

Module Catalogue

Quantum Technology

Examination regulations version: 2021 Responsible: Faculty of Physics and Astronomy

JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record MM|k29|-|-|H|2021



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The subject is divided into

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Abbreviations used

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Course types: \mathbf{E} = field trip, \mathbf{K} = colloquium, \mathbf{O} = conversatorium, \mathbf{P} = placement/lab course, \mathbf{R} = project, \mathbf{S} = seminar, \mathbf{T} = tutorial, $\ddot{\mathbf{U}}$ = exercise, \mathbf{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

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

Notes

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

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

In accordance with

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

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

15-May-2019 (2019-36) 27-Jun-2019 (2019-41) 14-Nov-2019 (2019-52) 22-Jan-2020 (2020-13) 06-May-2020 (2020-39) 22-Jul-2020 (2020-57) 17-Dec-2020 (2020-110) 10-Mar-2021 (2021-17)

Quantum Technology (2021)

09-Jun-2021 (2021-58) 22-Dec-2021 (2021-85) 05-Jul-2022 (2022-52) 31-Jan-2023 (2022-86) 15-Jun-2023 (2023-58) 13-Dec-2023 (2023-107) 07-Aug-2024 (2024-82) 22-Jan-2025 (2025-1)

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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.



Winter Term 2021

(ECTS credits)

| Module title | | | Abbreviation | |
|---|--|---|--|--|
| Current Topics in Physik | | | | 11-EXP6-161-m01 |
| Module | coordinator | | Module offered by | |
| chairpe | rson of examination committee | - | Faculty of Physics a | nd Astronomy |
| ECTS | Method of grading | Only after succ. com | pl. of module(s) | |
| 6 | numerical grade | | | |
| Duratio | n Module level | Other prerequisites | | |
| 1 semes | ster graduate | Approval from exam | ination committee re | equired. |
| Conten | ts | | | |
| | topics in experimental or theor ity or study abroad. | etical physics. Credit | ed academic achieve | ements, e.g. in case of change of |
| Intende | ed learning outcomes | | | |
| Theoret subdisc | dents have advanced competer cical Physics of the Master's pro cipline of Physics and understar dge. They are able to classify th | gramme of Nanostruc nd the measuring and | ture Technology. The location mether the second s | ey have knowledge of a current nods necessary to acquire this |
| Courses | S (type, number of weekly contact hours, l | anguage — if other than Ger | man) | |
| V (3) + F | R (1) | | | |
| | l of assessment (type, scope, langua creditable for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether |
| a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | |
| Allocati | ion of places | | | |
| | | | | |
| Additional information | | | | |
| | | | | |
| Workload | | | | |
| 180 h | | | | |
| Teaching cycle | | | | |
| | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | |
| | | | | |
| | | | | |

| Module title | | | | Abbreviation | |
|---|---------------------|--|---|---|--|
| Current Topics in Physik | | | | 11-EXP6A-161-m01 | |
| Module | coord | inator | | Module offered by | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | |
| 6 | nume | rical grade | | | |
| Duratio | n | Module level | Other prerequisites | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. |
| Content | ts | | | | |
| | | in Experimental or Theor tudy abroad. | etical Physics. Credit | ed academic achiev | ements, e.g. in case of change of |
| Intende | ed learı | ning outcomes | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | |
| V (3) + F | R (1) | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether |
| a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | |
| Allocati | ion of p | olaces | | | |
| | | | | | |
| Additional information | | | | | |
| | | | | | |
| Workload | | | | | |
| 180 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | |
| | | | | | |

| Module title | | | | Abbreviation | |
|---|---|--|--|---|---|
| Current Topics in Physik | | | | 11-EXP5-161-m01 | |
| Module | coord | inator | | Module offered by | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy |
| ECTS | Metho | od of grading | Only after succ. com | npl. of module(s) | |
| 5 | nume | rical grade | | | |
| Duratio | n | Module level | Other prerequisites | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. |
| Conten | ts | | | | |
| | | in Experimental or Theor tudy abroad. | retical Physics. Credit | ed academic achiev | ements, e.g. in case of change of |
| Intende | ed learı | ning outcomes | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. |
| Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | |
| V (2) + | R (2) | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether |
| or oral o pages) If a writ stead ta of asse nation o | examin or pres ten exa ake the ssmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examination | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be char e each or an oral exar | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- |
| Allocat | ion of p | olaces | | | |
| | | | | | |
| Additional information | | | | | |
| | | | | | |
| Workload | | | | | |
| 150 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | |
| | | | | | |

| Module title | | | | | Abbreviation | |
|---|---|--|---|---|--|--|
| Current | Current Topics in Physik | | | | 11-EXP7-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 7 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Intende | ed leari | ning outcomes | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + | R (1) | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral (pages) If a writ stead ta of asse nation | written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 210 h | | | | | | |
| Teachir | Teaching cycle | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Current Topics in Physik 11-EXP8-161-m01 Module creations in the provided in the physics and Astronomy Faculty of Physics and Astronomy ECTS Method is grading Only after succ. compl. of module(s) ECTS Method is grading Only after succ. compl. of module(s) S numerical grade - Duration Module level Other prerequisites Is emester graduate Approval from examination committee required. Contents S Set in the students and the oretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended Examination completencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the speciation areas. Courses (type, number of weekly contact hours, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination of an oral examination of an oral examination in groups (groups of 2, approx. 30 minutes) or oral examination in groups. If a writter examination was chosen as method of assessment, this may be changed and ingroups. A so injunetes is prior to the original examination area set is changed, the lecture must inform students about this by four examination in groups. If the method of assessment is change | Module title | | | | | Abbreviation |
|---|---|--|--|--|--|---|
| chairperson of examination committee Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of ne candidate each (approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes) or alexamination in groups. (If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination of a acet at the latest. Language of assessment: is changed, the lecturer must inform students about this by four weeks prior to the original examination o | Current Topics in Physik | | | | | 11-EXP8-161-m01 |
| ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade | Module | e coord | inator | | Module offered by | |
| 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intende learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German, examination of fored – if not every senester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) or project report (approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups. If the method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by | chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy |
| Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Contents Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination of prose treport (approx. 30 minutes). If a written examination mays chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Additional infor | ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | |
| 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination on and examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places - Additional information 2 | 8 | nume | rical grade | | | |
| Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes). If a written examination is changed, the lecturer must inform students about this by four weeks prior to the original examination do assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment: German and/or English Allocation of places | Duratio | n | Module level | Other prerequisites | | |
| Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | 1 seme | ster | graduate | Approval from exam | ination committee re | equired. |
| change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 9 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Conten | ts | | | | |
| The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | | | | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of |
| Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | Intende | ed lear | ning outcomes | | | |
| V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Theoret subdise | tical Ph cipline | ysics of the Master's pro of Physics and understar | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | ey have knowledge of a current nods necessary to acquire this |
| Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Workload 240 h Teaching cycle | Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | |
| module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | V (4) + | R (2) | | | | |
| or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Additional information Workload 240 h Teaching cycle | | | | ge — if other than German, e | examination offered — if no | t every semester, information on whether |
| Additional information Workload 240 h Teaching cycle | or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina t is changed, the lecturer t the latest. | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be char e each or an oral exa | r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method |
| Workload 240 h Teaching cycle | Allocat | ion of p | olaces | | | |
| Workload 240 h Teaching cycle | | | | | | |
| 240 h Teaching cycle | Additional information | | | | | |
| 240 h Teaching cycle | | | | | | |
| Teaching cycle | Workload | | | | | |
| - | 240 h | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | Teaching cycle | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | Abbreviation |
|---|---|--|--|---|---|
| Curren | t Topic | s in Quantum Technology | y | | 11-EXN5-212-m01 |
| Modul | e coord | inator | | Module offered by | , |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy |
| ECTS | Metho | od of grading | Only after succ. com | npl. of module(s) | |
| 5 | nume | rical grade | | | |
| Duratio | on | Module level | Other prerequisites | | |
| 1 seme | ster | graduate | Approval from exam | ination committee | required. |
| Conter | Its | | | | |
| | | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of |
| Intend | ed lear | ning outcomes | | | |
| physic: rent fie | s on Ma Id in pl | ster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods w | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this but fields of application. |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | rman) | |
| V (2) + Module | • • | t in: German or English | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if r | ot every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | ation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- |
| Allocat | ion of _l | olaces | | | |
| | | | | | |
| Additional information | | | | | |
| | | | | | |
| Workload | | | | | |
| 150 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | |

| Module | Module title Abbreviation | | | | | | |
|--|---|--|--|---|--|--|--|
| Current | Current Topics in Quantum Technology | | | | 11-EXN6-212-m01 | | |
| Module | e coord | inator | | Module offered by | <u> </u> | | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | 1 | od of grading | Only after succ. com | | , | | |
| 6 | nume | rical grade | | - | | | |
| Duratio | on | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | |
| Conten | ts | | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intende | ed lear | ning outcomes | | | | | |
| physics rent fie | s on Ma Id in pł | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | | |
| Course | S (type, r | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + Module | | t in: German or English | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocat | ion of p | olaces | | | | | |
| | | | | | | | |
| Additional information | | | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 180 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | | |

| Module title Abbreviation | | | | | Abbreviation |
|---|---|---|--|---|---|
| Curren | t Topic | s in Quantum Technology | y | | 11-EXN7-212-m01 |
| Modul | e coord | inator | | Module offered by | , |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | |
| 7 | nume | rical grade | | | |
| Duratio | on | Module level | Other prerequisites | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. |
| Conter | nts | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of |
| Intend | ed lear | ning outcomes | | | |
| physic: rent fie | s on Ma eld in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods wl | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this but fields of application. |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | rman) | |
| V (3) + Module | | t in: German or English | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) (ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- |
| Allocat | tion of _l | olaces | | | |
| | | | | | |
| Additional information | | | | | |
| | | | | | |
| Workload | | | | | |
| 210 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | |

| Module | Module title Abbreviation | | | | | |
|---|---|--|--|---|--|--|
| Current Topics in Quantum Technology | | | | | 11-EXN8-212-m01 | |
| Module | e coord | inator | | Module offered by | <u> </u> | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | |
| ECTS | r – | od of grading | Only after succ. con | | , | |
| 8 | | rical grade | | • | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conten | ts | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed leari | ning outcomes | | | | |
| physics rent fie | s on Ma Id in pł | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (4) + Module | | t in: German or English | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocation of places | | | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 240 h | | | | | | |
| Teachi | Teaching cycle | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | | | | |
|---|---|--|--|---|---|--|--|--|
| Curren | t Topic | s in Quantum Technolog | SY | | 11-EXN6A-212-m01 | | | |
| Module | e coord | inator | | Module offered b | y | | | |
| chairpe | erson o | f examination committe | e | Faculty of Physics | and Astronomy | | | |
| ECTS | Meth | od of grading | Only after succ. con | pl. of module(s) | | | | |
| 6 | nume | rical grade | | | | | | |
| Duratio | on | Module level | Other prerequisites | | | | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. | | | |
| Conten | nts | | | | | | | |
| | • | in experimental or theo tudy abroad. | retical physics. Credit | ed academic achie | evements, e.g. in case of change of | | | |
| Intend | ed lear | ning outcomes | | | | | | |
| physic: rent fie knowle | s on Ma eld in pl edge. H | aster's level in the study nysics and insight into th e/She is able to classify | programme Quantum ne measuring and calo and to link the learnt. | Technology. He/S ulating methods w He/She knows ab | odule in theoretical or experimental he commands knowledge in a cur- which are necessary to acquire this out fields of application. | | | |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | | | | |
| V (3) + Module | | t in: German or English | | | | | | |
| | | Sessment (type, scope, langu le for bonus) | age — if other than German, o | examination offered — if | not every semester, information on whether | | | |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. g amination was chosen a e form of an oral examina | of 2, approx. 30 minu 30 minutes). 5 method of assessme ation of one candidate r must inform student | tes per candidate) ent, this may be ch e each or an oral ex | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- camination in groups. If the method ir weeks prior to the original exami- | | | |
| Allocat | tion of _l | olaces | | | | | | |
| | | | | | | | | |
| Additional information | | | | | | | | |
| | | | | | | | | |
| Workload | | | | | | | | |
| 180 h | | | | | | | | |
| Teachi | Teaching cycle | | | | | | | |
| | | | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | | |
| Referre | ed to in | LPO I (examination regulation | ns for teaching-degree progra | mmes) | | | | |

| Advanced Topics in Solid State Physics 11-CSFM-161-m01 Module coordinator Module offered by Managing Director of the Institute of Theoretical Physics Faculty of Physics and Astronomy and Astrophysics Faculty of Physics and Astronomy CTS Method of grading Only after succ. compl. of module(s) 6 numerical grade - Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not to subjec not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whether module is cellable for bonus) a) written examination (approx. 90 to 120 minutes) or o) c) and examination of one candidate each (approx. 30 minutes) or c) or al examination of one candidate each (approx. 30 minutes) or o) cord examination in groups. If the meth of assessment is changed, the lecturer wist inform student sabout this by four weeks prior to the original exarination of assessment is changed, the lecturer must infor | Module | Module title Abbreviation | | | | | | | |
|---|---|--|--|---|---|--|--|--|--|
| Managing Director of the Institute of Theoretical Physics Faculty of Physics and Astronomy eCTS Method of grading Only after succ. compt. of module(s) 6 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) or al examination in groups (groups of 2, approx. 30 minutes) or c) or al examination in groups (groups of 2, approx. 30 minutes) or e) presentation/talk (approx. 30 minutes) b) oral examination in groups (groups of 2, approx. 30 minutes before an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exa | Advanced Topics in Solid State Physics | | | | | 11-CSFM-161-m01 | | | |
| Managing Director of the Institute of Theoretical Physics and Astrophysics Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 6 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German) V (3) + R (1) Method of assessment (spep x. 90 to 120 minutes) or b) or al examination (approx. 90 to 120 minutes) or c) or al examination in groups (groups of 2, approx, 30 minutes) or c) or al examination in groups (groups of 2, approx, 30 minutes) or c) or al examination in groups (groups of 2, approx, 30 minutes) or e) presentation/talk (approx, 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral exami | Module | coord | inator | | Module offered by | | | | |
| 6 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination of one candidate each (approx. 30 minutes) or o) oral examination in groups (groups of 2, approx. 30 minutes) or b) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by | | | | eoretical Physics | - | and Astronomy | | | |
| Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) and examination in groups (groups of 2, approx. 30 minutes) er eandidate) or d) project report (approx. 30 to 120 aniset) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the methor of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examation date at the latest. Language of assessment: | ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | | | |
| 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or b) oral examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an eatemination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examation date at the latest. Language of assessment: German and/or English Allocation of places - - Mothod Horo | 6 | nume | rical grade | | | | | | |
| Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination in groups (groups of 2, approx. 30 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) project report (approx. 30 minutes) if a written examination may chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Workload | Duratio | n | Module level | Other prerequisites | | | | | |
| This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not or vered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination in groups (groups of 2, approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or c) oral examination may a to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination mas chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload Morkload Morkload | 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | | | |
| vered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or c) oral examination of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exam- nation date at the latest. Language of assessment: German and/or English Allocation of places | Conten | ts | | | | | | | |
| The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 9 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | vered in | n any o | f the other modules. The | | | | | | |
| and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or e) presentation/talk (approx. 30 to 120 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 180 h Teaching cycle | Intende | ed learr | ning outcomes | | | | | | |
| V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exar nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload Workload | | | | | | of Condensed Matter Physics | | | |
| Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 180 h Teaching cycle | Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | | | | |
| module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload Faching cycle | V (3) + I | R (1) | | | | | | | |
| b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Additional information Workload 180 h Teaching cycle | | | | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | | | |
| Additional information Workload 180 h Teaching cycle | b) oral of c) oral of d) proje e) prese If a writ stead ta of asse nation of Langua | examin examin ect repo entatio ten exa ake the ssmen date at ge of a | ation of one candidate e ation in groups (groups of ort (approx. 8 to 10 pages n/talk (approx. 30 minut amination was chosen as form of an oral examina t is changed, the lecturer the latest. ssessment: German and | ach (approx. 30 minu of 2, approx. 30 minu of or es) method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | nged and assessment may in- mination in groups. If the method | | | |
| Workload 180 h Teaching cycle | Allocat | ion of p | olaces | | | | | | |
| Workload 180 h Teaching cycle | | | | | | | | | |
| 180 h Teaching cycle | Additional information | | | | | | | | |
| 180 h Teaching cycle | | | | | | | | | |
| Teaching cycle | Workload | | | | | | | | |
| | 180 h | | | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | Teachir | ng cycl | e | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | | | |
| | Referre | d to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | | | |
| | | | | | | | | | |

| Module | Module title Abbreviation | | | | | | |
|--|---|--|--|---|---|--|--|
| Advanc | ed Top | ics in Physics | | | 11-CSPM-161-m01 | | |
| Module | e coord | inator | | Module offered by | | | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | 1 | od of grading | Only after succ. con | | | | |
| 6 | | rical grade | | | | | |
| Duratio | | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | | equired. | | |
| Conten | ts | | | | • | | |
| module lar curr | es. The iculum | se topics may relate eithe | | | s not covered in any of the other subjects not included in the regu- | | |
| Intende | ed lear | ning outcomes | | | | | |
| | | advance their knowledge ts into the connections b | | | of nanostructure technology and | | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | rman) | | | |
| V (3) + | R (1) | | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the essmen date at | ation in groups (groups of centation/talk (approx. 3) amination was chosen as a form of an oral examina | of 2, approx. 30 minu o minutes). o method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocat | | | | | | | |
| | | | | | | | |
| Additio | onal inf | ormation | | | | | |
| | | | | | | | |
| Worklo | Workload | | | | | | |
| 180 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |
| | | | | | | | |

| Module title Abbreviation | | | | | |
|---|---|---|--|--|---|
| Advanced Topics in Quantum Technology | | | | | 11-CSNM-212-m01 |
| Modul | e coord | linator | | Module offered by | 1 |
| Manag and As | | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics | and Astronomy |
| ECTS | Meth | od of grading | Only after succ. cor | npl. of module(s) | |
| 6 | nume | erical grade | | | |
| Duratio | on | Module level | Other prerequisites | ; | |
| 1 seme | ster | graduate | Approval from exam | nination committee | required. |
| Conter | ts | | | | |
| that ca | n not b | | odule. These lecture | s may either reflect | ive lectures on advanced topics new developments in research or |
| | - | ning outcomes | | | |
| | | deepen their knowledge nts into the interface betw | | • | in quantum technology, thereby |
| Course | S (type, | number of weekly contact hours, | language — if other than Ge | rman) | |
| V (3) + Module | | nt in: German or English | | | |
| | | sessment (type, scope, langua ble for bonus) | age — if other than German, | examination offered — if r | not every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examin or pres tten ex ake the essmen date a | nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessm tion of one candidate r must inform studen | ites per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- |
| Allocat | ion of | places | | | |
| | | | | | |
| Additio | onal inf | formation | | | |
| | | | | | |
| Worklo | ad | | | | |
| 180 h | | | | | |
| Teachi | ng cycl | le | | | |
| | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | ammes) | |
| | | | | | |



Summer Term 2022

(ECTS credits)

| Module title Abbreviation | | | | | | |
|---|---|--|--|--|--|--|
| Current Topics in Physik | | | | | 11-EXP6-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achieve | ements, e.g. in case of change of | |
| Intende | ed leari | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + F | R (1) | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examin ect repo entatio ten exa ake the ssmen date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minu) or es) method of assessme tion of one candidate must inform student | tes per candidate) of ent, this may be char e each or an oral exam | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additio | Additional information | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachin | ng cycl | e | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | for teaching-degree progra | mmes) | | |
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| Module title Abbreviation | | | | | | |
|---|---|--|--|--|--|--|
| Current Topics in Physik | | | | | 11-EXP6A-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Content | ts | | | | | |
| | | in Experimental or Theor tudy abroad. | etical Physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed learı | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + F | R (1) | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examin ect repo entatio ten exa ake the ssmen date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minu) or es) method of assessme tion of one candidate must inform student | tes per candidate) of ent, this may be char e each or an oral exam | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additio | Additional information | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachin | ng cycl | e | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |
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| Module | Module title Abbreviation | | | | | |
|--|--|--|--|--|---|--|
| Current | t Topics | s in Physik | | 11-EXP5-161-m01 | | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 5 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | in Experimental or Theor tudy abroad. | retical Physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed learı | ning outcomes | | | | |
| Theore subdis | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (2) + | R (2) | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examination | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chan e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 150 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |

| Module | Module title Abbreviation | | | | | |
|---|---|--|--|--|---|--|
| Current | Topics | s in Physik | | | 11-EXP7-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 7 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Intende | ed leari | ning outcomes | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + | R (1) | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral (pages) If a writ stead ta of asse nation | examin or pres ten exa ake the ssmen date at | ation in groups (groups o entation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be char e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 210 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |

| Current Topics in Physik 11-EXP8-161-m01 Module creations in the provided in the physics and Astronomy Faculty of Physics and Astronomy ECTS Method is grading Only after succ. compl. of module(s) ECTS Method is grading Only after succ. compl. of module(s) S numerical grade - Duration Module level Other prerequisites Is emester graduate Approval from examination committee required. Contents S Set in the students and the oretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended Examination completencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the speciation areas. Courses (type, number of weekly contact hours, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination of an oral examination in groups (groups of 2, approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) are andidate or on oral examination in groups (groups of 2, approx. 30 minutes) are andidate each (approx. 30 minutes) or oral examination was chosen as method of assessment tis changed, the lecturer must i | Module | Module title Abbreviation | | | | | |
|---|---|--|--|--|--|---|--|
| chairperson of examination committee Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of ne candidate each (approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes) or alexamination in groups. (If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination of a acet at the latest. Language of assessment: is changed, the lecturer must inform students about this by four weeks prior to the original examination o | Current | t Topic | s in Physik | | | 11-EXP8-161-m01 | |
| ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade | Module | e coord | inator | | Module offered by | | |
| 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intende learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German, examination of fored – if not every senester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) or project report (approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups. If the method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by | chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Contents Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination (approx. 90 to 120 minutes). If a written examination may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination on and examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | 8 | nume | rical grade | | | | |
| Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Workload 240 h Teaching cycle | Duratio | n | Module level | Other prerequisites | | | |
| Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 9 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Conten | ts | | | | | |
| The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | | | | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | Intende | ed lear | ning outcomes | | | | |
| V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Theoret subdise | tical Ph cipline | ysics of the Master's pro of Physics and understar | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | ey have knowledge of a current nods necessary to acquire this | |
| Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Workload 240 h Teaching cycle | Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | V (4) + | R (2) | | | | | |
| or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Additional information Workload 240 h Teaching cycle | | | | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| Additional information Workload 240 h Teaching cycle | or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina t is changed, the lecturer t the latest. | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be char e each or an oral exa | r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method | |
| Workload 240 h Teaching cycle | Allocat | ion of p | olaces | | | | |
| Workload 240 h Teaching cycle | | | | | | | |
| 240 h Teaching cycle | Additional information | | | | | | |
| 240 h Teaching cycle | | | | | | | |
| Teaching cycle | Workload | | | | | | |
| - | 240 h | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | Teaching cycle | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | |
| | Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | | |

| Module title Abbreviation | | | | | |
|---|---|---|--|---|---|
| Curren | t Topic | s in Quantum Technology | y | | 11-EXN5-212-m01 |
| Modul | e coord | inator | | Module offered by | 1 |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | |
| 5 | nume | rical grade | | | |
| Duratio | on | Module level | Other prerequisites | | |
| 1 seme | ster | graduate | Approval from exam | ination committee | required. |
| Conter | Its | | | | |
| | | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achie | vements, e.g. in case of change of |
| Intend | ed lear | ning outcomes | | | |
| physic: rent fie | s on Ma Id in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods w | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this put fields of application. |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | |
| V (2) + Module | • • | t in: German or English | | | |
| | | Sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if r | not every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- |
| Allocat | ion of _l | olaces | | | |
| | | | - | | |
| Additional information | | | | | |
| | | | | | |
| Workload | | | | | |
| 150 h | | | | | |
| Teachi | Teaching cycle | | | | |
| | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | mmes) | |
| | | | | | |

| Module | Module title Abbreviation | | | | | | |
|--|--|--|--|---|--|--|--|
| Current | t Topics | s in Quantum Technology | / | | 11-EXN6-212-m01 | | |
| Module | e coord | inator | | Module offered by | <u> </u> | | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | 1 | od of grading | Only after succ. com | | , | | |
| 6 | nume | rical grade | | - | | | |
| Duratio | on | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | |
| Conten | ts | | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intende | ed lear | ning outcomes | | | | | |
| physics rent fie | s on Ma Id in pł | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | | |
| Course | S (type, r | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + Module | | t in: German or English | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocat | ion of p | olaces | | | | | |
| | | | | | | | |
| Additional information | | | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 180 h | | | | | | | |
| Teachi | ng cycl | e | | | | | |
| | | | | | | | |
| Referre | d to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |

| Module title Abbreviation | | | | | |
|---|---|---|--|---|---|
| Current Topics in Quantum Technology 11-EXN7-212-mo1 | | | | | 11-EXN7-212-m01 |
| Modul | e coord | inator | | Module offered by | , |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | |
| 7 | nume | rical grade | | | |
| Duratio | on | Module level | Other prerequisites | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. |
| Conter | nts | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of |
| Intend | ed lear | ning outcomes | | | |
| physic: rent fie | s on Ma eld in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods wl | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this but fields of application. |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | rman) | |
| V (3) + Module | | t in: German or English | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) (ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- |
| Allocat | tion of _l | olaces | | | |
| | | | | | |
| Additional information | | | | | |
| | | | | | |
| Workload | | | | | |
| 210 h | | | | | |
| Teachi | Teaching cycle | | | | |
| | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | mmes) | |
| | | | | | |

| Module title Abbreviation | | | | | Abbreviation | |
|---|---------------------------------------|---|------------------------------|----------------------------|---|--|
| Current Topics in Quantum Technology 11-EXN8-212-m01 | | | | | 11-EXN8-212-m01 | |
| Module coordinator | | | | Module offered by | , | |
| chairperson of examination committee | | | ! | Faculty of Physics | and Astronomy | |
| ECTS | Method of grading Only after succ. co | | | | | |
| 8 | numerical grade | | | | | |
| Duration Module level Other prerequisite | | | Other prerequisites | 5 | | |
| 1 semester graduate Approval from exar | | | Approval from exam | ination committee | required. | |
| Conter | nts | | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| The student posseses advanced knowledge meeting the requirements of a module in theoretical or experimental physics on Master's level in the study programme Quantum Technology. He/She commands knowledge in a current field in physics and insight into the measuring and calculating methods which are necessary to acquire this knowledge. He/She is able to classify and to link the learnt. He/She knows about fields of application. | | | | | | |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | | |
| V (4) + Module | | t in: German or English | | | | |
| | | Sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | tion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 240 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | | |
|---|---|---|------------------------------|-----------------------------|---|--|
| Current Topics in Quantum Technology 11-EXN6A-212-mo1 | | | | | 11-EXN6A-212-m01 | |
| Module coordinator | | | | Module offered by | | |
| chairperson of examination committee | | | | Faculty of Physics a | and Astronomy | |
| ECTS | | | | pl. of module(s) | , | |
| 6 | | rical grade | | • | | |
| | | | Other prerequisites | | | |
| | | | Approval from exam | ination committee r | equired. | |
| Conten | ts | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed leari | ning outcomes | | | | |
| physics rent fie | The student posseses advanced knowledge meeting the requirements of a module in theoretical or experimental physics on Master's level in the study programme Quantum Technology. He/She commands knowledge in a current field in physics and insight into the measuring and calculating methods which are necessary to acquire this knowledge. He/She is able to classify and to link the learnt. He/She knows about fields of application. | | | | | |
| Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + Module | | t in: German or English | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | | |
|---|-------------------|---|------------------------------|----------------------------------|---|--|
| Advanced Topics in Solid State Physics | | | | | 11-CSFM-161-m01 | |
| Module coordinator | | | | Module offered by | I | |
| Managing Director of the Institute of Theoretical Physics and Astrophysics | | | neoretical Physics | Faculty of Physics and Astronomy | | |
| ECTS | | | | npl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duration Module level Other prerequisite | | | Other prerequisites | 5 | | |
| 1 semester graduate Approval from exa | | | Approval from exam | ination committee r | equired. | |
| Conten | ts | | | | | |
| This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not co- vered in any of the other modules. These topics may relate either to recent research developments or to subjects not included in the regular curriculum. | | | | | | |
| Intende | ed lear | ning outcomes | | | | |
| | | advance their knowledge sights into the connection | | | c of Condensed Matter Physics | |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | rman) | | |
| V (3) + | R (1) | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | | | |
|---|-------------------|---|---|-----------------------------|---|--|--|
| Advanced Topics in Physics | | | | | 11-CSPM-161-m01 | | |
| Module coordinator | | | | Module offered by | | | |
| chairperson of examination committee | | | | Faculty of Physics a | and Astronomy | | |
| | | | Only after succ. con | pl. of module(s) | | | |
| 6 | numerical grade | | | | | | |
| Duration Module level | | Other prerequisites | | | | | |
| 1 semester graduate | | Approval from exam | Approval from examination committee required. | | | | |
| Conten | Its | | | | | | |
| This module will enable lecturers of Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subjects not included in the regular curriculum. | | | | | | | |
| | - | ning outcomes | | | | | |
| | | advance their knowledge ts into the connections b | | | of nanostructure technology and | | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + | R (1) | | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | | |
| Allocat | | | | | | | |
| | | | | | | | |
| Additional information | | | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 180 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Module title | | | | | Abbreviation | |
|--|--|---|---|--|---|--|
| Advanced Topics in Quantum Technology | | | | | 11-CSNM-212-m01 | |
| Module coordinator | | | | Module offered by | y | |
| Managing Director of the Institute of Theoretical Physics and Astrophysics | | | neoretical Physics | Faculty of Physics and Astronomy | | |
| ECTS | | | | npl. of module(s) | | |
| 6 | nume | erical grade | | | | |
| | | | Other prerequisites | 5 | | |
| | | | Approval from exam | nination committee | required. | |
| Conten | ts | | | | | |
| that ca | n not b | | nodule. These lecture | s may either reflect | give lectures on advanced topics t new developments in research or | |
| Intend | ed lear | ning outcomes | | | | |
| | | deepen their knowledge nts into the interface betw | | | c in quantum technology, thereby | |
| Course | S (type, | number of weekly contact hours, | language — if other than Ge | rman) | | |
| V (3) + Module | | nt in: German or English | | | | |
| | | sessment (type, scope, langua ble for bonus) | age — if other than German, | examination offered — if | not every semester, information on whether | |
| or oral pages) If a wri stead t of asse nation | examin or pres tten ex ake the ssmen date a | nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessm tion of one candidat r must inform studen | utes per candidate) ent, this may be ch e each or an oral ex | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- tamination in groups. If the method ir weeks prior to the original exami- | |
| Allocat | ion of | places | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Worklo | ad | | | | | |
| 180 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | |



Winter Term 2022

(ECTS credits)

| Module title 4 | | | | | Abbreviation | | |
|---|----------------------|---|---|---|--|--|--|
| Current | Topics | in Physik | | | 11-EXP6-161-m01 | | |
| Module | coordi | nator | | Module offered by | | | |
| chairpe | rson of | examination committee | | Faculty of Physics a | nd Astronomy | | |
| ECTS | Metho | d of grading | Only after succ. com | pl. of module(s) | | | |
| 6 | numer | ical grade | | | | | |
| Duratio | n | Module level | Other prerequisites | | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | | |
| Conten | ts | | | | | | |
| | | in experimental or theor udy abroad. | etical physics. Credit | ed academic achieve | ements, e.g. in case of change of | | |
| Intende | ed learn | ing outcomes | | | | | |
| Theoret subdisc | ical Ph cipline (| ysics of the Master's prog | gramme of Nanostruc nd the measuring and | ture Technology. Th /or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | | |
| | | umber of weekly contact hours, la | | | | | |
| V (3) + F | R (1) | | | | | | |
| | | essment (type, scope, language e for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | | |
| a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | | |
| Allocati | ion of p | laces | | | | | |
| | | | | | | | |
| Additio | nal info | ormation | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 180 h | | | | | | | |
| Teachin | Teaching cycle | | | | | | |
| | | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |
| | | | | | | | |

| Module title | | | | | Abbreviation | |
|---|---------------------|---|---|--|--|--|
| Current Topics in Physik | | | | | 11-EXP6A-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson of | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Content | ts | | | | | |
| | | in Experimental or Theor tudy abroad. | etical Physics. Credit | ed academic achieve | ements, e.g. in case of change of | |
| Intende | ed learr | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's prog | gramme of Nanostruc Id the measuring and | ture Technology. The location mether the second s | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| | | umber of weekly contact hours, la | | | | |
| V (3) + F | R (1) | | | | | |
| | | s essment (type, scope, languag le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additio | nal info | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachin | Teaching cycle | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Current Topics in Physik 11-EXP5-161-m01 Module coordinator Module offered by chairp=rson of examination committee Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade Duratior Module level Other prerequisites 1 semester graduate Approval from examination committee required. | | | | | | |
|---|--|--|--|--|--|--|
| chairperson of examination committee Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade Duration Module level Other prerequisites | | | | | | |
| ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade Duration Module level Other prerequisites | | | | | | |
| 5 numerical grade Duration Module level Other prerequisites | | | | | | |
| Duration Module level Other prerequisites | | | | | | |
| | | | | | | |
| 1 semester graduate Approval from examination committee required | | | | | | |
| Providence | | | | | | |
| Contents | | | | | | |
| Current topics in Experimental or Theoretical Physics. Credited academic achievements, e.g. in case of change university or study abroad. | | | | | | |
| Intended learning outcomes | | | | | | |
| The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a currer subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. | | | | | | |
| Courses (type, number of weekly contact hours, language — if other than German) | | | | | | |
| V(2) + R(2) | | | | | | |
| Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus) | | | | | | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocation of places | | | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 150 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | |

| Module title At | | | | | Abbreviation | | |
|---|---|---|---|---|--|--|--|
| Current Topics in Physik 11-EXP7-161-m01 | | | | | 11-EXP7-161-m01 | | |
| Module | e coord | inator | | Module offered by | | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | | |
| 7 | nume | rical grade | | | | | |
| Duratio | n | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | | |
| Conten | ts | | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | | |
| Intende | ed leari | ning outcomes | | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + | R (1) | | | | | | |
| | | | ge — if other than German, e | examination offered — if no | t every semester, information on whether | | |
| or oral (pages) If a writ stead ta of asse nation | module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | ion of p | olaces | | | | | |
| | | | | | | | |
| Additio | nal inf | ormation | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 210 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |

| Module title | | | | | Abbreviation | | |
|--|---------------------|--|---|---|--|--|--|
| Current Topics in Physik | | | | | 11-EXP8-161-m01 | | |
| Module | e coord | inator | | Module offered by | | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | | |
| 8 | nume | rical grade | | | | | |
| Duratio | n | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | | |
| Conten | ts | | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | | |
| Intende | ed lear | ning outcomes | | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (4) + | R (2) | | | | | | |
| | | sessment (type, scope, langua ıle for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English | | | | | | | |
| Allocat | | | | | | | |
| | | | | | | | |
| Additio | nal inf | ormation | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 240 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |
| | | | | | | | |

| Module title Abbreviation | | | | | | |
|---|---|---|--|---|---|--|
| Current Topics in Quantum Technology 11-EXN5-212-m01 | | | | | 11-EXN5-212-m01 | |
| Modul | e coord | inator | | Module offered by | 1 | |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | |
| 5 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee | required. | |
| Conter | Its | | | | | |
| | | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achie | vements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physic: rent fie | s on Ma Id in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods w | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this put fields of application. | |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | | |
| V (2) + Module | • • | t in: German or English | | | | |
| | | Sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if r | not every semester, information on whether | |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). s method of assessme tion of one candidate r must inform student | tes per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- | |
| Allocat | ion of _l | olaces | | | | |
| | | | - | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 150 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | mmes) | | |
| | | | | | | |

| Module title Abbreviation | | | | | | |
|--|---|--|--|---|--|--|
| Current Topics in Quantum Technology | | | | | 11-EXN6-212-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | required. | |
| Conten | ts | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physics rent fie knowle | s on Ma Id in pl dge. He | aster's level in the study p nysics and insight into th e/She is able to classify a | programme Quantum e measuring and calc and to link the learnt. | Technology. He/Sh ulating methods wh He/She knows abo | lule in theoretical or experimental e commands knowledge in a cur- nich are necessary to acquire this out fields of application. | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + Module | | t in: German or English | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the essmen date at | ation in groups (groups of centation/talk (approx. 3) amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). o method of assessme tion of one candidate must inform student | tes per candidate) c ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | |
| | | | | | | |

| Module title Abbreviation | | | | | |
|---|--|---|--|---|--|
| Current Topics in Quantum Technology 11-EXN7-212-mc | | | | | 11-EXN7-212-m01 |
| Modul | e coord | inator | | Module offered by | |
| chairpe | erson o | f examination committee | ! | Faculty of Physics a | and Astronomy |
| ECTS | Meth | od of grading | Only after succ. con | npl. of module(s) | |
| 7 | nume | rical grade | | | |
| Duratio | on | Module level | Other prerequisites | | |
| 1 seme | ester | graduate | Approval from exam | ination committee r | equired. |
| Conter | nts | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | ements, e.g. in case of change of |
| Intend | ed lear | ning outcomes | | | |
| physic: rent fie | s on Ma eld in pl | aster's level in the study (| programme Quantum e measuring and calc | Technology. He/Sh culating methods wh | lule in theoretical or experimental e commands knowledge in a cur- nich are necessary to acquire this ut fields of application. |
| Course | es (type, r | number of weekly contact hours, I | language — if other than Ger | man) | |
| V (3) + Module | | t in: German or English | | | |
| | | Sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa take the essmen date at | aation in groups (groups of sentation/talk (approx. 3) amination was chosen as a form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) c ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- |
| Allocat | tion of _l | olaces | | | |
| | | | | | |
| Additio | onal inf | ormation | | | |
| | | | | | |
| Workload | | | | | |
| 210 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | mmes) | |
| | | | | | |

| Modul | Module title Abbreviation | | | | | | |
|---|---|--|--|--|--|--|--|
| Current Topics in Quantum Technology 11-EXN8-212-mo | | | | | | | |
| Modul | e coord | inator | | Module offered by | <u> </u> | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | Metho | od of grading | Only after succ. com | | | | |
| 8 | nume | rical grade | | - | | | |
| Duratio | on | Module level | Other prerequisites | | | | |
| 1 seme | ester | graduate | Approval from exam | ination committee r | equired. | | |
| Conter | nts | | | | | | |
| | | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intend | ed lear | ning outcomes | | | | | |
| physic: rent fie | s on Ma eld in pl | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Should be the second s | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | | |
| Course | S (type, r | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (4) + Module | | t in: German or English | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a wri stead t of asse nation | examin or pres tten exa ake the essmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocat | tion of p | olaces | | | | | |
| | _ | | | | | | |
| Additio | onal inf | ormation | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 240 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |

| Module | Module title Abbreviation | | | | | | |
|--|--|--|--|---|--|--|--|
| Current Topics in Quantum Technology 11-EXN6A-212 | | | | | 11-EXN6A-212-m01 | | |
| Module | e coord | inator | | Module offered by | <u> </u> | | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | 1 | od of grading | Only after succ. com | | , | | |
| 6 | 1 | rical grade | | • | | | |
| Duratio | on . | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | |
| Conten | ts | | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intende | ed lear | ning outcomes | | | | | |
| physics rent fie | s on Ma Id in pl | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- nich are necessary to acquire this ut fields of application. | | |
| Course | S (type, r | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + Module | | t in: German or English | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocat | ion of p | olaces | | | | | |
| | | | | | | | |
| Additio | onal inf | ormation | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 180 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |

| Module | title | | | | Abbreviation | |
|--|-------------------|---|------------------------------|-----------------------------|---|--|
| Advanc | ed Top | ics in Solid State Physic | S | | 11-CSFM-161-m01 | |
| Module | coord | inator | | Module offered by | <u> </u> | |
| Managi and As | - | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics a | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conten | ts | | | | | |
| vered i | n any o | | | - | anced courses on topics not co- arch developments or to subjects | |
| Intende | ed learı | ning outcomes | | | | |
| | | advance their knowledge sights into the connection | | | c of Condensed Matter Physics | |
| Course | S (type, n | number of weekly contact hours, I | anguage — if other than Ger | man) | | |
| V (3) + | R (1) | | | | | |
| | | | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additio | nal inf | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachi | ıg cycl | e | _ | | | |
| | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | |

| Module | Module title Abbreviation | | | | | | | |
|--|--|---|--|--|---|--|--|--|
| Advanced Topics in Physics 11-CSPM-161-mo | | | | | 11-CSPM-161-m01 | | | |
| Module | e coord | inator | | Module offered by | | | | |
| chairpe | erson o | f examination committee | _ | Faculty of Physics a | and Astronomy | | | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | | | |
| 6 | nume | rical grade | | | | | | |
| Duratio | on | Module level | Other prerequisites | | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | | |
| Conten | Its | | - | | | | | |
| | es. The | se topics may relate eithe | | | s not covered in any of the other subjects not included in the regu- | | | |
| Intend | ed lear | ning outcomes | | | | | | |
| | | advance their knowledge its into the connections b | | | of nanostructure technology and | | | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Gei | rman) | | | | |
| V (3) + | R (1) | | | | | | | |
| | | Sessment (type, scope, langua le for bonus) | ge — if other than German, | examination offered — if no | ot every semester, information on whether | | | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the essmen date at | aation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chan e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | | |
| Allocat | - | | | | | | | |
| | | | | | | | | |
| Additio | onal inf | ormation | | | | | | |
| | | | | | | | | |
| Worklo | ad | | | | | | | |
| 180 h | | | | | | | | |
| Teaching cycle | | | | | | | | |
| | | | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| Module title | | | | | Abbreviation |
|---|---|---|--|--|---|
| Advanced Topics in Quantum Technology | | | ogy | | 11-CSNM-212-m01 |
| Modul | e coord | linator | | Module offered by | 1 |
| Manag and As | | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics | and Astronomy |
| ECTS | Meth | od of grading | Only after succ. cor | npl. of module(s) | |
| 6 | nume | erical grade | | | |
| Duratio | on | Module level | Other prerequisites | ; | |
| 1 seme | ster | graduate | Approval from exam | nination committee | required. |
| Conter | ts | | | | |
| that ca | n not b | | odule. These lecture | s may either reflect | ive lectures on advanced topics new developments in research or |
| | - | ning outcomes | | | |
| | | deepen their knowledge nts into the interface betw | | • | in quantum technology, thereby |
| Course | S (type, | number of weekly contact hours, | language — if other than Ge | rman) | |
| V (3) + Module | | nt in: German or English | | | |
| | | sessment (type, scope, langua ble for bonus) | age — if other than German, | examination offered — if r | not every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examin or pres tten ex ake the essmen date a | nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessm tion of one candidate r must inform studen | ites per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- |
| Allocat | ion of | places | | | |
| | | | | | |
| Additio | onal inf | formation | | | |
| | | | | | |
| Workload | | | | | |
| 180 h | | | | | |
| Teachi | ng cycl | le | | | |
| | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | ammes) | |
| | | | | | |



Summer Term 2023

(ECTS credits)

| Module | Module title | | | | Abbreviation | |
|--|---|---|---|---|---|--|
| Advanced Topics in Solid State Physics | | | | | 11-CSFM-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| Manag and As | | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics a | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conten | ts | | | | | |
| vered i | n any o | | | - | anced courses on topics not co- arch developments or to subjects | |
| Intend | ed lear | ning outcomes | | | | |
| | | advance their knowledge sights into the connectio | | | c of Condensed Matter Physics | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | rman) | | |
| V (3) + | R (1) | | | | | |
| | | eessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| b) oral c) oral d) proje e) pres lf a writ stead t of asse nation Langua | examir examin ect repo entatio tten exa ake the ssmen date at ge of a | form of an oral examina t is changed, the lecturer the latest. ssessment: German and | ach (approx. 30 minu of 2, approx. 30 minu s) or es) s method of assessme tion of one candidate r must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additio | nal inf | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachi | ng cycl | e | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | |
| | | | | | | |

| Module title | | | | | Abbreviation | |
|---|---|---|---|--|--|--|
| Advanced Topics in Quantum Technology | | | ogy | | 11-CSNM-212-m01 | |
| Module | e coord | linator | | Module offered by | y | |
| Manag and As | - | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics | and Astronomy | |
| ECTS | Meth | od of grading | Only after succ. cor | npl. of module(s) | | |
| 6 | nume | erical grade | | | | |
| Duratio | on | Module level | Other prerequisites | 5 | | |
| 1 seme | ster | graduate | Approval from exan | nination committee | required. | |
| Conten | Its | | | | | |
| that ca | n not b | | nodule. These lecture | s may either reflect | give lectures on advanced topics t new developments in research or | |
| Intend | ed lear | ning outcomes | | | | |
| | | deepen their knowledge nts into the interface betv | | | c in quantum technology, thereby | |
| Course | S (type, | number of weekly contact hours, | language — if other than Ge | rman) | | |
| V (3) + Module | | nt in: German or English | | | | |
| | | sessment (type, scope, langua ble for bonus) | age — if other than German, | examination offered — if | not every semester, information on whether | |
| or oral pages) If a wri stead t of asse nation | examin or pre- tten ex ake the essmer date a | nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessm tion of one candidat r must inform studen | utes per candidate) ent, this may be ch e each or an oral ex | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- tamination in groups. If the method r weeks prior to the original exami- | |
| Allocat | ion of | places | | | | |
| | | | | | | |
| Additio | onal inf | formation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | 180 h | | | | | |
| Teachi | ng cyc | le | | | | |
| | | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | ammes) | | |
| | | | | | | |

| Module title Abbreviation | | | | | Abbreviation | |
|--|--|--|--|---|---|--|
| Advand | ced Top | ics in Physics | | | 11-CSPM-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conten | Its | | | | | |
| module lar curr | es. The iculum | se topics may relate eithe | | | s not covered in any of the other subjects not included in the regu- | |
| | | ning outcomes | | <u> </u> | <u> </u> | |
| | | advance their knowledge ts into the connections b | | | of nanostructure technology and | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + | R (1) | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa take the essmen date at | ation in groups (groups of centation/talk (approx. 3) amination was chosen as a form of an oral examina | of 2, approx. 30 minu o minutes). o method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | - | | 0.0 | | | |
| | | | , | | | |
| Additio | onal inf | ormation | | | | |
| | | | | | | |
| Worklo | ad | | | | | |
| 180 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module title Abb | | | | | Abbreviation |
|---|---|--|--|---|---|
| Current Topics in Quantum Technology | | | y | | 11-EXN5-212-m01 |
| Modul | e coord | inator | | Module offered by | , |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy |
| ECTS | Metho | od of grading | Only after succ. com | npl. of module(s) | |
| 5 | nume | rical grade | | | |
| Duratio | on | Module level | Other prerequisites | | |
| 1 seme | ster | graduate | Approval from exam | ination committee | required. |
| Conter | Its | | | | |
| | | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of |
| Intend | ed lear | ning outcomes | | | |
| physic: rent fie | s on Ma Id in pl | ster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods w | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this but fields of application. |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | rman) | |
| V (2) + Module | • • | t in: German or English | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if r | ot every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | ation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- |
| Allocat | ion of _l | olaces | | | |
| | | | | | |
| Additio | onal inf | ormation | | | |
| | | | | | |
| Workload | | | | | |
| 150 h | | | | | |
| Teachi | ng cycl | e | | | |
| | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | mmes) | |
| | | | | | |

| Module title | | | | Abbreviation | | | | | |
|--|--|--|---|---|---|--|--|--|--|
| Current | t Topics | s in Quantum Technolog | у | | 11-EXN6-212-m01 | | | | |
| Module | e coord | inator | | Module offered b | y . | | | | |
| chairpe | erson o | f examination committee | 2 | Faculty of Physics | s and Astronomy | | | | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | | | | |
| 6 | nume | rical grade | | | | | | | |
| Duratio | on | Module level | Other prerequisites | | | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee | e required. | | | | |
| Conten | ts | | | | | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achi | evements, e.g. in case of change of | | | | |
| Intende | ed lear | ning outcomes | | | | | | | |
| physics rent fie | s on Ma Id in pl | aster's level in the study nysics and insight into th | programme Quantum ie measuring and calc | Technology. He/S ulating methods v | odule in theoretical or experimental She commands knowledge in a cur- which are necessary to acquire this bout fields of application. | | | | |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | | | | | |
| V (3) + Module | | t in: German or English | | | | | | | |
| | | sessment (type, scope, langua le for bonus) | age — if other than German, e | examination offered — if | f not every semester, information on whether | | | | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). s method of assessme ation of one candidate r must inform student | tes per candidate) ent, this may be ch e each or an oral ea | andidate each (approx. 30 minutes)) or project report (approx. 8 to 10 nanged and assessment may in- xamination in groups. If the method ur weeks prior to the original exami- | | | | |
| Allocat | ion of p | olaces | | | | | | | |
| | | | | | | | | | |
| Additio | nal inf | ormation | | | | | | | |
| | | | | | | | | | |
| Workload | | | | | | | | | |
| 180 h | | | | | | | | | |
| Teachi | ng cycl | e | | | | | | | |
| | | | | | | | | | |
| Referre | ed to in | LPO I (examination regulation | is for teaching-degree progra | mmes) | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | |
| | | | | | | | | | |

| Module title Abbreviation | | | | | |
|--|--|--|--|---|--|
| Current Topics in Quantum Technology | | | | | 11-EXN6A-212-m01 |
| Module | e coord | inator | | Module offered by | <u> </u> |
| | | f examination committee | | Faculty of Physics a | and Astronomy |
| ECTS | 1 | od of grading | Only after succ. com | | , |
| 6 | 1 | rical grade | | • | |
| Duratio | on . | Module level | Other prerequisites | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. |
| Conten | ts | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of |
| Intende | ed lear | ning outcomes | | | |
| physics rent fie | s on Ma Id in pl | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- nich are necessary to acquire this ut fields of application. |
| Course | S (type, r | umber of weekly contact hours, l | anguage — if other than Ger | man) | |
| V (3) + Module | | t in: German or English | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- |
| Allocat | ion of p | olaces | | | |
| | | | | | |
| Additio | onal inf | ormation | | | |
| | | | | | |
| Workload | | | | | |
| 180 h | 18o h | | | | |
| Teachi | ng cycl | e | | | |
| | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | |
| | | | | | |

| Module title Abbreviation | | | | | Abbreviation |
|---|---|---|--|---|---|
| Current Topics in Quantum Technology | | | y | | 11-EXN7-212-m01 |
| Modul | e coord | inator | | Module offered by | , |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | |
| 7 | nume | rical grade | | | |
| Duratio | on | Module level | Other prerequisites | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. |
| Conter | nts | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of |
| Intend | ed lear | ning outcomes | | | |
| physic: rent fie | s on Ma eld in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods wl | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this but fields of application. |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | rman) | |
| V (3) + Module | | t in: German or English | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) (ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- |
| Allocat | tion of _l | olaces | | | |
| | | | | | |
| Additio | onal inf | ormation | | | |
| | | | | | |
| Workload | | | | | |
| 210 h | | | | | |
| Teachi | ng cycl | e | | | |
| | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | mmes) | |
| | | | | | |

| Module title Abbreviation | | | | | | |
|---|--|--|--|---|--|--|
| Current Topics in Quantum Technology | | | | | 11-EXN8-212-m01 | |
| Module | e coord | inator | | Module offered by | <u> </u> | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | |
| ECTS | r – | od of grading | Only after succ. con | | , | |
| 8 | | rical grade | | • | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conten | ts | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed leari | ning outcomes | | | | |
| physics rent fie | s on Ma Id in pł | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (4) + Module | | t in: German or English | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additio | Additional information | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 240 h | | | | | | |
| Teachi | ng cycl | e | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | |
| | | | | | | |

| Module title | | | | Abbreviation | |
|--|--|--|--|--|---|
| Current Topics in Physik | | | | 11-EXP5-161-m01 | |
| Module | e coord | inator | | Module offered by | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | |
| 5 | nume | rical grade | | | |
| Duratio | n | Module level | Other prerequisites | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. |
| Conten | ts | | | | |
| | | in Experimental or Theor tudy abroad. | retical Physics. Credit | ed academic achiev | ements, e.g. in case of change of |
| Intende | ed learı | ning outcomes | | | |
| Theore subdis | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. |
| Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | |
| V (2) + | R (2) | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examination | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chan e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- |
| Allocat | ion of p | olaces | | | |
| | | | | | |
| Additio | nal inf | ormation | | | |
| | | | | | |
| Workload | | | | | |
| 150 h | | | | | |
| Teachi | Teaching cycle | | | | |
| | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | |
| | | | | | |

| Module title | | | | | Abbreviation |
|---|--|---|---|--|--|
| Current | Topics | in Physik | | | 11-EXP6-161-m01 |
| Module | coordi | nator | | Module offered by | |
| chairpe | rson of | examination committee | | Faculty of Physics a | nd Astronomy |
| ECTS | Metho | d of grading | Only after succ. com | pl. of module(s) | |
| 6 | numer | ical grade | | | |
| Duratio | n | Module level | Other prerequisites | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. |
| Conten | ts | | | | |
| | | in experimental or theor udy abroad. | etical physics. Credit | ed academic achieve | ements, e.g. in case of change of |
| Intende | ed learn | ing outcomes | | | |
| Theoret subdisc | ical Ph cipline (| ysics of the Master's prog | gramme of Nanostruc nd the measuring and | ture Technology. Th /or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. |
| | | umber of weekly contact hours, la | | | |
| V (3) + F | R (1) | | | | |
| | | essment (type, scope, language e for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examina ect repo entation ten exa ake the ssment date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minut) or es) method of assessme tion of one candidate must inform student | tes per candidate) or ent, this may be char e each or an oral exar | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- |
| Allocati | ion of p | laces | | | |
| | | | | | |
| Additio | nal info | ormation | | | |
| | | | | | |
| Workload | | | | | |
| 180 h | | | | | |
| Teachin | ng cycle | 2 | | | |
| | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | |
| | | | | | |
| | | | | | |

| Module title | | | | | Abbreviation | |
|--|---|--|--|--|---|--|
| Current | t Topic | s in Physik | | | 11-EXP8-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | _ | Faculty of Physics a | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 8 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acc | redited academic ac | hievements, e.g. in case of | |
| Intende | ed lear | ning outcomes | | | | |
| Theore subdis | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation met | of a module of Experimental or ey have knowledge of a current hods necessary to acquire this application areas. | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (4) + | R (2) | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the essmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chan e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additio | onal inf | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 240 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module title | | | | | Abbreviation | |
|---|---------------------|--|---|---|--|--|
| Current | Topics | s in Physik | | | 11-EXP6A-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Content | ts | | | | | |
| | | in Experimental or Theor tudy abroad. | etical Physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed learı | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + F | R (1) | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | | |
|---|---|--|---|---|--|--|
| Current | Topics | s in Physik | | | 11-EXP7-161-m01 | |
| Module | Module coordinator | | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 7 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Intende | ed leari | ning outcomes | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + | R (1) | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral (pages) If a writ stead ta of asse nation | written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 210 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |



Winter Term 2023

(ECTS credits)

| Module title | | | | | Abbreviation | |
|---|---------------------|--|---|---|--|--|
| Current | Topics | s in Physik | | | 11-EXP6-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Content | Contents | | | | | |
| | | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achieve | ements, e.g. in case of change of | |
| Intende | ed learı | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + F | R (1) | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module title | | | | | Abbreviation | |
|---|---|--|---|---|--|--|
| Current | Topics | s in Physik | | 11-EXP5-161-m01 | | |
| Module | Module coordinator | | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 5 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | in Experimental or Theor tudy abroad. | etical Physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed learı | ning outcomes | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (2) + | R (2) | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral pages) If a writ stead ta of asse nation | written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 150 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |

| Current Topics in Physik 11-EXP8-161-m01 Module creations in the provided in the physics and Astronomy Faculty of Physics and Astronomy ECTS Method is grading Only after succ. compl. of module(s) ECTS Method is grading Only after succ. compl. of module(s) S numerical grade - Duration Module level Other prerequisites Is emester graduate Approval from examination committee required. Contents S Set in the students and the oretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended Examination completencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the speciation areas. Courses (type, number of weekly contact hours, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination of an oral examination of an oral examination in groups (groups of 2, approx. 30 minutes) or oral examination in groups. If a writter examination was chosen as method of assessment, this may be changed and ingroups. A so injunetes is prior to the original examination area set is changed, the lecture must inform students about this by four examination in groups. If the method of assessment is change | Module title Abbreviation | | | | | | |
|--|---|--|---|---|---|--|--|
| chairperson of examination committee Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of ne candidate each (approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes) or alexamination in groups. (If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination of a acet at the latest. Language of assessment: is changed, the lecturer must inform students about this by four weeks prior to the original examination o | Current | Current Topics in Physik | | | | 11-EXP8-161-m01 | |
| ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade | Module | Module coordinator | | | Module offered by | | |
| 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intende learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German, examination of fored – if not every senester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) or project report (approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups. If the method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by | chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Contents Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination of project report (approx. 8 to 10 pages) or project report (approx. 8 to 10 pages) or project report (approx. 8 to 10 pages) or project report (approx. 9 to 120 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform | ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination on and examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | 8 | nume | rical grade | | | | |
| Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes). If a written examination is changed, the lecturer must inform students about this by four weeks prior to the original examination do assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment: German and/or English Allocation of places | Duratio | n | Module level | Other prerequisites | | | |
| Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 9 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Conten | ts | | | | | |
| The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | | | | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Intende | ed lear | ning outcomes | | | | |
| V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Theoret subdise | tical Ph cipline | ysics of the Master's pro of Physics and understar | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | ey have knowledge of a current nods necessary to acquire this | |
| Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Workload 240 h Teaching cycle | Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | V (4) + | R (2) | | | | | |
| or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Additional information Workload 240 h Teaching cycle | | | | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| Additional information Workload 240 h Teaching cycle | written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. | | | | | | |
| Workload 240 h Teaching cycle | Allocat | ion of p | olaces | | | | |
| Workload 240 h Teaching cycle | | | | | | | |
| 240 h Teaching cycle | Additional information | | | | | | |
| 240 h Teaching cycle | | | | | | | |
| Teaching cycle | Workload | | | | | | |
| - | 240 h | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | Teaching cycle | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | |
| | Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | | |

| Module coo | ics in Quantum Technolog | | | Abbreviation | |
|---|--|---|--|---|--|
| | Current Topics in Quantum Technology 11-EXN5-212-mo1 | | | | |
| | Module coordinator | | | | |
| chairpersor | of examination committee | 2 | Faculty of Physics | and Astronomy | |
| ECTS Met | hod of grading | Only after succ. con | npl. of module(s) | | |
| 5 nur | nerical grade | | | | |
| Duration | Module level | Other prerequisites | | | |
| 1 semester | graduate | Approval from exam | ination committee r | required. | |
| Contents | | | | | |
| • | cs in experimental or theor r study abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of | |
| Intended le | arning outcomes | | | | |
| physics on rent field in knowledge. | Master's level in the study physics and insight into th He/She is able to classify | programme Quantum he measuring and calo and to link the learnt. | Technology. He/Sh culating methods wh He/She knows abo | dule in theoretical or experimental e commands knowledge in a cur- nich are necessary to acquire this put fields of application. | |
| Courses (typ | e, number of weekly contact hours, | language — if other than Ger | rman) | | |
| V (2) + R (2) Module tau | ght in: German or English | | | | |
| | ssessment (type, scope, langua able for bonus) | age — if other than German, o | examination offered — if n | ot every semester, information on whether | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | |
| Allocation o | f places | | | | |
| | | | | | |
| Additional information | | | | | |
| | | | | | |
| Workload | | | | | |
| 150 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | |

| Module | Module title Abbreviation | | | | | | |
|---|---|--|---|---|--|--|--|
| Current Topics in Quantum Technology 11-EXN6-212-mo1 | | | | | | | |
| Module | a coord | inator | | Module offered by | | | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | | od of grading | Only after succ. com | · · · | | | |
| 6 | | rical grade | | | | | |
| Duratio | | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | |
| Conten | ts | 5 | <u> </u> | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intende | ed lear | ning outcomes | | | | | |
| physics rent fie | s on Ma Id in pl | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/She culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | | |
| Course | S (type, r | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + Module | | t in: German or English | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead ta of asse nation | written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | ion of p | olaces | | | | | |
| | | | | | | | |
| Additional information | | | | | | | |
| | | | | | | | |
| Worklo | Workload | | | | | | |
| 180 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | d to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |

| Module title Abbreviation | | | | | | |
|---|---------------------------------|---|--|--|--|--|
| Curren | t Topic | s in Quantum Technology | y - | | 11-EXN7-212-m01 | |
| Modul | e coord | inator | | Module offered by | , | |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | pl. of module(s) | | |
| 7 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. | |
| Conter | nts | | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | /ements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physic: rent fie knowle | s on Ma eld in pl edge. H | aster's level in the study nysics and insight into th e/She is able to classify | programme Quantum e measuring and calc and to link the learnt. | Technology. He/Sh ulating methods w He/She knows abo | dule in theoretical or experimental le commands knowledge in a cur- hich are necessary to acquire this but fields of application. | |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | man) | | |
| V (3) + Modul | | t in: German or English | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | tion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 210 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | | |
|---|---|--|--|---|--|--|
| Current | t Topic | s in Quantum Technolog | SY | | 11-EXN8-212-m01 | |
| Module coordinator | | | | Module offered by | y | |
| chairpe | erson o | f examination committee | e | Faculty of Physics | and Astronomy | |
| ECTS | Meth | od of grading | Only after succ. con | pl. of module(s) | | |
| 8 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. | |
| Conten | nts | | | | | |
| | • | in experimental or theo tudy abroad. | retical physics. Credit | ed academic achie | vements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physics rent fie | s on Ma eld in pl | aster's level in the study nysics and insight into th | programme Quantum ne measuring and calc | Technology. He/Sl culating methods w | dule in theoretical or experimental he commands knowledge in a cur- hich are necessary to acquire this out fields of application. | |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | | |
| V (4) + Module | | t in: German or English | | | | |
| | | Sessment (type, scope, langu ole for bonus) | age — if other than German, o | examination offered — if | not every semester, information on whether | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | tion of _l | places | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 240 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| Referre | ed to in | LPO I (examination regulation | ns for teaching-degree progra | mmes) | | |

| Module | Module title Abbreviation | | | | | | |
|--|---|--|---|---|--|--|--|
| Current | t Topics | s in Quantum Technology | 1 | | 11-EXN6A-212-m01 | | |
| Module | e coord | inator | | Module offered by | <u> </u> | | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | r – | od of grading | Only after succ. con | | , | | |
| 6 | | rical grade | | • | | | |
| Duratio | on | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | |
| Conten | ts | | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intende | ed leari | ning outcomes | | | | | |
| physics rent fie | s on Ma Id in pł | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + Module | | t in: German or English | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead t of asse nation | written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | ion of p | olaces | | | | | |
| | | | | | | | |
| Additional information | | | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 180 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | | |

| Module | Module title Abbreviation | | | | | | | |
|--|---|---|---|---|---|--|--|--|
| Advanced Topics in Solid State Physics | | | | | 11-CSFM-161-m01 | | | |
| Module | coord | inator | | Module offered by | <u> </u> | | | |
| Managi and As | - | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics a | and Astronomy | | | |
| ECTS | Metho | od of grading | Only after succ. con | pl. of module(s) | | | | |
| 6 | nume | rical grade | | | | | | |
| Duratio | n | Module level | Other prerequisites | | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | | |
| Conten | ts | | | | | | | |
| vered i | n any o | | | - | anced courses on topics not co- arch developments or to subjects | | | |
| Intende | ed learı | ning outcomes | | | | | | |
| | | advance their knowledge sights into the connection | | | c of Condensed Matter Physics | | | |
| Course | S (type, n | number of weekly contact hours, I | anguage — if other than Ger | man) | | | | |
| V (3) + | R (1) | | | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | | | |
| b) oral c) oral d d) proje e) pres lf a writ stead t of asse nation Langua | examin examin ect repo entatio ten exa ake the ssmen date at <u>ge of a</u> | e form of an oral examina t is changed, the lecturer the latest. ssessment: German and | ach (approx. 30 minu of 2, approx. 30 minu s) or es) s method of assessme tion of one candidate r must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | | |
| Allocat | ion of p | olaces | | | | | | |
| | | | | | | | | |
| Additio | nal inf | ormation | | | | | | |
| | | | | | | | | |
| Workload | | | | | | | | |
| 180 h | | | | | | | | |
| Teachi | ıg cycl | e | | | | | | |
| | | | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | | |
| | | | | | | | | |

| Module | Module title Abbreviation | | | | | | |
|--|--|--|--|---|---|--|--|
| Advand | Advanced Topics in Physics 11-CSPM-161-mo1 | | | | | | |
| Module | e coord | inator | | Module offered by | <u>, </u> | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | | |
| 6 | nume | rical grade | | | | | |
| Duratio | on | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | |
| Conten | Its | | | | | | |
| | es. The | se topics may relate eithe | | | s not covered in any of the other subjects not included in the regu- | | |
| Intend | ed lear | ning outcomes | | | | | |
| | | advance their knowledge ts into the connections b | | | of nanostructure technology and | | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + | R (1) | | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa take the essmen date at | ation in groups (groups of centation/talk (approx. 3) amination was chosen as a form of an oral examina | of 2, approx. 30 minu o minutes). o method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocat | - | | | | | | |
| | | | | | | | |
| Additio | onal inf | ormation | | | | | |
| | | | | | | | |
| Worklo | Workload | | | | | | |
| 180 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Module | e title | | | Abbreviation | |
|---|---|---|---|--|--|
| Advanced Topics in Quantum Technology | | | | | 11-CSNM-212-m01 |
| Module | e coord | linator | | Module offered by | y |
| Manag and As | - | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics | and Astronomy |
| ECTS | Meth | od of grading | Only after succ. cor | npl. of module(s) | |
| 6 | nume | erical grade | | | |
| Duratio | on | Module level | Other prerequisites | 5 | |
| 1 seme | ster | graduate | Approval from exan | nination committee | required. |
| Conten | Its | | | | |
| that ca | n not b | | nodule. These lecture | s may either reflect | give lectures on advanced topics t new developments in research or |
| Intend | ed lear | ning outcomes | | | |
| | | deepen their knowledge nts into the interface betv | | | c in quantum technology, thereby |
| Course | S (type, | number of weekly contact hours, | language — if other than Ge | rman) | |
| V (3) + Module | | nt in: German or English | | | |
| | | sessment (type, scope, langua ble for bonus) | age — if other than German, | examination offered — if | not every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examin or pre- tten ex ake the essmer date a | nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessm tion of one candidat r must inform studen | utes per candidate) ent, this may be ch e each or an oral ex | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- tamination in groups. If the method r weeks prior to the original exami- |
| Allocat | ion of | places | | | |
| | | | | | |
| Additio | onal inf | formation | | | |
| | | | | | |
| Worklo | ad | | | | |
| 180 h | | | - | | |
| Teachi | ng cyc | le | | | |
| | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | ammes) | |
| | | | | | |

| Module title Abbreviation | | | | | | |
|---|--|---|---|--|--|--|
| Current | Topics | s in Physik | | | 11-EXP6A-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson of | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Content | ts | | | | | |
| | | in Experimental or Theor tudy abroad. | etical Physics. Credit | ed academic achieve | ements, e.g. in case of change of | |
| Intende | ed learr | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's prog | gramme of Nanostruc Id the measuring and | ture Technology. The location mether the second s | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| | | umber of weekly contact hours, la | | | | |
| V (3) + F | R (1) | | | | | |
| | | s essment (type, scope, languag le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examin ect repo entatio ten exa ake the ssment date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minut) or es) method of assessme tion of one candidate must inform student | tes per candidate) or ent, this may be char e each or an oral exar | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additio | nal info | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachin | ng cycl | 9 | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module | e title | | | Abbreviation | | |
|---|--|--|--|--|---|--|
| Current | t Topic s | s in Physik | | | 11-EXP7-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 7 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Intende | ed lear | ning outcomes | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + | R (1) | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chai e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additio | nal inf | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 210 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |



Summer Term 2024

(ECTS credits)

| Module title Abbreviation | | | | | | |
|---|---|--|--|--|--|--|
| Current Topics in Physik | | | | | 11-EXP6-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achieve | ements, e.g. in case of change of | |
| Intende | ed leari | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + F | R (1) | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examin ect repo entatio ten exa ake the ssmen date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minu) or es) method of assessme tion of one candidate must inform student | tes per candidate) of ent, this may be char e each or an oral exam | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additio | nal inf | ormation | | | | |
| | | | | | | |
| Workloa | Workload | | | | | |
| 180 h | 180 h | | | | | |
| Teachin | ng cycl | e | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Current Topics in Physik In=EXP5-161-m01 Module corrent ator Module offered by chairp = rot examination committee Faculty of Physics and Astronomy ECTS Meth - f grading Only after succ. compl. of module(s) 5 num = rical grade - Module level Other prerequisites Image Image Content | Module | Module title Abbreviation | | | | | |
|--|---|---|--|--|--|---|--|
| chairperson of examination committee Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Contents Contents Current topics in Experimental or Theoretical Physics. Credited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics and Understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (2) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every senester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx, 30 minutes) or oral examination of no candidate each (approx. 30 minutes) or oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination and examination of paces Workload | Current Topics in Physik | | | | | 11-EXP5-161-m01 | |
| ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics in Experimental or Theoretical Physics. Credited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 9 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups. Groups of 2, approx. 30 minutes per candidate) or project report (approx. 30 minutes) of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination der assessment: German and/or English Allocation of | Module | e coord | inator | | Module offered by | | |
| 5 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics in Experimental or Theoretical Physics. Credited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination may be changed and assessment may instead take the form of an oral examination of one candidate each (approx. 30 to 10 assessment this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Langua | chairpe | erson o | f examination committee | _ | Faculty of Physics a | nd Astronomy | |
| Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics in Experimental or Theoretical Physics. Credited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (2) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination of nore candidate each (approx. 30 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German | ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 1 semester graduate Approval from examination committee required. Contents Current topics in Experimental or Theoretical Physics. Credited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (2) + R (2) Method of assessment (type, scope, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes). If a written examination (approx. 30 to 120 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination on all examination of one candidate each (approx. 30 minutes). If a written examination in groups. If the method of assessment, this may be changed and assessment may instead take the form of an oral examination on each diste each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/o | | | - | | | | |
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| Current topics in Experimental or Theoretical Physics. Credited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (2) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 150 h Teaching cycle | 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (2) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload Workload | Conten | ts | | | | | |
| The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (2) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 150 h Teaching cycle | | | | etical Physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (2) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | Intende | ed learı | ning outcomes | | | | |
| V (2) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload Workload Teaching cycle | Theoret subdise | tical Ph cipline | ysics of the Master's pro of Physics and understar | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | ey have knowledge of a current nods necessary to acquire this | |
| Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Workload 150 h Teaching cycle | Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 150 h Teaching cycle | V (2) + | R (2) | | | | | |
| or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Additional information Workload 150 h Teaching cycle | | | | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| Additional information Workload 150 h Teaching cycle | or oral pages) If a writ stead ta of asse nation | examin or pres ten exa ake the ssmen date at | ation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina- t is changed, the lecturer the latest. | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chai e each or an oral exa | r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method | |
| Workload 150 h Teaching cycle | Allocat | ion of p | olaces | | | | |
| Workload 150 h Teaching cycle | | | | | | | |
| 150 h Teaching cycle | Additio | nal inf | ormation | | | | |
| 150 h Teaching cycle | | | | | | | |
| Teaching cycle | Workload | | | | | | |
| | 150 h | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | Teachi | Teaching cycle | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | |
| | Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | | |

| Module title | | | | | Abbreviation | |
|---|--|---|--|--|---|--|
| Current | t Topic s | s in Physik | | | 11-EXP8-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 8 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Intende | ed lear | ning outcomes | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (4) + | R (2) | | | | | |
| | | sessment (type, scope, langua ıle for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | aation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chai e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | | | | | | |
| | | | | | | |
| Additio | nal inf | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 240 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | | |
|---|--|---|--|---|---|--|
| Curren | t Topic | s in Quantum Technology | y | | 11-EXN5-212-m01 | |
| Modul | e coord | inator | | Module offered by | 1 | |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | |
| 5 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee | required. | |
| Conter | Its | | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achie | vements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physic: rent fie | s on Ma Id in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods w | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this put fields of application. | |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | | |
| V (2) + Module | • • | t in: German or English | | | | |
| | | Sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if r | not every semester, information on whether | |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). s method of assessme tion of one candidate r must inform student | tes per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- | |
| Allocat | ion of _l | olaces | | | | |
| | | | - | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 150 h | 150 h | | | | | |
| Teachi | Teaching cycle | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | | |
|--|---|---|--|---|--|--|
| Current Topics in Quantum Technology 11-EXN6-21 | | | | | 11-EXN6-212-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | ļ | Faculty of Physics | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | required. | |
| Conten | ts | | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | rements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physics rent fie knowle | s on Ma Id in pl dge. H | aster's level in the study hysics and insight into th e/She is able to classify a | programme Quantum e measuring and calc and to link the learnt. | Technology. He/Sh ulating methods wh He/She knows abo | lule in theoretical or experimental e commands knowledge in a cur- nich are necessary to acquire this nut fields of application. | |
| Course | S (type, r | number of weekly contact hours, l | language — if other than Ger | man) | | |
| V (3) + Module | | t in: German or English | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether | |
| or oral pages) If a writ stead t of asse nation | examir or pres tten exa ake the ssmen date at | aation in groups (groups) sentation/talk (approx. 3) amination was chosen as s form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) c ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 inged and assessment may in- amination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of _l | olaces | | | | |
| | | | - | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachi | Teaching cycle | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | - | | | | | |

| Module title Abbreviation | | | | | | |
|---|---|---|--|---|---|--|
| Current Topics in Quantum Technology 11-EXN7-212-m01 | | | | | 11-EXN7-212-m01 | |
| Modul | e coord | inator | | Module offered by | , | |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | |
| 7 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. | |
| Conter | nts | | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physic: rent fie | s on Ma eld in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods wl | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this but fields of application. | |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | rman) | | |
| V (3) + Module | | t in: German or English | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether | |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) (ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- | |
| Allocat | tion of _l | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 210 h | | | | | | |
| Teachi | Teaching cycle | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | | | |
|---|---|---|--|---|---|--|--|
| Curren | t Topic | s in Quantum Technology | y | | 11-EXN8-212-m01 | | |
| Modul | e coord | inator | | Module offered by | 1 | | |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy | | |
| ECTS | Metho | od of grading | Only after succ. com | npl. of module(s) | | | |
| 8 | nume | rical grade | | | | | |
| Duratio | on | Module level | Other prerequisites | | | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. | | |
| Conter | nts | | | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of | | |
| Intend | ed lear | ning outcomes | | | | | |
| physic: rent fie | s on Ma eld in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods w | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this put fields of application. | | |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | | | |
| V (4) + Module | | t in: German or English | | | | | |
| | | Sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if r | not every semester, information on whether | | |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- | | |
| Allocat | tion of _l | olaces | | | | | |
| | | | | | | | |
| Additio | Additional information | | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 240 h | | | | | | | |
| Teachi | Teaching cycle | | | | | | |
| | | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | | |

| Module | Module title Abbreviation | | | | | | |
|--|---|--|--|---|--|--|--|
| Current | t Topics | s in Quantum Technology | / | | 11-EXN6A-212-m01 | | |
| Module | e coord | inator | | Module offered by | <u> </u> | | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | 1 | od of grading | Only after succ. com | | , | | |
| 6 | 1 | rical grade | | • | | | |
| Duratio | on . | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | |
| Conten | ts | | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intende | ed lear | ning outcomes | | | | | |
| physics rent fie | s on Ma Id in pl | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- nich are necessary to acquire this ut fields of application. | | |
| Course | S (type, r | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + Module | | t in: German or English | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocat | ion of p | olaces | | | | | |
| | | | | | | | |
| Additional information | | | | | | | |
| | | | | | | | |
| Worklo | Workload | | | | | | |
| 180 h | | | | | | | |
| Teachi | Teaching cycle | | | | | | |
| | | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | | |

| Advanced Topics in Solid State Physics 11-CSFM-161-m01 Module coordinator Module offered by Managing Director of the Institute of Theoretical Physics Faculty of Physics and Astronomy and Astrophysics Faculty of Physics and Astronomy CTS Method of grading Only after succ. compl. of module(s) 6 numerical grade - Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not to subjec not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whether module is cellable for bonus) a) written examination (approx. 90 to 120 minutes) or o) c) and examination of one candidate each (approx. 30 minutes) or c) or al examination of one candidate each (approx. 30 minutes) or o) cord examination in groups. If the meth of assessment is changed, the lecturer wist inform student sabout this by four weeks prior to the original exarination of assessment is changed, the lecturer must infor | Module | Module title Abbreviation | | | | | | |
|---|---|--|--|---|---|--|--|--|
| Managing Director of the Institute of Theoretical Physics Faculty of Physics and Astronomy eCTS Method of grading Only after succ. compt. of module(s) 6 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) or al examination in groups (groups of 2, approx. 30 minutes) or c) or al examination in groups (groups of 2, approx. 30 minutes) or c) or al examination in groups (groups of 2, approx. 30 minutes) or c) or al examination on acl examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exar nation date | Advanced Topics in Solid State Physics | | | | | 11-CSFM-161-m01 | | |
| Managing Director of the Institute of Theoretical Physics and Astrophysics Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 6 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German) V (3) + R (1) Method of assessment (spep x. 90 to 120 minutes) or b) or al examination (approx. 90 to 120 minutes) or c) or al examination in groups (groups of 2, approx, 30 minutes) or c) or al examination in groups (groups of 2, approx, 30 minutes) or c) or al examination in groups (groups of 2, approx, 30 minutes) or e) presentation/talk (approx, 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral exami | Module | coord | inator | | Module offered by | | | |
| 6 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination of one candidate each (approx. 30 minutes) or o) oral examination in groups (groups of 2, approx. 30 minutes) or b) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by | | | | eoretical Physics | - | and Astronomy | | |
| Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) and examination in groups (groups of 2, approx. 30 minutes) er eandidate) or d) project report (approx. 30 to 120 aniset) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the methor of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examation date at the latest. Language of assessment: | ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | | |
| 1 semester graduate Approval from examination committee required. Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or b) oral examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an eatemination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examation date at the latest. Language of assessment: German and/or English Allocation of places - - Mothod Horo | 6 | nume | rical grade | | | | | |
| Contents This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not covered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination in groups (groups of 2, approx. 30 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) project report (approx. 30 minutes) if a written examination may chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Workload | Duratio | n | Module level | Other prerequisites | | | | |
| This module will enable the lecturers of Condensed Matter Physics to teach advanced courses on topics not or vered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination in groups (groups of 2, approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or c) oral examination may a to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination mas chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exar nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload Morkload | 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | | |
| vered in any of the other modules. These topics may relate either to recent research developments or to subject not included in the regular curriculum. Intended learning outcomes The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or c) oral examination of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exam- nation date at the latest. Language of assessment: German and/or English Allocation of places | Conten | ts | | | | | | |
| The students advance their knowledge and understanding of an advanced topic of Condensed Matter Physics and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 9 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | vered in | n any o | f the other modules. The | | | | | |
| and acquire insights into the connections between research and teaching. Courses (type, number of weekly contact hours, language – if other than German) V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or e) presentation/talk (approx. 30 to 120 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 180 h Teaching cycle | Intende | ed learr | ning outcomes | | | | | |
| V (3) + R (1) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exar nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload Workload | | | | | | of Condensed Matter Physics | | |
| Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 180 h Teaching cycle | Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| module is creditable for bonus) a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload Faching cycle | V (3) + I | R (1) | | | | | | |
| b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the meth of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Additional information Workload 180 h Teaching cycle | | | | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | | |
| Additional information Workload 180 h Teaching cycle | b) oral of c) oral of d) proje e) prese If a writ stead ta of asse nation of Langua | examin examin ect repo entatio ten exa ake the ssmen date at ge of a | ation of one candidate e ation in groups (groups of ort (approx. 8 to 10 pages n/talk (approx. 30 minut amination was chosen as form of an oral examina t is changed, the lecturer the latest. ssessment: German and | ach (approx. 30 minu of 2, approx. 30 minu of or es) method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | nged and assessment may in- mination in groups. If the method | | |
| Workload 180 h Teaching cycle | Allocat | ion of p | olaces | | | | | |
| Workload 180 h Teaching cycle | | | | | | | | |
| 180 h Teaching cycle | Additional information | | | | | | | |
| 180 h Teaching cycle | | | | | | | | |
| Teaching cycle | Workload | | | | | | | |
| | | | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | Teaching cycle | | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | | |
| | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | |
| | | | | | | | | |

| Module | Module title Abbreviation | | | | | |
|--|--|--|--|---|--|--|
| Advand | ed Top | ics in Physics | | | 11-CSPM-161-m01 | |
| Module | e coord | inator | | Module offered by | I | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conten | Its | | | | | |
| module lar curr | es. The iculum | se topics may relate eithe | | | s not covered in any of the other subjects not included in the regu- | |
| | | ning outcomes | | | | |
| | | advance their knowledge ts into the connections b | | • | c of nanostructure technology and | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | rman) | | |
| V (3) + | R (1) | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the essmen date at | ation in groups (groups of centation/talk (approx. 3) amination was chosen as a form of an oral examina | of 2, approx. 30 minu o minutes). o method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | | | | | | |
| | | | | | | |
| Additio | onal inf | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | |
|---|---|---|--|--|---|
| Advanced Topics in Quantum Technology | | | | | 11-CSNM-212-m01 |
| Modul | e coord | linator | | Module offered by | 1 |
| Manag and As | | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics | and Astronomy |
| ECTS | Meth | od of grading | Only after succ. cor | npl. of module(s) | |
| 6 | nume | erical grade | | | |
| Duratio | on | Module level | Other prerequisites | ; | |
| 1 seme | ster | graduate | Approval from exam | nination committee | required. |
| Conter | ts | | | | |
| that ca | n not b | | odule. These lecture | s may either reflect | ive lectures on advanced topics new developments in research or |
| | - | ning outcomes | | | |
| | | deepen their knowledge nts into the interface betw | | • | in quantum technology, thereby |
| Course | S (type, | number of weekly contact hours, | language — if other than Ge | rman) | |
| V (3) + Module | | nt in: German or English | | | |
| | | sessment (type, scope, langua ble for bonus) | age — if other than German, | examination offered — if r | not every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examin or pres tten ex ake the essmen date a | nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessm tion of one candidate r must inform studen | ites per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- |
| Allocat | ion of | places | | | |
| | | | | | |
| Additio | onal inf | formation | | | |
| | | | | | |
| Worklo | ad | | | | |
| 180 h | | | | | |
| Teachi | ng cycl | le | | | |
| | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | ammes) | |
| | | | | | |

| Module | Module title Abbreviation | | | | | |
|---|---|--|--|--|--|--|
| Current Topics in Physik | | | | | 11-EXP6A-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Content | ts | | | | | |
| | | in Experimental or Theor tudy abroad. | etical Physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed learı | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + F | R (1) | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examin ect repo entatio ten exa ake the ssmen date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minu) or es) method of assessme tion of one candidate must inform student | tes per candidate) of ent, this may be char e each or an oral exam | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additio | Additional information | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachin | Teaching cycle | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module | Module title Abbreviation | | | | | |
|---|--|--|--|--|---|--|
| Current | t Topic s | s in Physik | | | 11-EXP7-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 7 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Intende | ed lear | ning outcomes | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + | R (1) | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chai e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 210 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |
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Winter Term 2024

(ECTS credits)

| Module | Module title Abbreviation | | | | | |
|---|---|--|--|--|--|--|
| Current Topics in Physik | | | | | 11-EXP6-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achieve | ements, e.g. in case of change of | |
| Intende | ed leari | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + F | R (1) | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examin ect repo entatio ten exa ake the ssmen date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minu) or es) method of assessme tion of one candidate must inform student | tes per candidate) of ent, this may be char e each or an oral exam | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additio | Additional information | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachin | ng cycl | e | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module | Module title Abbreviation | | | | | |
|---|---|--|--|--|--|--|
| Current Topics in Physik | | | | | 11-EXP6A-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Content | ts | | | | | |
| | | in Experimental or Theor tudy abroad. | etical Physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed learı | ning outcomes | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + F | R (1) | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examin ect repo entatio ten exa ake the ssmen date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minu) or es) method of assessme tion of one candidate must inform student | tes per candidate) of ent, this may be char e each or an oral exam | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocati | ion of p | olaces | | | | |
| | | | | | | |
| Additio | Additional information | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachin | Teaching cycle | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module | Module title Abbreviation | | | | | |
|--|--|--|--|--|---|--|
| Current | t Topics | s in Physik | | | 11-EXP5-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 5 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | in Experimental or Theor tudy abroad. | retical Physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed learı | ning outcomes | | | | |
| Theore subdis | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (2) + | R (2) | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examination | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chan e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| - | | | | | | |
| Workload | | | | | | |
| 150 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Module | Module title Abbreviation | | | | | |
|---|---|--|--|--|---|--|
| Current | Topics | s in Physik | | | 11-EXP7-161-m01 | |
| Module | e coord | inator | | Module offered by | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 7 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Intende | ed leari | ning outcomes | | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + | R (1) | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| or oral (pages) If a writ stead ta of asse nation | examin or pres ten exa ake the ssmen date at | ation in groups (groups o entation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be char e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 210 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Current Topics in Physik 11-EXP8-161-m01 Module creations in the provided in the physics and Astronomy Faculty of Physics and Astronomy ECTS Method is grading Only after succ. compl. of module(s) ECTS Method is grading Only after succ. compl. of module(s) S numerical grade - Duration Module level Other prerequisites Is emester graduate Approval from examination committee required. Contents S Set in the students and the oretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended Examination completencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the speciation areas. Courses (type, number of weekly contact hours, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination of an oral examination in groups (groups of 2, approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) are andidate or on oral examination in groups (groups of 2, approx. 30 minutes) are andidate each (approx. 30 minutes) or oral examination was chosen as method of assessment tis changed, the lecturer must i | Module | Module title Abbreviation | | | | | |
|---|---|---|---|--|--|---|--|
| chairperson of examination committee Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of ne candidate each (approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes) or alexamination in groups. (If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination of a acet at the latest. Language of assessment: is changed, the lecturer must inform students about this by four weeks prior to the original examination o | Current Topics in Physik 11-EXP8-161-m | | | | | 11-EXP8-161-m01 | |
| ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade | Module | e coord | inator | | Module offered by | | |
| 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intende learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German, examination of fored – if not every senester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) or project report (approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups. If the method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by | chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Contents Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination (approx. 90 to 120 minutes). If a written examination may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination on and examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | 8 | nume | rical grade | | | | |
| Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Workload 240 h Teaching cycle | Duratio | n | Module level | Other prerequisites | | | |
| Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 9 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Conten | ts | | | | | |
| The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | | | | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | Intende | ed lear | ning outcomes | | | | |
| V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Theoret subdise | tical Ph cipline | ysics of the Master's pro of Physics and understar | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | ey have knowledge of a current nods necessary to acquire this | |
| Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Workload 240 h Teaching cycle | Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | V (4) + | R (2) | | | | | |
| or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Additional information Workload 240 h Teaching cycle | | | | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| Additional information Workload 240 h Teaching cycle | or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina- t is changed, the lecturer t the latest. | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be char e each or an oral exa | r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method | |
| Workload 240 h Teaching cycle | Allocat | ion of p | olaces | | | | |
| Workload 240 h Teaching cycle | | | | | | | |
| 240 h Teaching cycle | Additional information | | | | | | |
| 240 h Teaching cycle | | | | | | | |
| Teaching cycle | Workload | | | | | | |
| - | 240 h | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | Teaching cycle | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | |
| | Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | | |

| Module title Abbreviation | | | | | | |
|---|--|---|--|---|---|--|
| Curren | t Topic | s in Quantum Technology | y | | 11-EXN5-212-m01 | |
| Modul | e coord | inator | | Module offered by | 1 | |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | |
| 5 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee | required. | |
| Conter | Its | | | | | |
| | | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achie | vements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physic: rent fie | s on Ma Id in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods w | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this put fields of application. | |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | | |
| V (2) + Module | • • | t in: German or English | | | | |
| | | Sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if r | not every semester, information on whether | |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). s method of assessme tion of one candidate r must inform student | tes per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- | |
| Allocat | ion of _l | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 150 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Module | Module title Abbreviation | | | | | |
|--|---|--|--|---|--|--|
| Current Topics in Quantum Technology | | | | | 11-EXN6-212-m01 | |
| Module | e coord | inator | | Module offered by | <u> </u> | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | |
| ECTS | 1 | od of grading | Only after succ. com | | , | |
| 6 | nume | rical grade | | - | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conten | ts | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed lear | ning outcomes | | | | |
| physics rent fie | s on Ma Id in pł | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | |
| Course | S (type, r | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (3) + Module | | t in: German or English | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachi | Teaching cycle | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Module title Abbreviation | | | | | Abbreviation | |
|---|---|---|--|---|---|--|
| Curren | t Topic | s in Quantum Technology | y | | 11-EXN7-212-m01 | |
| Modul | e coord | inator | | Module offered by | , | |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | |
| 7 | nume | rical grade | | | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. | |
| Conter | nts | | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | vements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physic: rent fie | s on Ma eld in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods wl | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this but fields of application. | |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | rman) | | |
| V (3) + Module | | t in: German or English | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether | |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessme tion of one candidate 7 must inform student | tes per candidate) (ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- | |
| Allocat | tion of _l | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 210 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | |

| Module | Module title Abbreviation | | | | | |
|---|--|--|--|---|--|--|
| Current Topics in Quantum Technology | | | | | 11-EXN8-212-m01 | |
| Module | e coord | inator | | Module offered by | <u> </u> | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | |
| ECTS | r – | od of grading | Only after succ. con | | , | |
| 8 | | rical grade | | • | | |
| Duratio | on | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conten | ts | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intende | ed leari | ning outcomes | | | | |
| physics rent fie | s on Ma Id in pł | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | |
| V (4) + Module | | t in: German or English | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of eentation/talk (approx. 30 amination was chosen as form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additional information | | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 240 h | | | | | | |
| Teaching cycle | | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | |
| | | | | | | |

| Module title Abbreviation | | | | | Abbreviation |
|---|---|--|--|---|---|
| Curren | t Topic | s in Quantum Technolog | SY | | 11-EXN6A-212-m01 |
| Module | e coord | inator | | Module offered b | y |
| chairpe | erson o | f examination committe | e | Faculty of Physics | and Astronomy |
| ECTS | Meth | od of grading | Only after succ. con | pl. of module(s) | |
| 6 | nume | rical grade | | | |
| Duratio | on | Module level | Other prerequisites | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. |
| Conten | nts | | | | |
| | • | in experimental or theo tudy abroad. | retical physics. Credit | ed academic achie | evements, e.g. in case of change of |
| Intend | ed lear | ning outcomes | | | |
| physic: rent fie knowle | s on Ma eld in pl edge. H | aster's level in the study nysics and insight into th e/She is able to classify | programme Quantum ne measuring and calo and to link the learnt. | Technology. He/S ulating methods w He/She knows ab | odule in theoretical or experimental he commands knowledge in a cur- which are necessary to acquire this out fields of application. |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | |
| V (3) + Module | | t in: German or English | | | |
| | | Sessment (type, scope, langu le for bonus) | age — if other than German, o | examination offered — if | not every semester, information on whether |
| or oral pages) If a wri stead t of asse nation | examir or pres tten exa ake the essmen date at | aation in groups (groups sentation/talk (approx. g amination was chosen a e form of an oral examina | of 2, approx. 30 minu 30 minutes). 5 method of assessme ation of one candidate r must inform student | tes per candidate) ent, this may be ch e each or an oral ex | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- camination in groups. If the method ir weeks prior to the original exami- |
| Allocat | tion of _l | olaces | | | |
| | | | | | |
| Additional information | | | | | |
| | | | | | |
| Workload | | | | | |
| 180 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| Referre | ed to in | LPO I (examination regulation | ns for teaching-degree progra | mmes) | |

| Module title | | | | | Abbreviation | |
|--|--|---|---|---|---|--|
| Advanc | ed Top | ics in Solid State Physic | S | | 11-CSFM-161-m01 | |
| Module | coord | inator | | Module offered by | | |
| Managi and Ast | | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics a | and Astronomy | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | |
| 6 | nume | rical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conten | ts | | | | | |
| vered in | n any o | | | - | anced courses on topics not co- arch developments or to subjects | |
| Intende | ed learr | ning outcomes | | | | |
| | | advance their knowledge sights into the connectio | | | of Condensed Matter Physics | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | rman) | | |
| V (3) + | R (1) | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| b) oral d c) oral d d) proje e) prese If a writ stead ta of asse nation Langua | examin examin ect repo entatio ten exa ake the ssmen date at ge of a | form of an oral examina t is changed, the lecturer the latest. ssessment: German and | ach (approx. 30 minu of 2, approx. 30 minu s) or es) s method of assessme tion of one candidate r must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | ion of p | olaces | | | | |
| | | | | | | |
| Additio | Additional information | | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachir | ng cycl | e | | | | |
| | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | |

| Module | Module title Abbreviation | | | | | | |
|--|--|--|--|---|---|--|--|
| Advanced Topics in Physics | | | | | 11-CSPM-161-m01 | | |
| Module | e coord | inator | | Module offered by | 1 | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | | | |
| 6 | nume | rical grade | | | | | |
| Duratio | on | Module level | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | |
| Conten | Its | | | | | | |
| | es. The | se topics may relate eithe | | | s not covered in any of the other subjects not included in the regu- | | |
| Intend | ed learı | ning outcomes | | | | | |
| | | advance their knowledge ts into the connections b | | • | of nanostructure technology and | | |
| Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + | R (1) | | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the essmen date at | ation in groups (groups of centation/talk (approx. 3) amination was chosen as a form of an oral examina | of 2, approx. 30 minu o minutes). o method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocat | ion of p | olaces | | | | | |
| | | | _ | | | | |
| Additio | onal inf | ormation | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 180 h | | | | | | | |
| Teaching cycle | | | | | | | |
| | | | | | | | |
| Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Module title | | | | • | Abbreviation |
|---|---|--|---|--|---|
| Advanc | ed Top | ics in Quantum Technolo | ogy | | 11-CSNM-212-m01 |
| Module | coord | inator | | Module offered by | |
| Managi and Ast | | ector of the Institute of Th sics | eoretical Physics | Faculty of Physics a | and Astronomy |
| ECTS | Metho | od of grading | Only after succ. con | npl. of module(s) | |
| 6 | nume | rical grade | | | |
| Duratio | n | Module level | Other prerequisites | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | required. |
| Conten | ts | | | | |
| that car deal wi Intende | n not b th topi ed lear i | e covered by any other m cs that are not included i ning outcomes | odule. These lecture n the regular teachin | s may either reflect i g cycle. | ve lectures on advanced topics new developments in research or |
| | | deepen their knowledge a ts into the interface betw | | | in quantum technology, thereby |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ge | rman) | |
| | taugh | t in: German or English | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, | examination offered — if no | ot every semester, information on whether |
| or oral of pages) If a writ stead ta of asse nation of | examin or pres ten exa ake the ssmen date at | ation in groups (groups of sentation/talk (approx. 30 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). method of assessm tion of one candidate must inform student | ites per candidate) c ent, this may be cha e each or an oral exa | ididate each (approx. 30 minutes) or project report (approx. 8 to 10 inged and assessment may in- amination in groups. If the method weeks prior to the original exami- |
| Allocat | ion of p | olaces | | | |
| | | | | | |
| Additional information | | | | | |
| | | | | | |
| Workload | | | | | |
| 180 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referre | d to in | LPO I (examination regulation | s for teaching-degree progra | ammes) | |
| | | | | | |



Summer Term 2025

(ECTS credits)

| Module title | | | | | Abbreviation | |
|---|--|---|---|--|--|--|
| Current | Topics | in Physik | | | 11-EXP6-161-m01 | |
| Module | coordi | nator | | Module offered by | | |
| chairpe | rson of | examination committee | | Faculty of Physics a | nd Astronomy | |
| ECTS | Metho | d of grading | Only after succ. com | pl. of module(s) | | |
| 6 | numer | ical grade | | | | |
| Duratio | n | Module level | Other prerequisites | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | |
| Conten | ts | | | | | |
| | | in experimental or theor udy abroad. | etical physics. Credit | ed academic achieve | ements, e.g. in case of change of | |
| Intende | ed learn | ing outcomes | | | | |
| Theoret subdisc | ical Ph cipline (| ysics of the Master's prog | gramme of Nanostruc nd the measuring and | ture Technology. Th /or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | |
| | | umber of weekly contact hours, la | | | | |
| V (3) + F | R (1) | | | | | |
| | | essment (type, scope, language e for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examina ect repo entation ten exa ake the ssment date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minut) or es) method of assessme tion of one candidate must inform student | tes per candidate) or ent, this may be char e each or an oral exar | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocati | ion of p | laces | | | | |
| | | | | | | |
| Additio | nal info | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 180 h | | | | | | |
| Teachin | Teaching cycle | | | | | |
| | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module title | | | | | Abbreviation | | |
|---|---|--|--|--|--|--|--|
| Current | Topics | s in Physik | | | 11-EXP6A-161-m01 | | |
| Module | coord | inator | | Module offered by | | | |
| chairpe | rson o | f examination committee | | Faculty of Physics a | nd Astronomy | | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | | |
| 6 | nume | rical grade | | | | | |
| Duratio | n | Module level | Other prerequisites | | | | |
| 1 semes | ster | graduate | Approval from exam | ination committee re | equired. | | |
| Content | ts | | | | | | |
| | | in Experimental or Theor tudy abroad. | etical Physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intende | ed learı | ning outcomes | | | | | |
| Theoret subdisc | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. | | |
| Courses | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + F | R (1) | | | | | | |
| | | essment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether | | |
| b) oral e c) oral e d) proje e) prese If a writ stead ta of asses nation o | examin examin ect repo entatio ten exa ake the ssmen date at | form of an oral examinat | ach (approx. 30 minu of 2, approx. 30 minu) or es) method of assessme tion of one candidate must inform student | tes per candidate) of ent, this may be char e each or an oral exam | r nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocati | ion of p | olaces | | | | | |
| | | | | | | | |
| Additio | nal inf | ormation | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 180 h | | | | | | | |
| Teachin | ng cycl | e | | | | | |
| | | | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |
| | | | | | | | |

| Module title | | | | | Abbreviation |
|--|--|--|--|--|---|
| Current Topics in Physik | | | | | 11-EXP5-161-m01 |
| Module | e coord | inator | | Module offered by | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | |
| 5 | nume | rical grade | | | |
| Duratio | n | Module level | Other prerequisites | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. |
| Conten | ts | | | | |
| | | in Experimental or Theor tudy abroad. | retical Physics. Credit | ed academic achiev | ements, e.g. in case of change of |
| Intende | ed learı | ning outcomes | | | |
| Theore subdis | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. |
| Course | S (type, n | number of weekly contact hours, l | anguage — if other than Ger | man) | |
| V (2) + | R (2) | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examination | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chan e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- |
| Allocat | ion of p | olaces | | | |
| | | | | | |
| Additio | nal inf | ormation | | | |
| | | | | | |
| Workload | | | | | |
| 150 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | |
| | | | | | |

| Module title | | | | | Abbreviation |
|---|--|--|--|--|---|
| Current | t Topic s | s in Physik | | | 11-EXP7-161-m01 |
| Module | e coord | inator | | Module offered by | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | |
| 7 | nume | rical grade | | | |
| Duratio | n | Module level | Other prerequisites | | |
| 1 seme | ster | graduate | Approval from exam | ination committee re | equired. |
| Conten | ts | | | | |
| | | of Experimental and The versity or study abroad. | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of |
| Intende | ed lear | ning outcomes | | | |
| Theoret subdise | tical Ph cipline | ysics of the Master's pro | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | of a module of Experimental or ey have knowledge of a current nods necessary to acquire this application areas. |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | |
| V (3) + | R (1) | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | t every semester, information on whether |
| or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be chai e each or an oral exa | didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- |
| Allocat | ion of p | olaces | | | |
| | | | | | |
| Additio | nal inf | ormation | | | |
| | | | | | |
| Workload | | | | | |
| 210 h | | | | | |
| Teaching cycle | | | | | |
| | | | | | |
| Referre | d to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | |
| | | | | | |
| | | | | | |

| Current Topics in Physik 11-EXP8-161-m01 Module creations in the provided in the physics and Astronomy Faculty of Physics and Astronomy ECTS Method is grading Only after succ. compl. of module(s) ECTS Method is grading Only after succ. compl. of module(s) S numerical grade - Duration Module level Other prerequisites Is emester graduate Approval from examination committee required. Contents S Set in the students and the oretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended Examination completencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the speciation areas. Courses (type, number of weekly contact hours, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination of an oral examination of an oral examination in groups (groups of 2, approx. 30 minutes) or oral examination in groups. If a writter examination was chosen as method of assessment, this may be changed and ingroups. A so injunetes is prior to the original examination area set is changed, the lecture must inform students about this by four examination in groups. If the method of assessment is change | Module title | | | | | Abbreviation | |
|---|---|--|--|--|--|---|--|
| chairperson of examination committee Faculty of Physics and Astronomy ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of ne candidate each (approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes) or alexamination in groups. (If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination of a acet at the latest. Language of assessment: is changed, the lecturer must inform students about this by four weeks prior to the original examination o | Current Topics in Physik | | | | | 11-EXP8-161-m01 | |
| ECTS Method of grading Only after succ. compl. of module(s) 8 numerical grade | Module | e coord | inator | | Module offered by | | |
| 8 numerical grade Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intende learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German, examination of fored – if not every senester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes) or project report (approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination (approx. 90 to 120 minutes). If a written examination in groups. If the method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by | chairpe | erson o | f examination committee | | Faculty of Physics a | nd Astronomy | |
| Duration Module level Other prerequisites 1 semester graduate Approval from examination committee required. Contents Contents Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination of one candidate each (approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination (approx. 90 to 120 minutes). If a written examination may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | |
| 1 semester graduate Approval from examination committee required. Contents Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination in groups (groups of 2, approx. 30 minutes) or oral examination of one candidate each (approx. 30 minutes). If a written examination in groups (groups of 2, approx. 30 minutes). If a written examination on and examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | 8 | nume | rical grade | | | | |
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| Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (a) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | 1 seme | ster | graduate | Approval from exam | ination committee re | equired. | |
| change of university or study abroad. Intended learning outcomes The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 9 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Conten | ts | | | | | |
| The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | | | | oretical Physics. Acci | redited academic ac | hievements, e.g. in case of | |
| Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas. Courses (type, number of weekly contact hours, language – if other than German) V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places | Intende | ed lear | ning outcomes | | | | |
| V (4) + R (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | Theoret subdise | tical Ph cipline | ysics of the Master's pro of Physics and understar | gramme of Nanostruc nd the measuring and | cture Technology. Th I/or calculation meth | ey have knowledge of a current nods necessary to acquire this | |
| Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Workload 240 h Teaching cycle | Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | |
| module is creditable for bonus) written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Morkload 240 h Teaching cycle | V (4) + | R (2) | | | | | |
| or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Allocation of places Additional information Workload 240 h Teaching cycle | | | | ge — if other than German, e | examination offered — if no | t every semester, information on whether | |
| Additional information Workload 240 h Teaching cycle | or oral pages) If a writ stead ta of asse nation | examin or pres tten exa ake the ssmen date at | nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina t is changed, the lecturer t the latest. | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be char e each or an oral exa | r project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method | |
| Workload 240 h Teaching cycle | Allocat | ion of p | olaces | | | | |
| Workload 240 h Teaching cycle | | | | | | | |
| 240 h Teaching cycle | Additio | nal inf | ormation | | | | |
| 240 h Teaching cycle | | | | | | | |
| Teaching cycle | Workload | | | | | | |
| - | 240 h | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | Teaching cycle | | | | | | |
| Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | |
| | Referre | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |
| | | | | | | | |

| Modul | Module title Abbreviation | | | | | |
|---|---|--|---|--|--|--|
| Curren | Current Topics in Quantum Technology 11-EXN5-212-mo1 | | | | | |
| Module coordinator M | | | | Module offered by | | |
| chairperson of examination committee | | | 1 | Faculty of Physics a | and Astronomy | |
| ECTS | Meth | od of grading | Only after succ. con | npl. of module(s) | | |
| 5 | nume | rical grade | | | | |
| | | | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | |
| Conter | nts | | | | | |
| | | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | ements, e.g. in case of change of | |
| Intend | ed lear | ning outcomes | | | | |
| physic rent fie | s on Ma eld in pl | aster's level in the study | programme Quantum e measuring and calc | Technology. He/Sh culating methods wh | lule in theoretical or experimental e commands knowledge in a cur- nich are necessary to acquire this ut fields of application. | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | rman) | | |
| V (2) + Modul | | t in: German or English | | | | |
| | | Sessment (type, scope, langua ile for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | tion of _l | olaces | | | | |
| | | | | | | |
| Additio | onal inf | ormation | | | | |
| | | | | | | |
| Workload | | | | | | |
| 150 h | 150 h | | | | | |
| Teachi | ng cycl | e | | | | |
| | | | | | | |
| Referre | ed to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | |
| | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |

| Module title Abbreviation | | | | | | | | | |
|--|---|---|---|---|--|--|--|--|--|
| Current | Current Topics in Quantum Technology 11-EXN6-212-mo1 | | | | | | | | |
| Module coordinator Module offered by | | | | | 1 | | | | |
| chairpe | erson o | f examination committee | 9 | Faculty of Physics | and Astronomy | | | | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | | | | |
| 6 | nume | rical grade | | | | | | | |
| | | | Other prerequisites | | | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee | required. | | | | |
| Conten | Its | | | | | | | | |
| | • | in experimental or theo tudy abroad. | retical physics. Credit | ed academic achie | vements, e.g. in case of change of | | | | |
| Intende | ed lear | ning outcomes | | | | | | | |
| physics rent fie knowle | s on Ma Id in pl dge. H | aster's level in the study nysics and insight into th e/She is able to classify | programme Quantum he measuring and calc and to link the learnt. | Technology. He/Sl ulating methods w He/She knows ab | dule in theoretical or experimental ne commands knowledge in a cur- hich are necessary to acquire this out fields of application. | | | | |
| Course | S (type, r | number of weekly contact hours, | language — if other than Ger | man) | | | | | |
| V (3) + Module | | t in: German or English | | | | | | | |
| | | Sessment (type, scope, langua le for bonus) | age — if other than German, e | examination offered — if | not every semester, information on whether | | | | |
| or oral pages) If a writ stead t of asse nation | written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | | | |
| Allocat | ion of _l | olaces | | | | | | | |
| | | | | | | | | | |
| Additio | onal inf | ormation | | | | | | | |
| | | | | | | | | | |
| Workload | | | | | | | | | |
| 180 h | 180 h | | | | | | | | |
| Teachi | ng cycl | e | | | | | | | |
| | | | | | | | | | |
| | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | | | | |
| Referre | ed to in | LPO I (examination regulation | ns for teaching-degree progra | mmes) | | | | | |

| Module title Abbreviation | | | | | | | | | | |
|---|--|---|--|--|--|--|--|--|--|--|
| Curren | Current Topics in Quantum Technology 11-EXN7-212-mo1 | | | | | | | | | |
| Module coordinator Modu | | | | Module offered by | , | | | | | |
| chairpe | erson o | f examination committee | ! | Faculty of Physics | and Astronomy | | | | | |
| ECTS | Metho | od of grading | Only after succ. con | pl. of module(s) | | | | | | |
| 7 | nume | rical grade | | | | | | | | |
| Duration Module level Other prerequisites | | | Other prerequisites | | | | | | | |
| 1 seme | ester | graduate | Approval from exam | ination committee | required. | | | | | |
| Conter | nts | | | | | | | | | |
| | • | in experimental or theor tudy abroad. | retical physics. Credit | ed academic achiev | /ements, e.g. in case of change of | | | | | |
| Intend | ed lear | ning outcomes | | | | | | | | |
| physic: rent fie knowle | s on Ma eld in pl edge. H | aster's level in the study nysics and insight into th e/She is able to classify | programme Quantum e measuring and calc and to link the learnt. | Technology. He/Sh ulating methods w He/She knows abo | dule in theoretical or experimental le commands knowledge in a cur- hich are necessary to acquire this but fields of application. | | | | | |
| Course | S (type, r | number of weekly contact hours, | anguage — if other than Ger | man) | | | | | | |
| V (3) + Modul | | t in: German or English | | | | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if n | ot every semester, information on whether | | | | | |
| written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | | | | | |
| Allocat | tion of p | olaces | | | | | | | | |
| | | | | | | | | | | |
| Additio | onal inf | ormation | | | | | | | | |
| | | | | | | | | | | |
| Workload | | | | | | | | | | |
| 210 h | 210 h | | | | | | | | | |
| Teachi | Teaching cycle | | | | | | | | | |
| | | | | | | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | mmes) | | | | | | |
| | | | | | Referred to in LPO I (examination regulations for teaching-degree programmes) | | | | | |

| Modul | Module title Abbreviation | | | | | | |
|---|---|--|--|--|--|--|--|
| | Current Topics in Quantum Technology 11-EXN8-212-m01 | | | | | | |
| curren | | | | | | | |
| Module coordinator | | | | Module offered by | | | |
| chairpe | erson o | f examination committee | | Faculty of Physics a | and Astronomy | | |
| ECTS | Metho | od of grading | Only after succ. com | pl. of module(s) | | | |
| 8 | nume | rical grade | | | | | |
| Duratio | on | Module level | Other prerequisites | | | | |
| 1 seme | ester | graduate | Approval from exam | ination committee r | equired. | | |
| Conter | nts | | | | | | |
| | | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intend | ed lear | ning outcomes | | | | | |
| physic: rent fie | s on Ma eld in pl | aster's level in the study p | programme Quantum e measuring and calc | Technology. He/Should be the second s | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (4) + | | | | | | | |
| | | t in: German or English | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, e | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a wri stead t of asse nation | examin or pres tten exa ake the essmen date at | ation in groups (groups of centation/talk (approx. 30 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) ir project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | | |
| Allocat | tion of p | olaces | | | | | |
| | _ | | | | | | |
| Additio | onal inf | ormation | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 240 h | 240 h | | | | | | |
| Teachi | ng cycl | e | | | | | |
| | | | | | | | |
| Referre | ed to in | LPO I (examination regulations | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |
| | | | | | | | |

| Module | Module title Abbreviation | | | | | | |
|--|---|--|---|---|--|--|--|
| Current | Current Topics in Quantum Technology 11-EXN6A-212-mo1 | | | | | | |
| Module coordinator Module offered by | | | | | | | |
| chairperson of examination committee | | | | Faculty of Physics a | and Astronomy | | |
| ECTS | r – | od of grading | Only after succ. con | | , | | |
| 6 | | rical grade | | • | | | |
| | | | Other prerequisites | | | | |
| 1 seme | ster | graduate | Approval from exam | ination committee r | equired. | | |
| Conten | ts | | | | | | |
| | • | in experimental or theor tudy abroad. | etical physics. Credit | ed academic achiev | ements, e.g. in case of change of | | |
| Intende | ed leari | ning outcomes | | | | | |
| physics rent fie | s on Ma Id in pł | ster's level in the study p | programme Quantum e measuring and calc | Technology. He/Sho culating methods wh | ule in theoretical or experimental e commands knowledge in a cur- ich are necessary to acquire this ut fields of application. | | |
| Course | S (type, n | umber of weekly contact hours, l | anguage — if other than Ger | man) | | | |
| V (3) + Module | | t in: German or English | | | | | |
| | | s essment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | | |
| or oral pages) If a writ stead t of asse nation | written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English | | | | | | |
| Allocat | ion of p | olaces | | | | | |
| | | | | | | | |
| Additio | Additional information | | | | | | |
| | | | | | | | |
| Worklo | Workload | | | | | | |
| 180 h | 180 h | | | | | | |
| Teachi | ng cycl | e | | | | | |
| | | | | | | | |
| Referre | d to in | LPO I (examination regulation | s for teaching-degree progra | mmes) | | | |
| | | | | | | | |

| mouule lille | Module title Abbreviation | | | | | | |
|--|---|-------------------------------|-----------------------------|---|--|--|--|
| Advanced Topics in Solid State Physics 11-CSFM-161-mo1 | | | | | | | |
| Module coo | rdinator | | Module offered by | <u> </u> | | | |
| Managing D and Astroph | irector of the Institute of Tl hysics | neoretical Physics | Faculty of Physics a | and Astronomy | | | |
| ECTS Met | hod of grading | Only after succ. com | pl. of module(s) | | | | |
| 6 nun | nerical grade | | | | | | |
| Duration | Module level | Other prerequisites | | | | | |
| 1 semester | graduate | Approval from exam | ination committee re | equired. | | | |
| Contents | | | | | | | |
| vered in any | | se topics may relate e | | anced courses on topics not co- arch developments or to subjects | | | |
| Intended le | arning outcomes | | | | | | |
| | s advance their knowledge insights into the connection | | | of Condensed Matter Physics | | | |
| Courses (type | e, number of weekly contact hours, | language — if other than Ger | man) | | | | |
| V (3) + R (1) | | | | | | | |
| Method of a module is credit | | age — if other than German, e | examination offered — if no | ot every semester, information on whether | | | |
| a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English | | | | | | | |
| Allocation o | of places | | | | | | |
| | | | | | | | |
| Additional i | nformation | | | | | | |
| | | | | | | | |
| Workload | | | | | | | |
| 180 h | | | | | | | |
| Teaching cy | cle | | | | | | |
| | | | | | | | |
| Referred to | in LPO I (examination regulation | s for teaching-degree progra | mmes) | | | | |
| | | | | | | | |

| Module | Module title Abbreviation | | | | | |
|--|---|---|--|---|--|--|
| Advanc | Advanced Topics in Physics 11-CSPM-161-m01 | | | | | |
| Module | e coord | inator | | Module offered by | | |
| | | f examination committee | | Faculty of Physics a | and Astronomy | |
| ECTS | 1 | od of grading | Only after succ. con | | | |
| 6 | | rical grade | | | | |
| Duratio | | Module level | Other prerequisites | | | |
| 1 seme | ster | graduate | Approval from exam | | equired. | |
| Conten | ts | | | | | |
| module lar curr | es. The iculum | se topics may relate eithe · | | | s not covered in any of the other subjects not included in the regu- | |
| Intende | ed lear | ning outcomes | | | | |
| | | advance their knowledge Its into the connections b | | | c of nanostructure technology and | |
| Course | S (type, r | number of weekly contact hours, l | anguage — if other than Ger | rman) | | |
| V (3) + | R (1) | | | | | |
| | | sessment (type, scope, langua le for bonus) | ge — if other than German, o | examination offered — if no | ot every semester, information on whether | |
| or oral pages) If a writ stead t of asse nation | examin or pres tten exa ake the essmen date at | aation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina | of 2, approx. 30 minu o minutes). o method of assessme tion of one candidate must inform student | tes per candidate) o ent, this may be cha e each or an oral exa | didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may in- mination in groups. If the method weeks prior to the original exami- | |
| Allocat | | | | | | |
| | | | | | | |
| Additio | onal inf | ormation | | | | |
| | | | | | | |
| Worklo | Workload | | | | | |
| 180 h | | | | | | |
| Teachi | Teaching cycle | | | | | |
| | | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | mmes) | | |
| | | | | | | |
| | | | | | | |

| Module title Abb | | | | | Abbreviation | |
|---|---|---|--|--|---|--|
| Advanced Topics in Quantum Technology | | | | | 11-CSNM-212-m01 | |
| Module coordinator | | | | Module offered by | 1 | |
| Manag and As | | ector of the Institute of Th sics | neoretical Physics | Faculty of Physics | and Astronomy | |
| ECTS | Meth | od of grading | Only after succ. cor | npl. of module(s) | | |
| 6 | numerical grade | | | | | |
| Duratio | on | Module level | Other prerequisites | 5 | | |
| 1 seme | ster | graduate | Approval from exam | nination committee | required. | |
| Conter | Its | | | | | |
| that ca deal w | n not b ith topi | be covered by any other mics that are not included i | odule. These lecture | s may either reflect | ive lectures on advanced topics new developments in research or | |
| | - | ning outcomes | | | | |
| | | deepen their knowledge nts into the interface betw | | • | in quantum technology, thereby | |
| Course | S (type, | number of weekly contact hours, | language — if other than Ge | rman) | | |
| V (3) + Module | | nt in: German or English | | | | |
| | | sessment (type, scope, langua ble for bonus) | age — if other than German, | examination offered — if r | not every semester, information on whether | |
| or oral pages) If a wri stead t of asse nation | examin or pres tten ex ake the essmen date a | nation in groups (groups sentation/talk (approx. 3 amination was chosen as e form of an oral examina | of 2, approx. 30 minu o minutes). 5 method of assessm tion of one candidate r must inform studen | utes per candidate) ent, this may be cha e each or an oral exa | ndidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in- amination in groups. If the method r weeks prior to the original exami- | |
| Allocat | ion of | places | | | | |
| | | | | | | |
| Additio | onal inf | formation | | | | |
| | | | | | | |
| Worklo | Workload | | | | | |
| 180 h | 180 h | | | | | |
| Teachi | ng cycl | le | | | | |
| | | | | | | |
| Referre | ed to in | LPOI (examination regulation | s for teaching-degree progra | ammes) | | |
| | | | | | | |