation/seminar prese | prox. 20 minute entation (approx Is on the metho | d of assessment and will be an- | | |
| | other prerequ | isites | tive don to the lessessn | etails at the begin assessment. If stu cturer will put thei nent in the current | ning of the course. Reg Idents have obtained t Ir registration for asses | gistration for the course will be a the qualification for admission to ssment into effect. Students who | considered a de o assessment o o meet all prere | form students about the respec- eclaration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- ents will have to obtain the quali- | | |

| 11-SRT-112-m01 | Special Theory of Relativity | | | | | | | | | | | | |
|------------------|------------------------------|----------|------------|--|--|--|---|---|---------------------------------|--|--|--|--|
| | ECTS | 4 | Duration |) | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Course | ·S | , | V + R | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | d of ass | | prox. to 10 Asses | 30 minutes per ca pages, time to con sment offered: Wh ced in due form un | ndidate, for modules v nplete: 1 to 4 weeks) o nen and how often ass | vith less than 4 ECTS credits app r d) presentation/seminar prese | prox. 20 minute entation (approx s on the metho | d of assessment and will be an- | | | | |
| | other p | orerequi | | tive do on to the le sessm | etails at the begin assessment. If stu cturer will put thei nent in the current | ning of the course. Reg dents have obtained t r registration for asses | gistration for the course will be on the qualification for admission to sment into effect. Students who | considered a de o assessment o o meet all prere | | | | | |
| Complex Systems, | Quantu | m Conti | ol and Bio | physic | cs (40 ECTS credit | s) | | | | | | | |
| 11-NOP-092-m01 | Nano-Optics | | | | | | | | | | | | |
| | ECTS | 4 | Duration |) | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Course | ·S | | R + V | (no information or | SWS (weekly contact | hours) and course language ava | ailable) | | | | | |
| | Method | d of ass | | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | | |
| | other p | rerequi | | tive do on to the le sessm | etails at the begin assessment. If stu cturer will put thei nent in the current | ning of the course. Reg dents have obtained t r registration for asses | gistration for the course will be on the qualification for admission to sment into effect. Students who | considered a de o assessment o o meet all prere | | | | | |

| 11-BMT-092-m01 | Biophy | sical M | easureme | nt Tecl | hnology in Medica | l Science | , | | | | | |
|----------------|---------------------|---|----------|--|---|--|--|---|---------------------------------|--|--|--|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | R + V (| (no information on | SWS (weekly contact | hours) and course language ava | ailable) | | | | |
| | Method | d of asso | | prox. to 10 p Asses nounc 2009. | Language of assessment: German, English | | | | | | | |
| | other p | rerequi | | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| 11-LMB-092-m01 | Labora | Laboratory and Measurement Technology in Biophysics | | | | | | | | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | R + V (| (no information on | SWS (weekly contact | hours) and course language ava | ailable) | | | | |
| | Method | d of asso | essment | prox. to 10 p Asses nounce 2009. | 30 minutes per car pages, time to com sment offered: Wh ced in due form und | ndidate, for modules v aplete: 1 to 4 weeks) o een and how often ass | with less than 4 ECTS credits app r d) presentation/seminar prese | prox. 20 minute entation (approx s on the metho | d of assessment and will be an- | | | |
| | other prerequisites | | | on to a the leasessm | etails at the beginr assessment. If stud cturer will put thein nent in the current | ning of the course. Reg dents have obtained t r registration for asses | gistration for the course will be on the qualification for admission to dessment into effect. Students who | considered a de o assessment c o meet all prere | | | | |

| 11-PKS-092-m01 | Physics | of Complex Sys | tems | | | | | | | | | |
|----------------|---|----------------|--|---|---|--|---|---|--|--|--|--|
| | ECTS | 6 Duratio | n | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | | R + V | R + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | of assessment | a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English | | | | | | | | | |
| | other pro | erequisites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |
| 11-QIC-092-m01 | Quantum Information and Quantum Computing | | | | | | | | | | | |
| | ECTS | 5 Duratio | n | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | | R + V | (no information o | n SWS (weekly contact h | ours) and course language ava | ailable) | | | | | |
| | Method | of assessment | prox. to 10 Asses nound | 30 minutes per ca pages, time to cor ssment offered: W ced in due form ur | ndidate, for modules wi nplete: 1 to 4 weeks) or one nen and how often asses | th less than 4 ECTS credits app d) presentation/seminar prese | prox. 20 minute entation (approx s on the metho | d of assessment and will be an- | | | | |
| | other pr | erequisites | tive d on to the le sessn | etails at the begin assessment. If stu cturer will put the nent in the current | ning of the course. Registed in the course have obtained the ir registration for assess | stration for the course will be one of the course will be one of the course will be one of the course who was a surface of the course will be course with the course will be course with the course will be course with the course will be course with the course wil | considered a de o assessment c o meet all prere | form students about the respec- eclaration of will to seek admissi- ever the course of the semester, quisites will be admitted to as- ents will have to obtain the quali- | | | | |

| 11-SDC-092-m01 | Statistics, Data Analysis and Computer Physics | | | | | | | | | | | |
|-------------------|--|-------------|--|--|--|---|---|--|--|--|--|--|
| | ECTS 4 | Duration | | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | | R + V (| no information or | SWS (weekly contact | hours) and course langua | ge available) | | | | | |
| | Method of as | ssessment | prox. 3 to 10 p Assess nounc 2009. | go minutes per ca pages, time to con sment offered: Wh ed in due form un | ndidate, for modules v nplete: 1 to 4 weeks) o nen and how often ass | with less than 4 ECTS cred r d) presentation/seminar essment will be offered de | its approx. 20 minuto presentation (appro epends on the metho | r oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) od of assessment and will be anand examination regulations) | | | | |
| | other prerequ | uisites | tive de on to a the lea sessm | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |
| Other Modules Spe | ecialisation (4 | o ECTS cred | lits) | | | | | | | | | |
| 11-SF-4A-072-m01 | Module Type 4A Special Training Astronomy | | | | | | | | | | | |
| | ECTS 4 | Duratio | ı | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | | V + R (| no information or | SWS (weekly contact | hours) and course langua | ge available) | | | | | |
| | Method of as | ssessment | | a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 8 pages) | | | | | | | | |
| 11-SF-4D-072-m01 | Module Type | 4D Specia | Training Didactics | | | | | | | | | |
| | ECTS 4 | Duratio | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | | V + R (| no information or | SWS (weekly contact | hours) and course langua | ge available) | | | | | |
| | Method of as | ssessment | a) writ oral ex | ten examination (kamination in gro | approx. 90 minutes) c ups (approx. 30 minute | or b) talk (approx. 30 minutes) or d) project report (ap | tes) or c) oral examir prox. 8 pages) | aation of one candidate each or | | | | |
| 11-SF-4E-072-m01 | Module Type | 4E Special | Trainir | ng Experimental P | hysics | | | | | | | |
| | ECTS 4 | Duratio | 1 [| 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | | V + R (| no information or | SWS (weekly contact | hours) and course langua | ge available) | | | | | |
| | Method of as | ssessment | | a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 8 pages) | | | | | | | | |
| 11-SF-4l-072-m01 | Module Type | 4l Special | Trainin | g Interdisciplinar | y Research Fields | | ' | | | | | |
| | ECTS 4 | Duratio | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | | V + R (| no information or | SWS (weekly contact | hours) and course langua | ge available) | | | | | |
| | Method of as | ssessment | a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 8 pages) | | | | | | | | | |

| 11-SF-4T-072-m01 | Module Type | 4T Special | Traini | ing Theoretical Ph | ysics | | | | | | |
|------------------|---|------------|---|--|-------------------------|---|-------------|---------------------------------|--|--|--|
| | ECTS 4 | Duratio | n | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | · | V + R | (no information o | n SWS (weekly contact h | ours) and course language a | vailable) | | | | |
| | Method of as | sessment | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or | | | |
| 11-SF-5A-072-m01 | Module Type | 5A Specia | Train | ing Astronomy | | | , | | | | |
| | ECTS 5 Duratio | | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | | V + R | (no information o | n SWS (weekly contact h | ours) and course language a | vailable) | | | | |
| | Method of as | sessment | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or | | | |
| 11-SF-5D-072-m01 | Module Type | 5D Specia | Train | ing Didactics | | | | | | | |
| | ECTS 5 | Duratio | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | | V + R | (no information o | n SWS (weekly contact h | ours) and course language a | vailable) | | | | |
| | Method of as | sessment | a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 10 pages) | | | | | | | | |
| 11-SF-5E-072-m01 | Module Type | 5E Special | Traini | ing Experimental F | Physics | | | | | | |
| | ECTS 5 | Duratio | า | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | , | V + R | (no information o | n SWS (weekly contact h | ours) and course language a | vailable) | | | | |
| | Method of as | sessment | | a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each oral examination in groups (approx. 30 minutes) or d) project report (approx. 10 pages) | | | | | | | |
| 11-SF-5I-072-m01 | Module Type 5I Special Training Interdisciplinary Research Fields | | | | | | | | | | |
| | ECTS 5 | Duratio | า | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | · | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method of as | sessment | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or | | | |
| 11-SF-5T-072-m01 | Module Type | 5T Special | Traini | ing Theoretical Ph | ysics | | ' | | | | |
| | ECTS 5 | Duratio | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | | V + R | (no information o | n SWS (weekly contact h | ours) and course language a | vailable) | | | | |
| | Method of as | ssessment | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or | | | |
| 11-SF-6A-072-m01 | Module Type | 6A Specia | Train | ing Astronomy | | | , | | | | |
| | ECTS 6 | Duratio | n | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | • | V + R | (no information o | n SWS (weekly contact h | ours) and course language a | vailable) | | | | |
| | Method of as | sessment | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or | | | |

| 11-SF-6D-072-m01 | Module | e Type 6 | D Specia | Train | ing Didactics | | | | |
|------------------|----------------------|----------------------|-----------|---|--------------------|-------------------------|---|-------------|---------------------------------|
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Course | S | | V + R | (no information o | n SWS (weekly contact h | nours) and course language a | available) | |
| | Method | d of ass | essment | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or |
| 11-SF-6E-072-m01 | Module | e Type 6 | E Special | Traini | ng Experimental | Physics | | | |
| | ECTS 6 Duration | | l | 1 semester | Method of grading | numerical grade | Modul level | graduate | |
| | Course | | | | • | | nours) and course language a | | |
| | Method of assessment | | essment | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or |
| 11-SF-6I-072-m01 | Module | e Type 6 | I Special | Traini | ng Interdisciplina | ry Research Fields | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Course | S | | V + R | (no information o | n SWS (weekly contact h | nours) and course language a | available) | |
| | Method of assessment | | | a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 12 pages) | | | | | |
| 11-SF-6T-072-m01 | Module | e Type 6 | T Special | Traini | ng Theoretical Ph | nysics | | | |
| | ECTS | 6 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Course | S | _ | V + R | (no information o | n SWS (weekly contact h | nours) and course language a | available) | |
| | Method of assessment | | | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or |
| 11-SF-8A-072-m01 | Module | e Type 8 | A Specia | Train | ing Astronomy | , | | | |
| | ECTS | 8 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Course | S | | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | |
| | Method | d of ass | essment | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or |
| 11-SF-8D-072-m01 | Module | e Type 8 | D Specia | Train | ing Didactics | | | | |
| | ECTS | 8 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Course | S | | V + R | (no information o | n SWS (weekly contact h | nours) and course language a | available) | |
| | Method | d of ass | essment | | | | b) talk (approx. 30 minutes) s) or d) project report (approx | | nation of one candidate each or |
| 11-SF-8E-072-m01 | Module | e Type 8 | E Special | Train | ing Experimental | Physics | | | |
| | ECTS | 8 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Course | S | | V + R | (no information o | n SWS (weekly contact h | nours) and course language a | available) | |
| | Method | Method of assessment | | a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 16 pages) | | | | | nation of one candidate each or |

| 11-SF-8I-072-m01 | Module Type 81 Special | Training Interdisciplinary R | esearch Fields | | | | | | |
|------------------|--|---|--|-----------------|-----------------------------------|--|--|--|--|
| | ECTS 8 Duratio | 1 semester | Method of grading numerical grade | Modul level | graduate | | | | |
| | Courses | V + R (no information on SV | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | |
| | Method of assessment | a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or | | | | | | | |
| | | oral examination in groups (approx. 30 minutes) or d) project report (approx. 16 pages) | | | | | | | |
| 11-SF-8T-072-m01 | | Training Theoretical Physic | | | | | | | |
| | ECTS 8 Duratio | | Method of grading numerical grade | Modul level | graduate | | | | |
| | Courses | | NS (weekly contact hours) and course language av | | | | | | |
| | Method of assessment | | prox. 90 minutes) or b) talk (approx. 30 minutes) o (approx. 30 minutes) or d) project report (approx. | | nation of one candidate each or | | | | |
| 11-FPA-112-m01 | Visiting Research Proje | ct | | | | | | | |
| | ECTS 10 Duratio | 1 semester | Method of grading numerical grade | Modul level | graduate | | | | |
| | Courses | R (no information on SWS (| (weekly contact hours) and course language availa | ıble) | | | | | |
| | Method of assessment | oroject report (approx. 10 to 20 pages) anguage of assessment: German, English | | | | | | | |
| | other prerequisites | Approval by examination co | ommittee required. | | | | | | |
| | Additional Information | Additional information on r | module duration: 1 to 2 semesters. | | | | | | |
| 11-EXE5-111-m01 | Current Topics in Experimental Physics | | | | | | | | |
| | ECTS 5 Duratio | 1 semester | Method of grading numerical grade | Modul level | graduate | | | | |
| | Courses | V + R (no information on SV | NS (weekly contact hours) and course language av | ⁄ailable) | | | | | |
| | Method of assessment | specified) or b) oral examir modules with less than 4 E | prox. 120 minutes, for modules with less than 4 EC nation of one candidate each or oral examination i ECTS credits approx. 20 minutes) or c) project repor seminar presentation (approx. 30 minutes) German, English | n groups (appro | ox. 30 minutes per candidate, for | | | | |
| | other prerequisites | Approval by examination co | ommittee required. | | | | | | |
| 11-EXE6-111-mo1 | Current Topics in Exper | mental Physics | | ' | | | | | |
| | ECTS 6 Duratio | 1 semester | Method of grading numerical grade | Modul level | graduate | | | | |
| | Courses | V + R (no information on SV | NS (weekly contact hours) and course language av | ailable) | | | | | |
| | Method of assessment | specified) or b) oral examir modules with less than 4 E | prox. 120 minutes, for modules with less than 4 EC nation of one candidate each or oral examination i ECTS credits approx. 20 minutes) or c) project reposeminar presentation (approx. 30 minutes) German, English | n groups (appro | ox. 30 minutes per candidate, for | | | | |
| | other prerequisites | Approval by examination co | ommittee required. | | | | | | |

| 11-EXE7-111-mo1 | Current To | pics in Experi | menta | l Physics | | | | | | | |
|-----------------|-------------------|----------------|--|--|--|-------------------------------|------------------|---|--|--|--|
| | ECTS 7 | Duratio | า | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | | V + R | (no information on | SWS (weekly contact | hours) and course language a | vailable) | | | | |
| | Method of | assessment | speci modu week | a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English | | | | | | | |
| | other prere | quisites | Appro | Approval by examination committee required. | | | | | | | |
| 11-EXE8-111-mo1 | Current To | pics in Experi | menta | l Physics | | | | | | | |
| | ECTS 8 | Duratio | า | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | Y | V + R | (no information on | SWS (weekly contact | hours) and course language a | vailable) | | | | |
| | | | speci modu week Langi | written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise becified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for odules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 peeks) or d) presentation/seminar presentation (approx. 30 minutes) anguage of assessment: German, English | | | | | | | |
| | other prere | equisites | Appro | oval by examination | n committee required. | | | | | | |
| 11-EXT5-111-m01 | Current To | pics in Theor | etical Physics | | | | | | | | |
| | ECTS 5 | Duratio | , | 1 semester | Method of grading | | Modul level | graduate | | | |
| | Courses | | V + R | (no information on | SWS (weekly contact | hours) and course language a | vailable) | | | | |
| | Method of | assessment | speci modu week | fied) or b) oral exar lles with less than A | nination of one candi 4 ECTS credits approx n/seminar presentati | date each or oral examination | in groups (appro | ox. 90 minutes; unless otherwise ox. 30 minutes per candidate, for 10 pages, time to complete: 1 to 4 | | | |
| | other prere | quisites | Appro | oval by examination | n committee required. | | | | | | |
| 11-EXT6-111-mo1 | Current To | pics in Theor | etical I | Physics | | | | | | | |
| | ECTS 6 | Duratio | า | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Courses | | V + R | (no information on | SWS (weekly contact | hours) and course language a | vailable) | | | | |
| | | | a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless oth specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English | | | | | | | | |
| | other prere | equisites | Appro | oval by examination | n committee required. | | | | | | |

| 11-EXT7-111-mo1 | Current | Topics | in Theore | tical F | hysics | | | | | | | | |
|---------------------------|---|-----------|-----------|--|--|-----------------------|--------------------------------|-------------------|------------------------------------|--|--|--|--|
| | ECTS | 7 | Duration |) | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | 5 | | V + R | (no information on S | SWS (weekly contact | hours) and course language av | ailable) | | | | | |
| | Method | of asse | | |) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise | | | | | | | | |
| | | | | | specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 | | | | | | | | |
| | | | | weeks | s) or d) presentation | /seminar presentation | on (approx. 30 minutes) | ι (αρρίολ. ο το 1 | bo pages, time to complete. I to 4 | | | | |
| | | | | | Language of assessment: German, English | | | | | | | | |
| | other p | <u> </u> | | | | committee required. | | | | | | | |
| 11-EXT8-111-m01 | | | in Theore | tical F | Physics | | | | | | | | |
| | ECTS | 8 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | S | | V + R | / + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | l of asse | | a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English | | | | | | | | | |
| | other p | rerequis | sites | Approval by examination committee required. | | | | | | | | | |
| Compulsory Electiv | es Subs | idiary S | ubjects P | hysics | (10 ECTS credits) | | | | | | | | |
| 08-SAM-092-m01 | Techno | logy of | Sensor ar | nd Acto | or Materials includin | ng Smart Fluids | | | | | | | |
| | ECTS | 5 | Duration |) | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | S | | V + P | (no information on S | SWS (weekly contact | hours) and course language av | ailable) | | | | | |
| | Method of assessment written examination (90 minutes) | | | | | | | | | | | | |
| 08-EEW-101-m01 | Electro | chemica | al Energy | Storag | ge and Conversion | | | | | | | | |
| | ECTS | 5 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | |
| | Courses | S | | V + P | + E (no information o | on SWS (weekly cont | act hours) and course language | e available) | | | | | |
| | Method | of asse | essment | written examination (90 minutes) and lab report (approx. 5 pages) | | | | | | | | | |

| 10-M-NM1-082- | Numer | cal Ma | thematics | 1 | | | | | | | | |
|---------------|----------------------|----------------------|-----------|--|---|--|---|--|--|--|--|--|
| mo1 | ECTS | 8 | Duration | 1 | 1 semester | Method of grading numerical grade | Modul level | undergraduate | | | | |
| | Course | S | | V + Ü | (no information on | SWS (weekly contact hours) and course language av | ailable) | | | | | |
| | Method | d of ass | essment | exami | written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner | | | | | | | |
| | otherp | rerequi | sites | tive do on to the le sessm | etails at the beginn assessment. If stud cturer will put their | st be met to qualify for admission to assessment. Thing of the course. Registration for the course will be elents have obtained the qualification for admission to registration for assessment into effect. Students who in the subsequent semester. For assessment at a lassessment anew. | considered a de o assessment c o meet all prere | eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- | | | | |
| | Referre | d to in | LPO I | § 73 (| ı) 5. Mathematik Ar | ngewandte Mathematik | | | | | | |
| 10-M-NM2-082- | Numer | ical Ma | thematics | 2 | | | | | | | | |
| mo1 | ECTS | 5 | Duration | ı | 1 semester | Method of grading numerical grade | Modul level | undergraduate | | | | |
| | Course | S | | V + Ü | (no information on | SWS (weekly contact hours) and course language av | ailable) | | | | | |
| | Method | Method of assessment | | | written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner | | | | | | | |
| | other prerequisites | | | tive do on to the le sessm | etails at the beginn assessment. If stud cturer will put their | st be met to qualify for admission to assessment. Thing of the course. Registration for the course will be alents have obtained the qualification for admission to registration for assessment into effect. Students who in the subsequent semester. For assessment at a lassessment anew. | considered a de o assessment c o meet all prere | eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- | | | | |
| | Referre | d to in | LPO I | § 73 (| ı) 5. Mathematik Ar | ngewandte Mathematik | | | | | | |
| 10-M-PRG-082- | Progra | mming | course fo | stude | nts of Mathematics | s and other subjects | | | | | | |
| mo1 | ECTS | 3 | Duration | | 1 semester | Method of grading (not) successfully completed | | undergraduate | | | | |
| | Course | | | P (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method of assessment | | | | project in the form of programming exercises (as specified at the beginning of the course) Language of assessment: German, English if agreed upon with the examiner | | | | | | | |
| | other p | other prerequisites | | | Admission prerequisite to assessment: regular attendance (attendance monitored, a maximum of one incident of unexcused absence). | | | | | | | |
| | Referre | Referred to in LPO I | | | ı) 5. Mathematik Ar | ngewandte Mathematik | | | | | | |

| 10-M-COM-082- | Computeroriented A | athematics | | | | | | | | | |
|---------------|----------------------|--|--|--|--|--|--|--|--|--|--|
| mo1 | ECTS 3 Dur | tion 1 semester Method of grading (not) successfully completed Modul level undergraduate | | | | | | | | | |
| | Courses | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | |
| | Method of assessm | project in the form of programming exercises (as specified at the beginning of the course) Assessment offered: once a year, summer semester Language of assessment: German, English if agreed upon with the examiner | | | | | | | | | |
| | other prerequisites | Admission prerequisite to assessment: regular attendance of exercises (attendance monitored, a maximum of one incident of unexcused absence). | | | | | | | | | |
| | Referred to in LPO I | § 73 (1) 5. Mathematik Angewandte Mathematik | | | | | | | | | |
| 10-M-VAN-082- | Advanced Analysis | | | | | | | | | | |
| mo1 | ECTS 8 Dur | tion 1 semester Method of grading numerical grade Modul level undergraduate | | | | | | | | | |
| | Courses | Ü + V (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | |
| | Method of assessm | written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner | | | | | | | | | |
| | other prerequisites | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |
| | Referred to in LPO I | § 73 (1) 1. Mathematik Analysis | | | | | | | | | |

| 08-CP1-072-m01 | Genera | l Chem | istry for P | hysics | and Engineers | 1 | | | | | | |
|------------------|---------|--|-------------|--|---|--|--|--|---|---|--|--|
| | ECTS | 10 | Duratio | 1 | 1 semester | Method of grad | ing numerical grade | e | Modul level | undergraduate | | |
| | Course | S | | This module comprises 3 module components. Information on courses will be listed separately for each module component. • 08-IOC-1-072: V (no information on SWS (weekly contact hours) and course language available) • 08-CP1-1-072: V (no information on SWS (weekly contact hours) and course language available) • 08-CP1-3-072: P (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | d of ass | essment | Asses | sment in this mo | dule comprises the | assessments in the | individual mod | dule componen | ts as specified below. Unless fall individual assessments. | | |
| | | | | Asses | eering and nature 3 ECTS, Method written examina 5 ECTS, Method written examina 5 ECTS, Method written examina 2 ECTS, Method for each experimance (log, 2 to Assessment offonly after successions) | al science of grading: numeric ation (approx. 60 mi c component o8-CP: of grading: numeric ation (60 minutes) c component o8-CP: of grading: (not) su ment: Vortestate (pi o 5 pages), Nachtest ered: once a year, si essful completion of | tal grade nutes) 1-1-072: Basics of General and ccessfully completed re-experiment exams ate (post-experiment ummer semester | neral an Inorga Analytical Ched 5, approx. 10 m t exams, appro s: Successful c | emistry (lab) ninutes each), a ox. 10 minutes e | assessment of practical perforeach) | | |
| 10-I-EIN-072-m01 | | uction to Computer Science for Students of all Faculties | | | | | | | | | | |
| | ECTS | 10 | Duratio | | 1 semester | | ing numerical grade | | Modul level | undergraduate | | |
| | Course | S | | V + Ü | + Ü (no informati | on on SWS (weekly | contact hours) and c | ourse languag | e available) | | | |
| | Method | d of ass | essment | | | | s) or b) oral examina tes, groups of 3: 40 i | | ndidate each (a | ipprox. 20 minutes) or c) oral ex- | | |
| | other p | rerequi | sites | Admis | | e to assessment: ac | ademic requirements | s to be met in e | exercises as sp | ecified at the beginning of the | | |
| 11-EXNP6-112-m01 | Non-Pl | nysical | Minor Sub | ject | | | | | , | | | |
| | ECTS | 6 | Duratio | 1 | | | | | | | | |
| | Course | S | , | V + R (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | d of ass | essment | prox. on/se | 30 minutes per c minar presentati | | ect report (approx. 8 autes) | | | or oral examination in groups (aper oral examination in groups (aper or d) presentation | | |
| | other p | ther prerequisites Approval by examination committee required. | | | | | | | | | | |

| 10-I-DB-102-m01 | Databa | ses | | | | | | | | | | | |
|------------------|----------------------|-----------|-----------|--|---|---------------------|--------------------------------|-----------------|--------------------------------|--|--|--|--|
| | ECTS | 5 | Duration | n | 1 semester | Method of grading | numerical grade | Modul level | undergraduate | | | | |
| | Course | S | | V + Ü | (no information on S | SWS (weekly contact | hours) and course language ava | ailable) | | | | | |
| | Method | d of asso | essment | if ann exam tes, g | written examination (approx. 50 to 60 minutes) if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner | | | | | | | | |
| | other p | rerequi | sites | Admis cours | | assessment: exercis | es (type and scope to be annou | unced by the le | cturer at the beginning of the | | | | |
| | Referre | d to in L | | | 49 (1) 1. b) Datenbanksysteme und Softwaretechnologie 69 (1) 1. b) Datenbanksysteme und Softwaretechnologie | | | | | | | | |
| 10-I-00P-102-m01 | Object- | -oriente | d Prograr | nming | ming | | | | | | | | |
| | ECTS | 5 | Duratio | 1 | 1 semester | Method of grading | numerical grade | Modul level | undergraduate | | | | |
| | Course | S | | V + Ü | (no information on S | SWS (weekly contact | hours) and course language ava | ailable) | | | | | |
| | Method of assessment | | | writte didate | written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner | | | | | | | | |
| | other prerequisites | | | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course). | | | | | | | | | |
| 10-I-AR-102-m01 | Automa | ation an | d Control | Techn | ology | | | | | | | | |
| | ECTS | 8 | Duratio | 1 | 1 semester | Method of grading | numerical grade | Modul level | undergraduate | | | | |
| | Course | S | | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | |
| | Method | d of asso | essment | writte 90 mi (appr | written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner | | | | | | | | |
| | other prerequisites | | | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course). | | | | | | | | | |

| 10-I-BS-102-m01 | Operati | ing Sys | tems | | | | | | | | | |
|------------------|-----------|-----------|--|--|--|---|---------------------------------|---|---|--|--|--|
| | ECTS | 5 | Duration | n . | 1 semester | Method of grading | numerical grade | Modul level | undergraduate | | | |
| | Course | S | | V + Ü | (no information on S | SWS (weekly contact | hours) and course language | available) | | | | |
| | Method | d of ass | essment | writte didate | vritten examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the vritten examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one canlidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) anguage of assessment: German, English if agreed upon with the examiner | | | | | | | |
| | other p | | | cours | dmission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the ourse). | | | | | | | |
| | Referre | d to in l | -PO I | § 69 (| 1) 1. c) Informatik Te | echnische Informatik | | | | | | |
| 10-I-RAK-102-m01 | Compu | ter Arch | itecture | | | | | | | | | |
| | ECTS | 5 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | undergraduate | | | |
| | Course | S | | V + Ü | (no information on S | SWS (weekly contact | hours) and course language | available) | | | | |
| | Method | d of ass | essment | writte didate | tten examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the tten examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one canate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) arguage of assessment: German, English if agreed upon with the examiner | | | | | | | |
| | other p | | | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course). | | | | | | | | |
| | Referre | d to in l | o in LPO I § 69 (1) 1. c) Informatik Technische Informatik | | | | | | | | | |
| 10-I=PVS-102-m01 | Prograi | mming | of Distrib | uted Sy | ystems | | | | | | | |
| | ECTS | 8 | Duration | | 1 semester | Method of grading | | Modul level | graduate | | | |
| | Course | s | | V + Ü | (no information on S | SWS (weekly contact | hours) and course language | available) | | | | |
| | Method | d of ass | essment | writte 90 mi (appr | n examination can be nute written examinox.) oral examinatio | pe replaced by an ora nation is equivalent t n in groups of 2 and | al examination of one candida | ite éach or an ora xamination of on amination in grou | orior to the examination date, the l examination in groups. A 80 to e candidate each, a 30 minute ups of 3. | | | |
| | other p | | | Where | e applicable, prereq | uisites as specified l | by the lecturer at the beginnin | g of the course (e | e. g. completion of exercises). | | | |
| 10-l=Kl-102-m01 | Artificia | al Intell | igence | | | | | | | | | |
| | ECTS | 8 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | V + Ü | (no information on S | SWS (weekly contact | hours) and course language | available) | | | | |
| | Method | d of ass | essment | writte didate | n examination can be each: 15 minutes, | oe replaced by an ora groups of 2: 20 minu | | ite éach or an ora | prior to the examination date, the I examination in groups (one can- | | | |
| | other p | rerequi | sites | Where | e applicable, prereq | uisites as specified l | by the lecturer at the beginnin | g of the course (e | e. g. completion of exercises). | | | |

| 10-I=DB2-102-m01 | Databa | Databases II | | | | | | | | | | | | |
|------------------|------------------|--------------|----------|--|---|--|---|--|--|--|--|--|--|--|
| | ECTS | 5 | Duration | ı | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | | |
| | Course | S | | V + Ü | (no information on S | SWS (weekly contact | hours) and course language av | ailable) | | | | | | |
| | Method | d of asso | essment | writte didate | itten examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the itten examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) nguage of assessment: German, English if agreed upon with the examiner | | | | | | | | | |
| | other p | rerequi | sites | Where | e applicable, prereq | uisites as specified b | by the lecturer at the beginning | of the course (e | .g. completion of exercises). | | | | | |
| 10-I=PA-102-m01 | Progra | m Desig | n and An | alysis | | | | | | | | | | |
| | ECTS 5 Duration | | | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | | |
| | Course | S | | V + Ü | (no information on S | SWS (weekly contact | hours) and course language av | ailable) | | | | | | |
| | Method | d of asso | essment | written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner | | | | | | | | | | |
| | other p | rerequi | sites | Where | applicable, prereq | uisites as specified b | by the lecturer at the beginning | of the course (e | .g. completion of exercises). | | | | | |
| 10-M=AAAN-102- | Applied Analysis | | | | | | | | | | | | | |
| mo1 | ECTS | 10 | Duration | ı | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | | |
| | Course | S | | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | | |
| | Method | d of asse | essment | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | | | | |
| | other p | rerequi | sites | corda (e. g. s tails a asses turer v in the | nce with the specifications accessful completing the beginning of the sment. If students hall put their registra | ed registration deadle on of a certain perce ne course. Registrationate obtained the qualition for assessment beequent semester. I | ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi alification for admission to asso into effect. Students who meet | t be met to qua r will inform stu dered a declara essment over th all prerequisite | s announced by the lecturer in aclify for admission to assessment dents about the respective detion of will to seek admission to be course of the semester, the lects will be admitted to assessment are to obtain the qualification for | | | | | |

| 10-M=ADG- | Differe | ntial Ge | ometry | | | | | , | | | | |
|-----------|---------|-----------|----------|--|--|---|---|--|--|--|--|--|
| M-102-m01 | ECTS | 10 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | V + Ü | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | d of asse | essment | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | | |
| | other p | rerequis | sites | corda (e. g. : tails a asses turer v in the | nce with the specifice successful completion it the beginning of the sment. If students how their registra | ed registration deadle on of a certain perce se course. Registration ave obtained the quation for assessment osequent semester. I | ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi alification for admission to asso into effect. Students who meet | t be met to qua r will inform stu dered a declara essment over th all prerequisite | s announced by the lecturer in ac- lify for admission to assessment idents about the respective de- ition of will to seek admission to be course of the semester, the lec- es will be admitted to assessment ave to obtain the qualification for | | | |
| 10-M=AFT- | Comple | ex Analy | sis | | | | | | | | | |
| H-102-m01 | ECTS | 10 | Duration | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | V + Ü | (no information on S | WS (weekly contact | hours) and course language av | ailable) | | | | |
| | Method | d of asse | essment | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | | |
| | other p | rerequis | sites | Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 10-M=ALTH-102- | Lie The | ory | | | | | | | | | |
|----------------|---------|-----------|----------|--|--|---------------------|-------------------------------|-------------|----------|--|--|
| mo1 | ECTS | 10 | Duration | ı | 1 semester | Method of grading | numerical grade | Modul level | graduate | | |
| | Course | S | | V + Ü | (no information on S | SWS (weekly contact | hours) and course language av | vailable) | | | |
| | Method | d of asse | essment | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | |
| | | rerequis | sites | corda (e. g. : tails a asses turer v in the | Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | |
| 10-M=A- | Topolo | gy | , | | | | | - | | | |
| TOP-102-m01 | ECTS | 10 | Duration | | 1 semester | Method of grading | _ | Modul level | graduate | | |
| | Course | | | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | d of asse | essment | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | |
| | other p | rerequis | sites | Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | |

| 10-M=AZTH-102- | Numbe | r Theor | y | | | | | " | | | |
|----------------|----------------------------------|----------|----------|--|---|--|--|---|--|--|--|
| mo1 | ECTS | 10 | Duration | ı | 1 semester | Method of grading | numerical grade | Modul level | graduate | | |
| | Course | S | | V + Ü | (no information or | SWS (weekly contact | hours) and course language av | ⁄ailable) | | | |
| | Method | d of ass | essment | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | |
| | other p | rerequi | sites | corda (e. g. tails a asses turer v in the | nnce with the speci successful comple at the beginning of ssment. If students will put their regist | fied registration deadlation of a certain perce the course. Registration have obtained the quaration for assessment ubsequent semester. | ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi alification for admission to ass into effect. Students who meet | st be met to qua er will inform stu idered a declara essment over th t all prerequisite | s announced by the lecturer in aclify for admission to assessment idents about the respective detion of will to seek admission to be course of the semester, the lects will be admitted to assessment ave to obtain the qualification for | | |
| 10-M=VGDS-102- | Groups and their Representations | | | | | | | | | | |
| mo1 | ECTS 10 Duration | | | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | |
| | Course | s | | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method of assessment | | | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, conse offered on demand or every four semesters. Language of assessment: German, English | | | | | | | |
| | other p | rerequi | sites | corda (e. g. tails a asses turer v in the | nnce with the speci successful comple at the beginning of ssment. If students will put their regist | fied registration deadl tion of a certain perce the course. Registration have obtained the qual ration for assessment ubsequent semester. | ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi alification for admission to ass into effect. Students who meet | st be met to qua er will inform stu idered a declara essment over th t all prerequisite | s announced by the lecturer in ac- lify for admission to assessment idents about the respective de- ition of will to seek admission to ne course of the semester, the lec- es will be admitted to assessment ave to obtain the qualification for | | |

| 10-M=V- | Geome | trical M | echanics | | | | | , | | | | |
|-------------|---------|-----------|-------------|--|---|---|---|--|--|--|--|--|
| GEM-102-m01 | ECTS | 10 | Duration | n . | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | |
| | Course | S | | V + Ü | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | |
| | Method | d of asse | essment | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | | |
| | · | rerequis | | corda (e. g. tails a asses turer v in the admis | nce with the specifice successful completion in the beginning of the sment. If students he will put their registration current or in the substitution to assessment | d registration deadle on of a certain perce e course. Registration ave obtained the quation for assessment osequent semester. I | ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi alification for admission to asso into effect. Students who meet | t be met to qua r will inform stu dered a declara essment over th all prerequisite | s announced by the lecturer in ac- lify for admission to assessment idents about the respective de- ition of will to seek admission to be course of the semester, the lec- es will be admitted to assessment ave to obtain the qualification for | | | |
| 10-M=VN- | Numeri | ic of Par | tial Differ | ential | Equations | | | | | | | |
| PE-102-m01 | ECTS | 10 | Duration | | 1 semester | Method of grading | | Modul level | graduate | | | |
| | Course | S | | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | |
| | Method | d of asse | essment | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | | |
| | other p | rerequis | sites | Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | |

| 10-M=V- | Discrete Mathematic | | | | | | | | | | | | |
|-----------------------|---|----------|----------|--|-------------------|-------------------|-------------|-------------|----------|--|--|--|--|
| DIM-102-m01 | ECTS 5 Duration | | 1 | 1 semester | Method of grading | numerical grade | Modul level | graduate | | | | | |
| | Courses | | | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | |
| | Method of assessment | | | | | | | | | | | | |
| | other prerequisites | | | Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |
| 10-M=VMPH-102- mo1 | Selected Topics in Mathematical Physics | | | | | | | | | | | | |
| | ECTS | 5 | Duration | | 1 semester | Method of grading | | Modul level | graduate | | | | |
| | Courses | | | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | |
| | Method of assessment | | | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, approx. 20 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | | | |
| | other p | rerequis | sites | Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | |

| 10-M=VQK- | Quantum Control and Quantum Computing | | | | | | | | | | | | |
|--------------------|--|---------------|--|------------------------------|-----------------|-------------|----------|--|--|--|--|--|--|
| C-102-m01 | ECTS 5 | Duratio | n 1 semeste | er Method of grading | numerical grade | Modul level | graduate | | | | | | |
| | Courses | · | V + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | | |
| | Method o | f assessment | At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, approx. 20 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English | | | | | | | | | | |
| | other prei | requisites | Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. | | | | | | | | | | |
| 08-PCM4-PHY-111- | Ultrafast Spectroscopy and Quantum Control | | | | | | | | | | | | |
| mo1 | ECTS 5 Duratio | | n 1 semeste | er Method of grading | numerical grade | Modul level | graduate | | | | | | |
| | Courses | | S + Ü (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | | |
| | Method o | fassessment | written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English | | | | | | | | | | |
| 08-MW-PHY-111- | Structure | and Propertie | s of Modern Mate | rials: Experiments and Simul | ations | | | | | | | | |
| m01 | ECTS 5 Duration | | n 1 semeste | er Method of grading | numerical grade | Modul level | graduate | | | | | | |
| | Courses | | V + S (no information on SWS (weekly contact hours) and course language available) | | | | | | | | | | |
| | Method o | f assessment | talk (approx. 45 minutes) | | | | | | | | | | |
| Thesis (30 ECTS cr | edits) | | | | | | | | | | | | |
| 11-MA-P-072-m01 | Master Th | nesis Physics | | | | | | | | | | | |
| | ECTS 30 Duratio | | n 1 semeste | er Method of grading | numerical grade | Modul level | graduate | | | | | | |
| | Courses | | no courses assigned | | | | | | | | | | |
| | Method o | fassessment | written thesis (approx. 75 pages) | | | | | | | | | | |
| | other prei | | Registration for assessment to be carried out electronically. Deadlines will be announced separately. Please consult with your supervisor. | | | | | | | | | | |