

Examination Regulations for the master's degree program in Physics

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Siegen, June 28,

2017

— DRAFT —

Table of contents

- 1 Basis and objectives of degree program
- 2 Master's degree
- 3 Scope and structure of degree program
- 4 Admission requirements
- 5 Examining board
- 6 Authorized examiners
- 7 Course work requirements
- 8 Examination
- 9 Organization of examinations
- 10 Retaking examinations
- 11 Research stage
- 12 Assignment and organization of master's thesis
- 13 Acceptance and assessment of master's thesis
- 14 Repeating the master's thesis
- 15 Grading of course work and examinations
- 16 Overall grade
- 17 Award of master's degree
- 18 Certificate and transcript of records

- 19 Master's diploma and diploma supplement
- 20 Recognition of study times, course work and passed examinations
- 21 Family regulation, protective provisions, times of absence
- 22 Compensation for disabled and chronically ill students
- 23 Failure to attend, withdrawal, fraud, breach of regulations
- 24 Invalidity of course work and examination performances, revocation of master's degree
- 25 Access to examination documents
- 26 Entry into effect and publication
- A List of modules for the master's degree program in Physics
- B Degree plan

I GENERAL

Section 1 Basis and objectives of degree program

(1) The master's degree program in Physics is the continuation of a completed bachelor's program in Physics. The purpose of the degree program is to develop the advanced specialist and methodological knowledge required for the profession of scientist in the field of physics and to obtain an overview of the correlations in the field. As a research-oriented degree program, the master's degree program in Physics prepares for independent academic work in the context of a doctorate.

(2) The students are provided with advanced knowledge through courses in an area of special scientific focus to be chosen by the students themselves as well as through the master's thesis at the one-year research stage and through elective options in further research and application-oriented fields of modern physics.

Section 2 Master's degree

Upon successful completion of the degree program, the University will award the academic degree of "Master of Science" (M.Sc.).

Section 3 Scope and structure of degree program

(1) The standard period of study is four semesters.

(2) The degree program has a modular structure. The workload for the individual modules is quantified by credit points (CP) according to the European Credit Transfer and Accumulation System (ECTS). The overall workload for the degree program is 120 CP. 1 CP corresponds to a time requirement of 30 hours.

(3) The modules are divided into a one-year course stage and a one-year research stage, subdivided into the sections

- (a) Area of special focus (3 modules with 24 CP)
- (b) Internships (1 module with 9 CP)
- (c) Advanced seminar (1 module with 6 CP)
- (d) Elective section (module with a total of 21 CP)
- (e) Research stage with master's thesis (3 modules with 60 CP)

The list of modules can be found in the Annex to these Examination Regulations.

Section 4 Admission requirements

(1) Admission to the master's degree program is subject to the successful graduation from a bachelor's program in physics at a university within the area of application of the German Basic Law or a first degree with a comparable professional qualification.

(2) For admission to the master's degree program, prospective students who do not have completed their admission requirements at a German-language institution must provide proof of proficiency in German or English at the level of the DSH examination (proficiency in German) or a TOEFL iBT of at least 87 or an IELTS (Volume 5 – 6) test (proficiency in English) or a comparable test. If no proof of proficiency in German can be provided, only courses in English can be taken.

(3) Admission to the master's degree program requires proof of particular qualification for the degree program. Details can be found in the Regulation on Determination of Qualification for the master's degree program in Physics (M.Sc.) at the University of Siegen.

(4) Enrollment is not permitted if the prospective student has failed a compulsory examination according to the examination regulations in a degree program of essentially similar content and no longer has the right to retake the exam.

II EXAMINING BOARD AND AUTHORIZED EXAMINERS

Section 5 Examining board

(1) For the organization of examinations and the tasks assigned by the Examination Regulations, the Faculty Council of Faculty IV: Faculty of Natural Science and Technology establishes an examining board for the subject of Physics, hereinafter the "Examining Board".

(2) The Examining Board ensures that the provisions of the Examination Regulations are complied with and enforces the proper organization of examinations. In particular, the Examining Board is responsible for decisions regarding objections against decisions in the context of course work and examination performances.

(3) The Examining Board reports to the Faculty Council and the Department of Physics and also consults them on issues concerning the Examination Regulations, the degree plans, examination and course work requirements.

(4) The Examining Board consists of four members from the group of professors, one member from the group of academic employees, and two members from group of group of students. All members shall belong to the Department of Physics. The term of office of the members from the group of professors and the members from the group of academic employees is three years. The term of office of the members from the group of students is one year. Reelection is permitted.

(5) The Examination Board elects the chairperson and the deputy chairperson from the group of professors.

(6) The Examination Board shall be deemed to have a quorum if the chairperson or the deputy chairperson, two additional members from the group of professors and two additional members with voting rights are present. Decisions require a simple majority. In case of a tie, the vote of the chairperson or, if absent, the vote of the deputy chairperson shall be decisive. The meetings and decisions of the Examining Board shall be documented in minutes.

(7) The members from the group of students do not contribute to teaching and academic decisions, in particular concerning the assessment, recognition or transfer of completed course work and passed examinations and the appointment of examiners.

- (8) The members of the Examining Board have the right to sit in on examinations.
- (9) The meetings of the Examining Board are not public. The members of the Examining Board are required to maintain confidentiality with regard to their official duties. In case they are not public servants, they shall be bound to confidentiality by the chairperson of the Examining Board.
- (10) The Examining Board can invite additional persons to attend meetings if this is objectively appropriate. Paragraph 9 sentences 2 and 3 apply accordingly to these persons.
- (11) The Examining Board can delegate the fulfillment of its tasks to the chairperson and the deputy chairperson. This does not apply to decisions on objections.
- (12) The Examining Board is a public authority within the meaning of administrative procedural law.

Section 6 Authorized examiners

- (1) The Examining Board appoints the examiners for the examinations according to Section 8.
- (2) The persons authorized to act as examiners shall be members of the Department of Physics at the University of Siegen and shall teach or have taught independently at the Department of Physics. They shall be members of the group of professors or shall have successfully completed a habilitation procedure. The Examining Board decides on exceptions for compelling reasons.
- (3) Persons who fulfill the conditions according to paragraph 2 generally shall be authorized to act as examiners; the dean's office, in consultation with the Examining Board, decides on exceptions.
- (4) Persons who, as a minimum, hold a master's degree or diploma in the examination subject or a comparable degree can be appointed as observers.
- (5) Section 5 (9) sentences 2 and 3 apply accordingly to the examiners as well as to the observers.
- (6) The examiners are independent with regard to their examination activity.

III Award of master's degree

Section 7 Course work requirements

- (1) Course work requirements document the achievement of the learning objectives of the individual modules. The credit points for a module are considered obtained when the course work for the module has been performed. Excluded from this are the modules completed by an examination (Section 8) as well as the master's thesis; for these modules, the credit points are obtained upon passing the examination and successful completion of the master's thesis, respectively.
- (2) Course work performances are graded. Deviating from sentence 1, the course work performances at the research stage are not graded.
- (3) The form and scope of the course work performances for a module are defined by module coordinators in consultation with the Examining Board and shall be communicated to the students at the start of the course.

(4) The course work for a module shall be performed until the start of lectures in the subsequent semester in each case.

(5) The assessment of course work performances shall be communicated to the student after six weeks at the latest in each case.

(6) Course work performances are reviewed individually. Possible forms are, in particular, written examinations, a form of oral examination, seminar presentations, exercises, internship reports or written papers. Course work performances in multiple choice format are not permitted.

(7) The table in Section 15 shall apply to the assessment of graded course work. Graded course work is considered completed if the grade is at least "sufficient" (4.0). It is considered not completed if the grade is "failed" (5.0).

(8) For the assessment of ungraded course work, the statement that the course work was performed shall suffice. Provided that the student submits the according application in due time, the course work performance can be assessed as graded course work. This assessment does not contribute to the performance grade according to Section 16.

(9) The module coordinator accepts the course work performance and assesses it. If several persons are responsible for a module, the person who has taught the course in the respective semester will accept the course work performance. He/she shall ensure that the course work performed for a module and its assessment are recorded by the Examining Board.

(10) The Examining Board decides on the acceptance of course work and examination performances, including the allocation of credit points.

(11) Course work not performed or considered not performed can be repeated without restriction.

Section 8 Examination

(1) In an area of special focus to be chosen by the candidate, the comprehensive understanding of the contents and the achievement of the learning objectives is determined by means of an examination. The examination in the subject of special focus concludes the module "Advanced subject" in the compulsory elective section.

(2) The examination will focus on the content taught in a specialized course with 9 credit points and of the advanced subject with 6 credit points. The modules chosen for the examination shall feature related contents as a subject of special focus and shall be communicated by the candidate when registering for the examination. A requirement for admission to this examination is that the course work for the modules stated in sentence 1 has been performed in its entirety.

Section 9 Organization of examinations

(1) The application for admission to an examination shall be submitted in writing to the chairperson of the Examining Board no later than two weeks prior to the scheduled examination date.

(2) The Examining Board appoints the examiner and sets the examination date in consideration of the submitted proposal and notifies the candidate in due time, generally no later than two weeks prior to the scheduled examination date.

(3) The candidate can deregister from an examination. The deregistration is effective if it has been communicated to both the examiner and the Examining Board no later than 1 week prior to the scheduled examination date.

(4) The examination is taken as an individual oral examination by a reviewer in the presence of an observer who is proficient in the field. The duration of an examination is between 30 and 45 minutes. Prior to determining the grade according to Section 15, the examiner shall hear the observer.

(5) The observer compiles minutes of the examination. The minutes contain the names of the examiner, the observer and the candidate, the date and duration as well as the essential details of the examination. Subsequent to the examination, the assessment shall be entered into the minutes and disclosed to the candidate. The minutes are signed by the examiner and the observer. The examiner ensures that the minutes are recorded without delay by the Examining Board.

(6) If the examination has been assessed as "failed" (5.0), the chairperson of the Examining Board will issue an according written notice which also includes the conditions and terms for retaking the examination.

Section 10 Retaking examinations

(1) A failed examination can be retaken. If the retake examination is likewise failed, it can be retaken a second time. A third retake examination is not permitted.

(2) If a second retake examination is failed, the examination is failed without the right to retake it again.

(3) Retake examinations shall be taken within thirteen months of issuance of the notice regarding the failed examination. If the candidate fails to register for a retake examination within three years of issuance of the notice regarding the failed examination, he/she will lose the right to take the examination unless he/she can provide proof that he/she is not responsible for the non-observance of this deadline. The Examining Board decides on any exceptions.

(4) The deadline within the meaning of paragraph 3 is extended

1. for the care and upbringing of children who are minors within the meaning of Section 25 (5) of the Federal Education Assistance Act by three semesters per child,
2. for the participation as an elected representative in university bodies, the student body, department associations of the student body or student services by a total maximum of four semesters,
3. for fulfilling the function of gender equality officer by a maximum of four semesters,
4. to compensate for the extra time required to complete the degree program due to disability or severe illness, and
5. by up to three semesters for the time in which students assume responsibility for close relatives who require care and support.

(5) Retaking a passed examination is not permitted.

(6) The candidate can suggest new examiners for a retake examination.

(7) Deviating from Section 9 (4) sentence 1, a second examiner shall be appointed for the second retake examination.

Section 11 Research stage

(1) The one-year research stage consists of the preparation project, the familiarization project and the master's thesis.

(2) The familiarization project serves the advanced study and the acquisition of knowledge of the academic literature and the current state of the area of special focus from which the topic of the master's thesis shall be taken.

(3) In the preparation project, students work on tasks in order to acquire the specific experimental and/or theoretical methods and the knowledge of their area of special focus to an extent that enables them to apply these methods to issues in the context of a subsequent master's thesis.

(4) The familiarization project and the preparation project can be assigned by any authorized examiner acting as the supervisor. Upon request, the Examining Board shall ensure that the student gets assigned the familiarization project and the preparation project. The completion period is three months in each case. The successful completion of the preparation project and the familiarization project shall be recorded as a course work performance by the Examining Board in each case.

(5) By writing the master's thesis, the students are intended to demonstrate that they are able to work on a defined scientific issue from modern experimental or theoretical physics within the specified period, applying scientific methods and presenting and interpreting the task, the means to solve it and the solution in an understandable and logical manner.

(6) A requirement for assignment of the master's thesis is that the course work for the modules

- Specialized course (subject of special focus)
- Advanced subject (subject of special focus)
- Specialized course (complementary subject)
- Master's internship - Advanced seminar
- Preparation project
- Familiarization project

has been completed and the cross-module examination in the area of special focus has been passed.

Section 12 Assignment and organization of master's thesis

(1) The master's thesis can be assigned by any person who is an authorized examiner, acting as the supervisor. Upon request, the Examining Board will ensure that the candidate is assigned a master's thesis. The date and time of assignment shall be recorded by the Examining Board.

(2) Upon request, the Examining Board can allow the master's thesis to be organized at an establishment outside of the Department of Physics.

(3) The completion period for the master's thesis is six months. The topic and the task must be designed in such a way that the thesis can be completed and submitted by the specified deadline. The recommended scope of the thesis is 60 pages.

(4) The Examining Board can exceptionally extend the completion period once by up to six weeks. The according application must be submitted no later than two weeks before the end of the completion period and reasons must be provided in writing. The thesis supervisor shall be heard on the issue.

(5) The candidate can reject the topic of the thesis during the first two months. In this case a new application for assignment of a master's thesis shall be submitted. Rejecting the topic a second time is not permitted.

Section 13 Acceptance and grading of master's thesis

(1) The master's thesis shall be submitted in triplicate to the Examining Board by the end of the completion period. If the master's thesis is not submitted within the specified period without good reason, it will be assessed as "failed" (5.0).

(2) Upon submission of the master's thesis, the candidate shall affirm in writing that he/she has completed the thesis independently, has used only the indicated sources and aids and has identified all citations.

(3) The Examining Board will appoint a person who is an authorized examiner as the primary reviewer and another person who is an authorized examiner as the secondary reviewer of the master's thesis. The primary reviewer shall be the supervisor of the thesis. Both the supervisor and the candidate can propose secondary reviewers. Upon request, the Examining Board can appoint a secondary reviewer outside of the Department of Physics, provided that the qualification of the person in question is equivalent to the requirements of Section 6 (3).

(4) The written reviews must include the assessment of the thesis according to the table in Section 15 and reasons for this grading must be provided. The overall grade of the master's thesis is based on the individual assessments by averaging according to Section 15 (3) sentence 1.

(5) If the difference between the individual assessments is greater than 2.0 or the thesis is given a grade of "failed" (5.0) by one of the reviewers, a third review shall be obtained from an authorized examiner. If the thesis is assessed as "failed" (5.0) in two of the three reviews, the grade of the master's thesis is "failed" (5.0). In all other cases, the grade of the master's thesis results from the two better grades according to Section 15 (3) sentence 1.

(6) The candidate shall be notified of the grade of the master's thesis no later than eight weeks after submission of the thesis. If the thesis has been assessed as "failed" (5.0), the chairperson of the Examining Board will issue an according written notice which also includes the conditions and terms for repeating the master's thesis.

Section 14 Repeating the master's thesis

(1) A failed master's thesis can be repeated once. In this case, rejecting the topic according to Section 12 (5) is permitted only if this option was not already exercised for the first master's thesis. A second repetition is not permitted.

(2) If the second master's thesis is failed, the master's thesis is failed without the right to repeat it again.

(3) The registration of the second master's thesis shall take place within thirteen months of issuance of the notice regarding the failed master's thesis. If the candidate fails to register for a repeat of the master's thesis within three years of issuance of the notice regarding the failed master's thesis, he/she will lose the right to write the master's thesis unless he/she can provide proof that he/she is not responsible for the non-observance of this deadline. The Examining Board shall decide on any exceptions.

- (4) The deadline within the meaning of paragraph 3 is extended
1. for the care and upbringing of children who are minors within the meaning of Section 25 (5) of the Federal Education Assistance Act by three semesters per child,
 2. for the participation as an elected representative in university bodies, the student body, department associations of the student body or student services by a total maximum of four semesters,
 3. for fulfilling the function of gender equality officer by a maximum of four semesters,
 4. to compensate for the extra time required to complete the degree program due to disability or severe illness, and
 5. by up to three semesters for the time in which students assume responsibility for close relatives who require care and support.
- (5) Repeating a passed master's thesis is not permitted.
- (6) For a second master's thesis, the candidate can propose a new person who is an authorized examiner as the supervisor.

Section 15 Grading of course work and examinations

(1) For the grading of course work, examinations and the master's thesis, the following table of numeric values and designations applies:

Numeric value	Designation
1.0	Excellent
1.3	Very good
1.7 2.0 2.3	Good
2.7 3.0 3.3	Satisfactory
3.7 4.0	Sufficient
5.0	Failed

- (2) Course work is considered performed and/or an examination or the master's thesis is considered passed if the grade is 4.0 (sufficient) or better.
- (3) If a grade is calculated by averaging several individual grades, the numeric value of the grade results from the deletion of the second and all further decimal places of the calculated average. The designation of the grade results from the table in paragraph 1. If the exact numeric value does not appear in the table, the designation for the grade with the next smaller numeric value shall be used. The calculated average is only used if the numeric value of each individual grade is less than or equal to 4.0; otherwise the grade is "failed" (5.0).

Section 16 Overall grade

- (1) The completed master's degree program is assessed with an overall grade.
- (2) The following partial grades contribute to the calculation of the overall grade:
- (a) The performance grade with the weighting 30/100.
The performance grade is determined by weighted averaging of the grades of all graded course work performed for the award of master's degree according to Section 15.
An exception is made for the course work requirement for the module "Advanced subject" in the compulsory elective section. For this, each individual grade is weighted with the credit points allocated to the module.
 - (b) The grade of the examination in the area of special focus with the weighting 20/100.
 - (c) The grade of the master's thesis with the weighting 50/100.
- (3) The overall grade is determined from the weighted averaging of these partial grades according to Section 15.

Section 17 Award of master's degree

- (1) For the master's degree, the course work of all modules in the compulsory section must have been performed in its entirety (15 CP in total).
- (2) The course work of all modules in the compulsory elective section must have been performed in its entirety and the cross-module examination in the subject of special focus must have been passed (24 CP in total). The modules in the compulsory elective section serve the establishment of an individual area of special focus and shall be chosen from the courses offered for the master's degree program by the Department of Physics.
- (3) The course work of modules in the elective section with a total of 21 CP must have been performed in its entirety. The modules in the elective section shall be chosen from the courses offered for the master's degree program by the Department of Physics. Considering the compulsory elective section and the elective section together, modules amounting to at least 9 CP must be chosen from the specialist fields of experimental physics. Considering the compulsory elective section and the elective section together, modules amounting to at least 9 CP must be chosen from the specialist fields of theoretical physics. Upon request, the examining board can allow modules from other departments of the Faculty of Natural Sciences and Technology in the elective section.
- (4) The course work of the research stage (preparation and familiarization project) must have been performed in its entirety (30 CP).
- (5) The master's thesis must have been passed (30 CP).
- (6) If the requirements from paragraphs 1-5 are met, the overall grade is determined and the degree of Master of Science is awarded.

Section 18 Certificate and transcript of records

- (1) Upon being awarded the master's degree, the graduate receives a certificate and a transcript of records.
- (2) The certificate will show the grade and the topic of the master's thesis and the overall grade. It is signed by the chairperson of the Examining Board and the seal of the Faculty is affixed.
- (3) In addition to the overall grade, the transcript of records will show the list of all course work performances including the allocated credit points. It will show the allocated grades to the extent that the course work has been graded. In addition, it will show the performance grade, the grades of the cross-module examinations and the names of the examiners, as well as the topic, the supervisor, the credit points and the grade of the master's thesis. Performed course work exceeding the requirement for the award of the master's degree will also be listed upon request by the graduate. The transcript of records is signed by the chairperson of the Examining Board and the seal of the Faculty is affixed.
- (4) The certificate and the transcript of records show the date on which the last course work performance or examination has taken place; they will be issued without delay, if possible within four weeks.
- (5) If the student has not yet been awarded the master's degree, he/she can, upon request and submission of the relevant documentation, be issued a written document listing all performed course work and passed examinations with the allocated credit points. To the extent applicable, the grade and the name of the examiner will be entered. In addition, this document will feature a statement explaining that the master's degree has not been awarded yet.

Section 19 Master's diploma and diploma supplement

(1) Together with the certificate, the graduate is issued a master's diploma with the date of the certificate. It attests the award of the master's degree according to Section 2.

(2) The master's diploma is signed by the dean of the Faculty and the chairperson of the Examining Board and the seal of the Faculty is affixed.

(3) A diploma supplement is issued together with the certificate. The diploma supplement contains information about the degree program, its requirements and contents, the grading system and the type of degree. The diploma supplement is completed by information about the university and the German system of degree programs. The diploma supplement attests the ECTS level of the overall grade:

(4) The calculation of the ECTS grade is based on the final grades of the graduates of the master's degree program in Physics who have successfully completed the program over the course of the last 12 months, calculated from the month the certificate is issued. The attestation of ECTS level will only be issued for groups of at least 30 graduates.

IV SUPPLEMENTARY PROVISIONS

Section 20 Recognition of study times, course work and passed examinations

(1) Examinations passed in degree programs at other public or publicly approved universities, at public or publicly approved universities of cooperative education or in degree programs at public or publicly approved universities abroad will be recognized upon request if they essentially correspond to the examinations they are substituted for with regard to the acquired competences.

(2) The person submitting the application has to provide the necessary information about the performed examination to be recognized. The Examining Board has to prove that an application within the meaning of paragraph 1 does not fulfill the requirements for recognition. In case of doubt the Examining Board will hear the competent representatives of the subject. If essential differences according to the Lisbon Convention are found and proven, reasons for the decision not to recognize must be given in writing.

(3) Decisions on applications within the meaning of paragraph 1 are made within a period of two months.

(4) On the basis of the recognition according to paragraph 1, the student can be admitted to a semester calculated according to sentences 2 and 3; such admission is mandatory if the student applies for it. The semester of the degree program the student is admitted to results from the scope of the ECTS credit points acquired as a consequence of the recognition in relation to the overall scope of the total ECTS credit points that can be acquired in the respective degree program, multiplied by the standard period of study in semesters for the degree program. If the decimal place is less than five, it is rounded down to a whole number of semesters, otherwise it is rounded up; admission shall be at least to the 1st semester of the degree program.

(5) To the extent that arrangements and agreements of the Federal Republic of Germany with other countries on equivalency in higher education (equivalency agreements) provide favorable terms for foreign students deviating from paragraph 1, the provisions of the equivalency agreements shall apply.

(6) Upon request, other proficiencies and qualifications can be recognized on the basis of submitted documents if these proficiencies and qualifications are equivalent with regard to content and level to the examinations they are intended to be substituted for.

(7) If performed examinations are recognized, the grades – to the extent that the grading systems are comparable

– shall be transferred and included in the calculation of the overall grade.

(8) The competent examining board is responsible for transfers according to paragraphs 1 to 7.

Section 21 Family regulation, protective provisions, times of absence

- (1) Upon request of a female student, the maternity protection terms as specified by the German Maternity Protection Act (MuSchG) as amended shall be taken into account accordingly. The maternity protection terms suspend any term specified by these Examination Regulations. The duration of maternity protection is not included in the calculation of the terms.
- (2) Likewise the terms of parental leave in accordance with the German Parental Allowance and Parental Leave Act (BEEG) shall be taken into account upon request. Four weeks prior to the date on which the student intends to take parental leave at the latest, the student must notify the Examining Board of the period(s) in which he/she wants to take parental leave.
- (3) In addition, times of absence due to the care for or support of spouses, civil partners, direct-line relatives or persons related in the first degree by marriage shall be taken into account upon request if the aforementioned persons are in need of care or support. The application shall be submitted without delay once the conditions arise.
- (4) The documents required for review shall be enclosed with the applications.

Section 22 Compensation for disabled and chronically ill students

If a student can substantiate that he/she is unable, due to a chronic illness or disability within the meaning of Section 2 (1) SGB IX, to complete course work or perform examinations, in part or in total, in the intended form within the specified time for completion or deadline, the Examining Board will allow the time for completion or deadline to be extended or equivalent course work to be completed and/or equivalent examinations to be taken as the situation requires.

Section 23 Failure to attend, withdrawal, fraud, breach of regulations

- (1) An examination is considered assessed as "failed" (5.0) if the candidate fails to attend an examination without good reason or withdraws from the examination without good reason after it has started.
- (2) The reasons stated for the failure to attend or the withdrawal must be indicated in writing to the Examining Board and substantiated without delay. In case of illness of the candidate, a medical certificate documenting the inability to take examinations shall be submitted. If the Examining Board accepts the reasons, the candidate will be notified accordingly in writing and a new date will be scheduled.
- (3) To the extent that the compliance with examination deadlines, retaking examinations, reasons for the failure to attend examinations and the compliance with completion periods for examination papers are concerned, the illness of a child to be cared for primarily by the candidate alone shall be equivalent to the candidate's own illness.
- (4) If a candidate attempts to influence the outcome of course work or an examination by means of fraud or the use of aids that are not permitted, the course work shall be considered not completed and/or the examination shall be assessed as "failed" (5.0). If a candidate disturbs the proper conduct of course work or an examination, he/she can be excluded from continuing by the examiner or the supervising person after having been given due warning; in such a case, the course work shall be considered not completed and/or the examination shall be assessed as "failed" (5.0). The reasons for exclusion shall be recorded.

(5) The candidate affected by the decision made according to paragraph 4 can request within 14 days that the decision be reviewed by the Examining Board. The candidate shall be notified of incriminating decisions without delay and reasons shall be given for such decisions. Prior to the decision, the candidate shall be given the right to be heard.

Section 24 Invalidity of course work and examination performances, revocation of master's degree

(1) If a candidate has fraudulently completed course work or passed an examination and this fact becomes known only after the certificate has been issued, the Examining Board can retroactively amend the grades accordingly for the completed course work and the passed examinations for which fraud has been proven and can declare the course work as not completed and/or the examination as "failed (5.0).

(2) If the requirements for admission to an examination were not met without any intention of fraud by the candidate and this fact becomes known only after the certificate has been issued, this defect is remedied by the candidate having passed the examination. If the candidate has obtained admission with intention of fraud, the Examining Board shall decide on the legal consequences in consideration of the German Administrative Procedure Act.

(3) Before the decision is made, the person concerned shall be given the opportunity to explain himself/herself.

(4) The incorrect certificate, diploma and transcript of records shall be seized and replaced by new documents if applicable. Any decision according to paragraph 1 and paragraph 2, sentence 2 is excluded after five years have passed since the issuance of the master's diploma. The period between initiation and completion of an administrative procedure for the review of the revocation of the degree award is not counted towards the five-year term.

(5) If the certificate, diploma and transcript of records are to be seized according to paragraph 4 without replacement the degree of "Master of Science" is revoked.

Section 25 Access to examination documents

(1) Upon award of the master's degree, the graduate is granted access, upon request, to the minutes of the oral examinations and the written reviews of the master's thesis.

(2) The application shall be submitted to the Examining Board within one month of issuance of the certificate.

Section 26 Entry into effect and publication

(1) These Examination Regulations will enter into effect upon publication and apply to all students starting the master's degree program in Physics at the University of Siegen in winter semester 2018/2019 or later. At the same time, the examination regulations for the master's degree program in Physics dating from January 17, 2013 (ON 5/2013) will cease to be in effect.

(2) Students who have started the master's degree program in Physics at the University of Siegen prior to winter semester 2018/2019 can continue the program according to the examination regulations for the master's degree program in Physics dating from January 17, 2013 (ON 5/2013) until March 31, 2021. After this date, these Examination Regulations will apply without limitation. Upon request by a

student, these Examination Regulations can also be applied before March 31, 2021. The application shall be submitted in writing to the Examining Board and is irrevocable.

(3) These Examination Regulations shall be published in the "Official Notices of the University of Siegen".

ANNEX

A List of modules for the master's degree program in Physics

This Annex lists names, qualification objectives, contents and forms of teaching for the modules of the master's degree program. The workload assigned to the individual modules is quantified by the indicated credit points (CP).

Unless indicated otherwise, the credit points for a module are awarded on the basis of graded or ungraded course work, see Section 7. The conditions for the award of the master's degree are specified in Section 17.

Unless stated otherwise in these Examination Regulations, there are no requirements for the course work or examination performances in the form of other course work or examination performances. In case courses are not organized by the Department of Physics, the conditions for the requirements, form of teaching and grading of course work are the responsibility of the teaching units organizing the respective courses.

Abbreviations: L = lecture, E = exercise, I = internship, S = seminar, T = tutorial;
KQ = key qualifications; AW = academic work.

1. Compulsory elective section: Area of special focus (24 CP)
Qualification goal: Mastery of the content-related and methodological basics in specialist fields of modern physics; selection of individual areas of special focus for preparation for academic work at the research stage.
 - (a) Specialized course: Subject of special focus (L+E, 9 CP)
 - (b) Advanced subject: Subject of special focus (L+E, 6 CP)
 - (c) Specialized course: Complementary subject (L+E, 9 CP)
2. Compulsory section: Internships (9 CP):
Qualification goal: Skilled application of experimental methodology and structural documentation capacity with regard to the demands of modern physics.
 - (a) Master's internship: Experiments from specialist fields of modern physics (I, 9 CP)
3. Compulsory section: Advanced seminar (6 CP)
Qualification goal: Mastery of form and terminology of scientific communication in the context of physics research.
 - (a) Advanced seminar in Physics: Report from a specialist field of modern physics (S, 6 CP)
4. Elective section(21 CP):
Qualification goal: Expansion of knowledge in specialist fields of physics or related fields of mathematics, natural sciences or engineering.
 - (a) Courses on specific subfields of physics (L/E/S)
 - (b) Courses from other departments at the Faculty of Natural Sciences and Technology (L/E/S/I)The choice of modules is subject to the restrictions in Section 17 (3).

5. Research stage (60 CP):

Qualification goal: Acquisition of the capacity for independent academic work in a current field of research, including the comprehensible, structured and logical presentation of problems and research results.

(a) Preparation project: Preparatory studies for academic work in a specialist field of modern physics (AW, 15 CP, not graded)

Familiarization project: Introduction to the methodology for academic work in a specialist field of modern physics (AW, 15 CP, not graded)

(b) Master's thesis: Academic work from a specialist field of modern physics (WA, 30 CP).

The requirements for assignment of the master's thesis are specified in Section 11 (6).

B Degree plan

Degree plan for the master's degree program

1st semester	2nd semester	3rd semester	4th semester
Specialized course Subject of special focus 4L/2E (9)	Elective section Subject of special focus 2L/2E (6)	Examination Subject of special focus (-)	
	Specialized course Complementary subject 4L/2E (9)		
Elective section 2L/2E (6)	Elective section 2L/2E (6)		
Elective section 2L/2E (6)	Elective section 1L/1E (3)		
Master's internship 4I (9)	Advanced seminar 2S (6)	Prep. for + familiarization with the master's thesis (15+15)	Master's thesis (30)
(30)	(30)	(30)	(30)