Translation of the Examination and Study Regulations of the Internationally Oriented Master of Science Programme Physics
(for the purpose of information only)

As of 30. August 2007

Based on § 34 (1) Sent. 3 of the Landeshochschulgesetz from 01.01.2005 (GBI. 2005, p. 1) the Senat of the Universität Stuttgart has on the day of 16. May 2007 enacted the following Examination und Study Regulations of the Universität Stuttgart for the Master of Science programme Physics.

The Rektor has given his consent based on § 34 (1) Sent. 3 of the Landeshochschulgesetz on the day of 30. August 2007, Az.: 7831.175-P-01.

Table of Contents

I. General Regulations

§ 1 Purpose of the Examination
§ 2 Master of Science Degree
§ 3 Credit Point System and Modules
§ 4 Formal Length and Structure of Study Programme, Credits
§ 5 Outline of Studies and Examinations
§ 6 Admission to Modules and Courses
§ 7 Examination Deadlines
§ 8 Examination Board
§ 9 Examiners and Assessors
§ 10 General Admission Requirements to Examinations
§ 11 Module Examinations, Course and Examination Achievements
§ 12 Language of Instruction
§ 13 Course Achievements and Examinations Concomitant to the Courses
§ 14 Oral Examinations
§ 15 Written Examinations
§ 16 Evaluation of Course Credits and Examination Performances, Module Grades
§ 17 Absence, Withdrawal, Deception, Violation of the Regulations
§ 18 Passing and Non-Passing
§ 19 Repeating of Examinations
§ 20 Credit of Study Periods, Course Achievements and Examination Results

II. Master of Science Examination

§ 21 Purpose of the Master of Science Examination
§ 22 Method and Complexity of the Master of Science Examination
§ 23 Master Thesis
§ 24 Calculation of Final Grade and Certificate of Examinations
§ 25 University Degree and Master of Science Certificate

III. Final Clauses

§ 26 Inspection of Examination Documents
§ 27 Invalidity of an Examination
§ 28 Coming into Effect and Transitional Regulations

Appendix: Scheme of Study Plan
Overview over the Module Examinations
Preamble
This is a translation of the “Examination and Study Regulations of the Internationally Oriented Master of Science Programme Physics at the Universität Stuttgart”. It has been prepared for the purpose of information only; the legally binding document is the original version written in German language entitled “Prüfungs- und Studienordnung der Universität Stuttgart für den auslandsorientierten Masterstudiengang Physics, vom 30. August 2007”.

I. General Regulations

§ 1 Purpose of the Examination
The Master of Science examination terminates the programme of study with a professional qualification in Physics. With the Master of Science examination it should be determined whether the candidate has acquired the capability, to deal independently with scientific problems in his field of specialisation, to develop new methods and to apply them in complex situations.

§ 2 Master of Science Degree
(1) After passing the examination the Universität Stuttgart grants the academic degree “Master of Science” (M. Sc.).

§ 3 Credit Point System and Modules
(1) During the studies credit points have to be earned. They are a qualitative measure of the workload of the students during their studies. On average, 30 credit points have to be earned per semester. This corresponds to a workload of approx. 900 hours. The earning of credit points requires a successful participation at the courses or a successful producing of certain course achievements, respectively. It also requires that the candidate passed the corresponding module examination or partial examination.

(2) The study programme is structured into modules, for which the credits of the corresponding module will be distributed after passing the module examination or the partly examinations. The modules contain courses, exercises and lab courses coherent in content with a duration of one, but at maximum two semesters.

§ 4 Formal Length and Structure of Study Programme, Credits
(1) The standard period of study is 4 semesters. It includes the module examinations and the time allotted to the Master Thesis preparation.

(2) The amount of time required for the successful completion of the master degree is equivalent to 120 ECTS points. 90 ECTS points are allotted to the master thesis and 90 ECTS points to the course work and examinations during the studies.

(3) Credits can only be earned by producing course achievements and by passing examinations, which had been graded at least “ausreichend (4,0)” or “attended successfully” (“mit Erfolg teilgenommen”), respectively. The distribution of ECTS points on the individual modules and courses of the compulsory and elective lectures is regulated in the Appendix of this Examination Regulation.

(4) It is expected from German students who were admitted to this programme that they studied at least one semester at a foreign university.
§ 5 Outline of Studies and Examinations

(1) The Master of Science examination consists of module examinations which are given along the study programme and the Master Thesis. The course and thesis work extends over all 4 semesters.

(2) The modules offered are listed in Appendix of this Examination Regulation.

§ 6 Admission to Modules and Courses

The right to participate at certain modules or courses, respectively, can be connected to the proof of successful participation at certain courses or the passing of an examination, if this is required for performing the studies according to the rules in this course.

§ 7 Examination Deadlines

(1) The entitlement of examinations in the Master of Science programme Physics expires if the Master of Science examination was not taken successfully within 8 semesters of studies in the Physics programme, unless the candidate is not responsible for the failure to meet the deadline. The Head of the Examination Board will decide on this upon application of the examinee.

(2) Pregnant students are not allowed to take examinations during the last six weeks before childbirth. Exceptions can be made upon written application to the Head of the Examination Board by the student in which the student explicitly states the willingness to take the examination. The application can be withdrawn by the student anytime. Women in childbed are not allowed to take examinations during the first eight weeks after childbirth. In the case of preterm or multiple birth this period is extended to twelve weeks, in case of preterm birth in addition by the period which could not be used according to Sent.1. In the case of death of the child the mother can take examinations before these deadlines pass if she demands this explicitly and if a medical certificate does not oppose this. She can always cancel this statement towards the Head of the Examination Board.

(3) Students who are legally bound to care for a child under the age of eight years and who live in the same household with this child and who take care of the child mainly by them own are entitled to take examinations and proofs of successful participation at the corresponding courses after the corresponding deadlines passed. The Head of the Examination Board decides on the extension of the deadline upon application of the candidate. Time limits for repeat examinations can be extended up to two semesters only. The time of treatment of the Master Thesis can only be extended according to the deadline mentioned in § 23 (5). The eligibility expires with the end of the semester in which the conditions mentioned in Sent.1 do not apply anymore. The deadline in (1) is to extend by at maximum 6 semesters per child if the conditions according to Sent.1 were fulfilled for that period. Incidentally, the eligibility expires at latest with the end of the semester in which the child completes its eighth year. Students have to proof the corresponding evidence. Changes of the conditions have to be communicated immediately.

(4) Students who, without being unable to study, for ill health reasons or because of a long-lasting or continuous disability are unable to attend regularly the course lectures and to take the examinations in due time, are entitled to take individual examinations and proofs of successful participation at the corresponding courses after the corresponding deadlines passed. The Head of the Examination Board decides on the extension of the deadline upon application of the candidate. Time limits for repeat examinations can be extended up to two semesters only; otherwise the maximum extension is two years. The candidate has to proof the corresponding evidence, particularly a medical certificate; in
cases of doubt it can be required to present a medical certificate from a doctor appointed by the Universität Stuttgart. Changes of the conditions have to be communicated immediately.

(5) A function as elected member in a board provided for by statute or statutory authorities of the university or the Studentenwerk during at least one year can be disregarded up to one year of studies by the calculation of the deadlines; the Rektor decides on this upon request of the candidate.

§ 8 Examination Board

(1) For the organisation of the examinations and all other tasks allotted by these Regulations the Faculty of Mathematics and Physics constitutes the Examination Board. The Head of the Examination Board, his or her deputy and the other members as well as their deputies are appointed by the Faculty Council (Fakultätsrat) of the Faculty of Mathematics and Physics. The Examination Board consists of:
   1. three professors or extraordinary professors that belong to the full-time personal of the Universität Stuttgart,
   2. one scientific employee,
   3. one student (with advisory vote).
The Head of the Examination Board and his or her deputy can only be a professor or extraordinary professor in terms of No.1. The Head of the Examination Board as a general rule conducts the business of the Examination Board. Beyond this, the board can delegate certain responsibilities revocable to the chairperson.

(2) The voting members are elected for a period of three years; the student member is elected for a period of one year.

(3) The Examination Board is to ensure that the terms of this Examination Regulations are adhered to. It reports regularly to the Faculty on the development of the examination and study periods and the distribution of the final grades. The Examination Board is to ensure that the study and examination results can be achieved within the timeframe laid out in this Examination Regulations. For this purpose the students shall be informed in time about the form and number of the required study and examination achievements as well as the dates at which they have to be delivered.

(4) The members of the Examination Board are allowed to attend in examinations.

(5) The members of the Examination Board and their substitutes are sworn to secrecy. The members must be sworn to secrecy by the chair, if they are not members of the public service.

(6) Negative decisions of the Examination Board or its chairperson and an explanation of the reason behind the decision are to be promptly communicated to the candidate in writing, accompanied by legal advice. Challenges to those decisions are to be addressed in written form to the Head of the Examination Board within up to month after notification of the decision. In case the Examination Board does not remedy the challenge, it is to be presented to the Prorektor Lehre und Weiterbildung for decision.

(7) The Examination Board or its chairperson can use the assistance of the Examination Office.
§ 9 Examiners and Assessors

(1) The Examination Board appoints the examiners. The appointment can be assigned to the Head of the Examination Board. The examiner appoints the assessor.

(2) In general, examinations not concomitant to course modules are to be administered by professors and university or private lecturers (Hochschul- und Privatdozenten), and those scientific employees and lecturers for special purposes, who were authorized to conduct examinations. Scientific assistants, scientific employees, holders of teaching permits and teachers for special purposes can be appointed as examiners only in exceptional cases if not enough professors and university or private lecturers are available as examiners.

(3) For course achievements (Studienleistungen) and examinations concomitant to the courses (lehrveranstaltungsbegleitende Prüfungen), as a general rule the lecturer who taught the course will be appointed as examiner. The Examination Board can appoint another member of the subject who is involved in the teaching of the Master of Science programme as a examiner.

(4) The appointment as assessor of an oral examination requires, that the appointee is a graduate of Physics (M.Sc., Diplom, Lehramt) or that the appointee has successfully completed a comparable examination.

(5) § 8 (5) applies equally to the examiners and assessors.

(6) The examinees have to be informed in time about the examination dates and the names of the appointed examiners. There is no legal claim to the assignment of a specific examiner.

§ 10 General Admission Requirements to Examinations

(1) To module examinations and to the master thesis can be admitted, who

1. is enrolled as student of the M.Sc. programme Physics at the time of the registration for the examination,
2. has fulfilled the admission requirements of the specific examination and
3. has not lost the examination entitlement in the Master of Science programme Physics or in a related study programme in Germany. In a related study programme this only applies for the loss of the examination entitlement in examinations or modules, respectively, which are also required in the Master of Science programme Physics. Which study programmes are regarded as related decides the Head of Examination Board.

(2) The application for admission to examinations must be submitted in writing to the Examination Office (Prüfungsamt). Unless not already available at the Universität Stuttgart from earlier submission, the application must be accompanied by:

1. documentation regarding compliance to the requirements listed in §10 (1) No.1. -3.,
2. a statement whether the candidate has failed already in the Master of Science examination or an examination in a related study programme according to §10 (1) No.3. or whether he is currently involved in an examination procedure in such a study programme.

(3) If the candidate is unable to provide documentation required in (2) in a prescribed form, the Examination Board may allow to provide other acceptable evidence.
(4) If at the time of application the documentation is incomplete, the admission to the examination can be granted conditionally. In this case the completed documentation must be shown to the examiner by the time of examination at last.

(5) The Head Examination Board decides about the admission to examinations. If the admission was not declined within one month after receipt of the registration by the Examination Office (Prüfungsamt), the candidate is considered as admitted.

(6) The admission can be declined only if

1. the requirements listed in (1) are not fulfilled or
2. the documentation is incomplete or
3. the candidate has lost the examination entitlement in the Master of Science programme Physics or in a related study programme according to (1) No.3. at an university or an equally-ranked higher education institution (Hochschule) in Germany or is currently involved in an examination procedure in such a study programme.

(7) The deadlines for the examinations will be announced by the Examination Office (Prüfungsamt) of the Universität Stuttgart.

§ 11 Module Examinations, Course and Examination Achievements

(1) Each module examination consists of one or more course achievements (Studienleistungen) and/or examinations.

(2) Course achievements are

1. certifications of successful participation at the course which are demanded for admission to examinations (Vorleistungen),
2. non-graded proficiency certificates (nicht benotete Leistungsnachweise)

(3) Examinations are

1. written examination,
2. oral examinations,
3. examinations concomitant to the courses (lehrveranstaltungsbegleitende Prüfungen).

Form and scope of the examinations are to be fixed by the Examination Board and declared in the course handbook (Modulhandbuch). The students have to be informed about them at latest at the beginning of the semester.

(4) Examinations which are not a part of a course can be taken during a leave of absence (Beurlaubung), but not course achievements and examinations concomitant to the courses.

(5) If the candidate proofs with a medical certificate that he/she cannot take examinations in full or partially in the planned way because of continuous or permanent health problems, than the Head of the Examination Board allows him/her to make the examination within an extended handling period or to provide equivalent results in another form. The same applies for course achievements.

§ 12 Language of Instruction

The language for lectures and examinations is as a general rule English.
§ 13 Course Achievements and Examinations Concomitant to the Courses

(1) Course achievements and examinations concomitant to the courses are taken concomitant to the studies within the corresponding course. They consist out of written or oral achievements or successful participation at laboratory courses.

(2) The anticipated date, the form and scope of the course achievements or the examinations concomitant to the courses, respectively, are to be notified to all students by the lecturer of the course at the beginning of the semester.

§ 14 Oral Examinations

(1) With oral examinations the candidate is to demonstrate that the interrelations of the field of study to be examined are understood and that particular questions can be properly allocated to these interrelations.

(2) Oral examinations are conducted by a committee consisting of all examiners having contributed to the module. If only one examiner is present at an oral examination the examination requires the presence of a knowledgeable assessor.

(3) The duration of an oral examination is as a general rule between 30 minutes and 60 minutes. The exact duration is fixed by the Examination Board on the suggestion of the examiner and will be published in the course handbook. It has to be announced at the beginning of the corresponding semester.

(4) The essential facts and the results of the oral examination are to be documented in a written record which has to be signed by the examiner and the assessor. The result of the examination will be fixed by the examiner after hearing the assessor and is to be communicated to the candidate immediately after the examination.

(5) Upon application, students of the same programme can be admitted to participate as auditors at an oral examination provided that enough space is available. The admission does not attend to the counselling and announcement of the examination results of the examinee. Out of solid grounds or if the candidate applies for it, the public can be excluded from the examination.

§ 15 Written Examinations

(1) With written examinations the candidate is to demonstrate the ability to understand and solve a problem of his/her subject within a given time limit and with a limited collection of resources.

(2) Written examinations are to be evaluated by at least one examiner. If the examiner grades the examination results with “failed” (in German "nicht ausreichend") the evaluation by a second examiner is required. In this case one of the examiners has to be a professor. The final grade then is the average of the two individual grades (§ 16 (2) Sent. 3). The grading procedure should not take more than four weeks.

(3) The duration of a written examination is as a general rule between 60 minutes and 120 minutes. The exact duration is fixed by the Examination Board on the suggestion of the examiner and will be published in the course handbook. It has to be announced at the beginning of the corresponding semester.

(4) Written examinations can be conducted completely or partially with the multiple-choice method. The corresponding examiner is responsible for the problems and the evaluation. The problems must allow reliable results.
§ 16 Evaluation of Course Credits and Examination Performances, Module Grades

(1) Course achievements according to § 11 (2) No. 1 und 2 will be evaluated with grade "participated successfully" ("mit Erfolg teilgenommen") or "participated without success" ("ohne Erfolg teilgenommen"). The former is at least equivalent to the grade "ausreichend" (4,0).

(2) The grades for individual examinations are determined by the respective examiner. The following grades are admissible:

1 = sehr gut = an excellent performance;
2 = gut = a performance which is significantly above average;
3 = befriedigend = an average performance;
4 = ausreichend = a performance that is sufficient despite deficiencies;
5 = nicht ausreichend = an insufficient performance.

For a more differentiated grading the above listed numerical grade can be increased or decreased by a value of 0,3; die grades 0,7; 4,3; 4,7 and 5,3 are not admissible. If examinations are graded independently by more than one examiner, the grade is calculated out of the arithmetic average of the individual grades; the third sentence of (3) applies.

(3) If a module consists out of multiple examinations, the module grade is calculated out of the weighted average of the individual examinations. The weights of the individual examinations are defined in the course handbook. Only the first decimal (after the comma) is used in the calculated weighted average; i.e. the weighted average is truncated (without rounding) after the first decimal.

(4) The module grades are:

for a result up to 1,5 = sehr gut,
for a result from 1,6 up to 2,5 = gut,
for a result from 2,6 up to 3,5 = befriedigend,
for a result from von 3,6 up to 4,0 = ausreichend,
for a result above 4,0 = nicht ausreichend.

§ 17 Absence, Withdrawal, Deception, Violation of the Regulations

(1) Failure to attend an obligatory examination will result in a mark "nicht ausreichend" (5,0); the same result is obtained if the student withdraws without cogent reasons after the examination has begun, or if in the case of written examinations the results are not achieved within the allotted time. A withdrawal from a registered examination is possible until four weeks before the examination date without giving reasons. This is not possible for examinations concomitant to the courses and re-examinations which must be repeated at the next scheduled examination date.

(2) The reasons stated for a late withdrawal or the absence must be submitted in writing and to be shown credibly to the Head of the Examination Board and the examiner before the examination date. In the case of failure to attend for reasons of ill health, a medical certificate must be submitted to the Head of the Examination Board within three working days. The medical certificate must state that the candidate is unable to take the examination and indicate, for how long the ill health condition is likely to persist. As far as the observation of the deadline for the first registration to an examination, the repeating of examinations, the reasons for absence from examinations and the observation of times allotted for achieving examination results are concerned, an ill health condition of a child for whom he/she has to take care mainly by his/her own or the home-care of a close
relative are equally ranked to the illness of the candidate. If the Head of the Examination Board accepts the student’s reasons, the candidate must take the examination at the next possible date provided that no separate date will be fixed; partial examination results are to be recognised and valued for the grading of the examination. If the Head of the Examination Board does not accept the student’s reasoning, the examination result will be graded "nicht ausreichend" (5,0).

(3) If a candidate who was fully aware or negligently unaware of a reason for withdrawal took an examination, a subsequent withdrawal out of this reason is excluded. Negligent unawareness is particularly given when there were indications of impairment to health and the candidate did not bring about a clarification.

(4) If the candidate attempts to improve the examination result by deception or by using resources not permitted, the module or Master Thesis, respectively, will be graded "nicht ausreichend" (5,0). The penalty mentioned in the first sentence can also be applied if the candidate carries resources not permitted about with him after the problems where distributed. If the candidate obstructs the proper administration and execution of the examination, the examiner can exclude the candidate from the continuation of the examination. In this case the examination is graded "nicht ausreichend" (5,0). In severe cases the examination board can exclude the candidate from further examinations.

§ 18 Passing and Non-Passing

(1) A module examination is passed, if all individual examinations have been graded at least with a grade of "ausreichend" (4,0) and all course achievements according to § 11 (2) No.1.-2. were passed successfully.

(2) The Master of Science examination is passed, if the Master Thesis is graded at least with a grade of "ausreichend" (4,0) and if all related module examinations are passed.

(3) If the candidate failed in a module examination or the Master Thesis, a notification will be issued in writing, accompanied by legal advice which informs about if and if applicable in what extent the module examination and the Master Thesis can be repeated. In the case of module examinations the announcement of the examination result also can happen in a different way.

(4) If the candidate finally failed in the Master of Science examination, upon application the Examination Office will issue a certificate in which, after providing the related supporting documents, the passed course achievements and examinations and their grades as well as the non-passed course achievements and examinations are listed. It will also indicate what course achievements and examinations are missing and that the candidate failed in the Master of Science examination.

§ 19 Repeating of Examinations

(1) An examination that has been graded "ausreichend" or better cannot be repeated.

(2) Examinations can be repeated once, if they have been graded "nicht ausreichend".

(3) A second repeating of the same examination is not possible. A second repeating of the Master Thesis is not allowed.

(4) Failed examinations must be repeated at the next scheduled examination date. Failure to take the examination at the next possible examination date will result in a grade „nicht ausreichend”. If cogent reasons for not taking the exam exist, the Head of the Examination Board can approve the withdrawal; §17 (2) is applicable.
§ 20 Credit of Study Periods, Course Achievements and Examination Results

(1) The Examination Board is responsible for the credit of course achievements and examination results.

(2) Study periods, course achievements and examination results from other programmes of study can be credited, if equivalence is ascertained. Equivalence is to be ascertained, if the period of study, study achievements and examination results largely conform in content, scope and demand to those of the corresponding subject according to these Regulations. An over-all assessment and total evaluation must be performed rather than a schematic comparison. Here, the assistance of the professor responsible for the subject area can be enlisted. For the credit of study periods, course achievements and examination results performed outside Germany the equivalent agreements (Äquivalenzvereinbarungen) approved by the Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz, KMK) and the Conference of the German University Rectors (Hochschulrektorenkonferenz, HRK) as well as agreements within university partnerships are to be taken into account. The credit can be refused, if more than one half of the total ECTS points or the Master Thesis should be credited.

(3) For study periods, course achievements and examination results in state-approved distance studies (2) applies, accordingly; (2) applies also for study periods, course achievements and examination results in other higher education institutions, in particular in state-run or state-approved Universities of Cooperative Education (Berufsakademien) as well as the “Fachschulen”, “Ingenieursschulen” and “Offiziersschulen” of the former German Democratic Republic.

(4) If course achievements and examination results were accepted, as far as the grading system is compatible, the grades will be transferred and included into the total grade according to § 15. In the case of non-compatible grading systems, the remark “passed” (“bestanden”) is entered; no inclusion in the evaluation of the module grade and final grade will occur. The acknowledgement can be noted in the certificate.

(5) Fulfilment of the conditions contained in (1) – (3) results in the right of acknowledgement. The acknowledgement of study periods, course achievements and examination results performed in Germany is carried out officially. The candidate has to present all documents required for the acknowledgement.

II. Master of Science Examination

§ 21 Purpose of the Master of Science Examination

The Master of Science examination is to demonstrate that the students have earned the capability to work independently on a scientific problem in their field which is beyond the scope of a Bachelor programme utilizing pertinent methods.

§ 22 Method and Complexity of the Master of Science Examination

(1) The Master of Science examination consists of

1. the modules listed in the Appendix of this Examination Regulations,
2. the Master Thesis.
§ 23 Master Thesis

(1) The Master Thesis is to show that the candidate is able to solve within a given time limit a professional problem independently using scientific methodology and to present the results properly. With the Master Thesis 30 ECTS points are earned.

(2) The Master Thesis can be issued, supervised and graded only by professors, university or private lecturers (Hochschul- oder Privatdozenten), furthermore each scientific employee, who was authorized according to the legal requirements to conduct examinations. For persons who are not member of the Faculty for Mathematics and Physics of the Universität Stuttgart, the approval of the Head of the Examination Board is required. The candidate has the right to propose a thesis topic.

(3) The topic of the Master Thesis has to be in the field of Physics and its applications and has to be considerably of physical nature. The topic of the Master Thesis can be issued if the candidate has obtained at least 51 ECTS points in the programme of study. The candidate has to start working on the thesis at latest one month after earning 60 ECTS points or the candidate has to file an application to the Head of the Examination Board for allocation of a topic. The Head of the Examination Board will take care that the candidate gets a topic in time. Otherwise, the Master Thesis will be graded „nicht ausreichend“ (5,0), unless the candidate is not responsible for the failure to meet the deadline. The Head of the Examination Board will decide on this upon application. After the allocation of the topic of the Master Thesis by the Head of the Examination Board, the candidate has to register the Master Thesis immediately at the Examination Office (Prüfungsamt). Topic and date of the issuance have to be recorded. The topic of the Master Thesis can be returned only once and only during the first two weeks after issue. Until the date at which the Master Thesis is filed, 30 ECTS points have to be earned in the modules “Scientific Specialisation” and “Practical Skills and Project Planning”.

(4) The Master Thesis has to be made at the Department of Physics of the Universität Stuttgart, the Max Planck Institute for Solid State Research or the Max Planck Institute for Metals Research. Exceptions hereof have to be approved by the Examination Board.

(5) The Master Thesis must be finished within a period of twelve months (processing period). The scope of the topic has to be limited in such a way that it corresponds to 30 ECTS points (900 working hours) and that the Master Thesis can be finished within the above mentioned period. Upon a substantiated application by the candidate, this period can be extended by at most six weeks if the candidate is not responsible for the delay.

(6) The Master Thesis has to be written in English language. Besides the printed text, the Master Thesis can contain multimedia-based contents saved on electronic data storage media if this is required by the topic and if it has been approved by the examiners.

(7) During the processing period according to (5) three copies of the finalized Master Thesis have to be handed to the supervisor. In addition, one electronic copy has to be filed. The date of the hand-over has to be put on record. Upon submission of the Master Thesis the candidate must affirm in writing that
   1. the thesis was prepared independently,
   2. no sources and resources were used other than those listed in the thesis and that all statements which were adopted literally or logically from other works are marked as such,
   3. the filed Master Thesis was neither completely nor in substantial parts subject of another examination,
   4. the work was neither completely nor in parts published before, unless the examination board approved the publication beforehand, and
   5. the electronic copy is consistent with the other copies.
Translation of the Examination and Study Regulations of PHYSICS (for the purpose of information only)

(8) An oral presentation of at least 30 minutes on its content is part of the Master Thesis.

(9) If the Master Thesis is not filed within the time limit, it will be graded „nicht ausreichend“ (5,0), unless the candidate is not responsible for the failure to meet the deadline.

(10) The Master Thesis will be evaluated by two examiners, one of whom is the examiner who issued the topic according to (2). The second examiner will be appointed by the Head of the Examination Board from the professors stated in § 9 (2) Sent.1. They grade the Master Thesis according to the marks stated in § 16. The grade of the Master Thesis is the average of both grades. The evaluation procedure should be finalized at latest after two months.

(11) The Master Thesis can be repeated once, if it has been graded "nicht ausreichend". In case of repetition the topic of the Master Thesis can only be returned within the deadline defined in (3), if the candidate did not exercise this possibility during the first Master Thesis.

§ 24 Calculation of Final Grade and Certificate of Examinations

(1) The final grade of the Master of Science examination is calculated from the average of the module grades, out of which the Master of Science examination is composed as well as the grade of the Master Thesis, in each case weighted with the number of ECTS points of the corresponding module or the Master Thesis, respectively. § 16 (3) and (4) are applied for the calculation, accordingly.

(2) In case of an outstanding performance (final grade up to 1,2) the honours degree “Very Good With Distinction“ („Sehr gut mit Auszeichnung“) will be awarded.

(3) Additionally, at request of the candidate the final grade can be reported as relative ECTS grade according to the following scale:

<table>
<thead>
<tr>
<th>ECTS Grade</th>
<th>Quota</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>belongs to the top 10 % of the students who passed the Master of Science Examination</td>
</tr>
<tr>
<td>B</td>
<td>25</td>
<td>belongs to the next 25 % of the students who passed the Master of Science Examination</td>
</tr>
<tr>
<td>C</td>
<td>30</td>
<td>belongs to the next 30 % of the students who passed the Master of Science Examination</td>
</tr>
<tr>
<td>D</td>
<td>25</td>
<td>belongs to the next 25 % of the students who passed the Master of Science Examination</td>
</tr>
<tr>
<td>E</td>
<td>10</td>
<td>belongs to the final 10 % of the students who passed the Master of Science Examination</td>
</tr>
</tbody>
</table>

The calculation is based on the cohorts of the last three calendar years before the Master of Science examination. Relative ECTS grades can only be reported if at least 30 graduates passed the Master of Science examination successfully in this time period.

(4) If a candidate passed the Master of Science examination, he or she obtains a Certificate of Examinations. The Certificate of Examinations contains besides the final grade the individual module grades and the grade of the Master Thesis. The final grade will be quoted as decimal number with one decimal place. The Certificate of Examinations will be signed by the Head of the Examination Board and the Dean of the Faculty of Mathematics and Physics. The date of the Certificate of Examinations is the date on which the last examination result was obtained. The Certificate of Examinations is written
in German and English language.

(5) The university issues a diploma supplement (DS) according to the “Diploma Supplement Model” of the European Union/Council of Europe/Unesco which describes the profile of the programme.

§ 25 University Degree and Master of Science Certificate

(1) On the basis of the passed Master of Science examinations the university degree “Master of Science” (abbreviated: M. Sc.) will be awarded.

(2) At the same time as the Certificate of Examinations the candidate obtains a Master of Science Certificate with the date of the Certificate of Examinations. It certifies the award of the university degree according to (1). The Master of Science Certificate is written in German and English language.

(3) The Master of Science Certificate is signed by the Head of the Examination Board and the Dean of the Faculty of Mathematics and Physics and affixed with the seal of the Universität Stuttgart.

III. Final Clauses

§ 26 Inspection of Examination Documents

(1) Within a period of one year after the end of the examinations, upon application the candidate is granted the opportunity to inspect the written examinations, the evaluation of the examinations by the examiners, and the written records of oral examinations.

(2) A corresponding application has to be addressed to the Head of the Examination Board in written form.

§ 27 Invalidity of an Examination

(1) If the candidate has been cheating in examinations and if this fact becomes known only after the Certificate of Examinations has been handed out to the candidate, the respective grade can be corrected retroactively. The board may declare the module examinations as „nicht ausreichend and the Master of Science examination as “failed” (“nicht bestanden”).

(2) If the preconditions for examinations were not complete without the candidate intending to cheat, and if this fact becomes known only after the Certificate of Examinations has been handed out to the candidate, this deficiency is considered remedied by passing the examination. If the candidate was aware that the preconditions were not completed, the Examination Board may declare the module examinations as “nicht ausreichend” and the Master of Science examination as “failed” (“nicht bestanden”).

(3) The opportunity for a statement is to be given the candidate before the board takes a decision.

(4) The incorrect Certificate of Examinations is to be confiscated and a new one is to be issued if applicable. Together with the certificate also the Master of Science Certificate is to be confiscated, if the examination was declared as “failed” (“nicht bestanden”) because of deception according to (1). Decisions according to (1) and (2) Sent. 2 are not possible later than five years after the date indicated on the Certificate of Examinations.
§ 28 Coming into Effect and Transitional Regulations

(1) These Examination Regulations come into effect 01. October 2007. Simultaneously the Examination Regulations of the Universität Stuttgart of the internationally oriented model programme Master of Science Physics (PHYSICS) from the 25.4.2000 (W.F.v.K. 2000, p 489) cease to be in force.

(2) Students, who are enrolled in the internationally oriented Master of Science programme Physics at the Universität Stuttgart at the time at which this Examination Regulations come into effect, can finalize the Master of Science examination according to the old Examination Regulations, but at the longest until the 30th of September 2010.
Appendix 1: Study plan

Students earn 120 ECTS points during four semesters. 30 ECTS points account for the master thesis and 90 ECTS points account for the modules, which are structured into majors and modules for scientific specialisation. In the majors, the students improve and deepen their knowledge about physics, which was acquired during the bachelors program. In the modules for scientific specialisation, special knowledge in a certain area of physics is acquired.

The master studies in physics consists of the majors (V)

- Advanced Experimental Physics I
- Advanced Theoretical Physics I
- Advanced Physical Lab
- Specialised Module („Advanced Experimental Physics II“ or „Advanced Theoretical Physics II“)
- Seminar

and the modules for scientific specialisation (S)

- Elective Module
- Scientific Specialisation
- Practical Skills and Project Planning
## Scheme of study plan

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<tr>
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<tbody>
<tr>
<td>Advanced Experimental Physics I (V) 9</td>
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<td>Scientific Specialisation (S) 15</td>
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<td>Sum ECTS = 120</td>
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* Solid State Spectroscopy for major in experimental physics with the specialised module „Advanced Experimental Physics II“
  Advanced Statistical Physics for major in theoretical physics with the specialised module „Advanced Theoretical Physics II“
* Advanced Condensed Matter Physics II for major in experimental physics with the specialised module „Advanced Experimental Physics II“
  Solid State Theory for major in theoretical physics with the specialised module „Advanced Theoretical Physics II“

SWS: weekly teaching hours
### Appendix 2: Overview over the module examinations

#### (1) General overview

<table>
<thead>
<tr>
<th>No.</th>
<th>Module</th>
<th>Compulsory/Elective</th>
<th>Semester</th>
<th>Compulsory requirements</th>
<th>Module Examination</th>
<th>Credit Points</th>
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<td>USL</td>
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(2) Specialised Module

(a) Specialisation Experimental Physics
with specialised module „Advanced Experimental Physics II“

<table>
<thead>
<tr>
<th>No.</th>
<th>Module</th>
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<th>Semester</th>
<th>Compulsory requirements</th>
<th>Module Examination</th>
<th>Credit Points</th>
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<td>- Solid State Spectroscopy</td>
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(b) Specialisation Theoretical Physics
with specialised module „Advanced Theoretical Physics II“

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<th>Semester</th>
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<th>Module Examination</th>
<th>Credit Points</th>
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<td>1 2 3 4</td>
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<tr>
<td>3</td>
<td><strong>Advanced Theoretical Physics II (Specialised module)</strong></td>
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<tr>
<td></td>
<td>- Solid State Theory</td>
<td>C</td>
<td>x</td>
<td>USL</td>
<td></td>
<td>(6)</td>
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</tbody>
</table>

Annotations:

1. Abbreviations:
   - C = Compulsory module; E = Elective module
   - USL = proof of attendance, details will be announced by the lecturer
   - PL = Module examination; form and duration of the examination are regulated in the module manual

2. The semesters in which you should take the related module (course unit) are marked by an “x”.

3. If a module consists out of more than one course unit, the credit points of the individual course units are shown in brackets. The credit points of the total module are in bold letters.

4. The course units of the “Elective module” are defined in the module manual which will be edited by the Faculty each semester. The “Elective Module” consists of two course units, which can be combined arbitrarily. For every course unit an oral examination of 30 minutes has to be passed and the grade for the “Elective Module” consists of the average over these examinations.