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# Subject-Specific Study and Examination Regulations for the Bachelor's Programmes in Physics and Physics and Management, the English-language Master's Programme in Physics and the Master's Programme in Physics and Management Offered by the Faculty of Natural Sciences of Ulm University of 2 June 2014

Based on § 19 (1) sentence 2 no. 9 in conjunction with § 32 state university law (LHG) in the version of article 1 of the third law on changes to higher education regulations (Drittes Hochschulrechtsänderungsgesetz - 3. HRÄG) of 1 April 2014 (law gazette no. 6, p. 99 ff) the Senate of Ulm University, in its meeting of 14 May 2014, adopted the following Subject-Specific Study and Examination Regulations for the bachelor's programmes in Physics and Physics and Management, the English-language master's programme in Physics and the master's programme in Physics and Management. The President of Ulm University approved these on 2 June 2014 according to § 32 (3) sentence 1 LHG.

## I. General provisions



## II. Bachelor's programme in Physics and master's programme in Physics



## III. Bachelor's and master's programmes in Physics and Management

## IV. Final provisions



### Preliminary remarks on language use

According to article 3 (2) Basic Law, men and women have equal rights; male designations of persons and positions used in these regulations apply equally to men and women.

## I. General Provisions

### § 1 Scope of application (§ 1 General Framework)

(1) These Subject-Specific Study and Examination Regulations contain specific regulations for the bachelor's programmes in Physics and Physics and Management, the English-language master's programme in Physics and the master's programme in Physics and Management.

(2) The Subject-specific Study and Examination Regulations supplement the General Provisions for Study and Examination Regulations regarding Bachelor's and Master's Programmes at Ulm University (General Framework). In case of doubt, the General Framework has priority.

### § 2 Study courses, academic degrees (§ 2 General Framework)

(1) The Faculty of Natural Sciences of Ulm University, Department of Physics, offers the bachelor's programmes in Physics and Physics and Management leading to the degree of "Bachelor of Science" (in short: "B.Sc.").

(2) The Faculty of Natural Sciences of Ulm University, Department of Physics, offers the English-language master's programme in Physics and the master's programme in Physics and Management leading to the degree of "Master of Science" (in short: "M.Sc.").

### § 3 Commencement of studies (§ 3 General Framework)

The bachelor's programmes in Physics and Physics and Management, the English-language master's programme in Physics and the master's programme in Physics and Management start in both the winter and the summer semester.

### § 4 Standard period of study (§ 5 General Framework)

The standard period of study of the bachelor's programmes is three years and that of the consecutive master's programmes is two years.

### § 5 Content, scope and volume of the orientation examination (§ 6 (6) General Framework)

The orientation examination in the bachelor's programmes in Physics and Physics and Management consists of a module examination corresponding to 8 credit points in the modules "Mechanics" or "Electricity and Magnetism" or a module examination corresponding to 10 credit points in the modules "Higher Mathematics I" or "Higher Mathematics II".

### § 6 Deadlines (§ 6 (8) General Framework)

(1) In the bachelor's programmes, students must have obtained a minimum of 60 credit points by the end of the examination period of the third subject-specific semester. They must

have obtained a minimum of 120 credit points by the end of the examination period of the sixth subject-specific semester. Students lose their right to be examined if they fail to fulfil the requirements and meet deadlines indicated in sentences 1 and 2 above unless they are not responsible for this failure.

(2) Students must have completed their master's examination including their master's thesis by the end of the sixth subject-specific semester. Students lose their right to be examined if they fail to fulfil the requirements and meet deadlines indicated in sentence 1 above unless they are not responsible for this failure.

## § 7 Courses and examinations in English or any other foreign language (§ 7 General Framework)

(1) Courses and examinations in the bachelor's and master's programmes can be held in German or in English. As a rule, course and examinations in the bachelor's programme are in German; in the master's programme, they are in English. The language of instruction of the individual courses is determined by the study commission.

(2) As a rule, examinations are in the language of instruction of the respective course.

## § 8 Work experience (§ 8 General Framework)

(1) It is recommended that students pursue practical activities related to their career (work experience) during their studies. This work experience can be done at any private or public organisation in Germany or abroad suited to provide insight into their future career. This work experience should have a minimum duration of eight weeks and be done, preferentially, during a lecture-free period. The subject-specific board of examiners can recognize this work experience as an ungraded supplementary examination corresponding to 10 credit points if it was approved by the subject-specific board of examiners before and if the employer issues a certificate of confirmation and the student writes a report about the work experience and presents it.

(2) At the request of the student, the work experience in Physics and Management can be done as a module corresponding to 10 credit points within the elective area of economics; in the bachelor's programme, this would be in accordance with § 19 (2) no. 20 or, in the master's programme, with § 19 (3) no. 7a.

## § 9 Subject-specific board of examiners (§ 10 General Framework)

(1) A subject-specific board of examiners is formed for the bachelor's programmes in Physics und Physics and Management, and for the English-language master's programme in Physics and the master's programme in Physics and Management.

(2) The subject-specific board of examiners has six members. It is composed of four full-time lecturers or full-time professors of Ulm University, one member of scientific staff and one student in an advisory capacity. The term of office of the student member is one year; that of the other members is three years.

## § 10 Organisation of module examinations (§ 13 General Framework)

Written examinations and dates for retakes are provided for in § 13 (1) General Framework.

## § 11 Related study courses (§ 14 General Framework)

(1) Study courses related with the bachelor' and master's programmes in Physics are, in particular, the bachelor's and master's programmes in physics offered at universities in Germany. Study courses related with the bachelor' and master's programmes in Physics and Management are, in particular, the bachelor's and master's programmes in physics and management offered at universities in Germany.

(2) The study courses Physics/Physics and Physics and Management are not related according to § 14 (2) General Framework.

## § 12 Admission to and requirements for the modules bachelor's and master's thesis (§ 16c General Framework)

(1) The period from the assignment of the topic to the submission of the bachelor's thesis is three months. The subject-specific board of examiners may extend this period by up to two weeks. The bachelor's thesis corresponds to 10 credit points.

a) As a rule, the bachelor's thesis in the physics study course is done in the Department of Physics or the Electron Microscopy Group of Materials Science at Ulm University.

b) The bachelor's thesis in the study course Physics and Management is done in the subject areas physics, mathematics and management, or economics at Ulm University.

(2) In the master's programme in Physics and Management, the period from the assignment of the topic to the submission of the master's thesis is six months; in the physics master's programme it is twelve months. The subject-specific board of examiners may extend this period by up to four weeks. The master's thesis corresponds to 30 credit points.

a) As a rule, the master's thesis in the Physics master's programme is done in the Department of Physics at Ulm University or in any cooperating institution.

b) The master's thesis in Physics and Management is done in the subject areas physics, mathematics and management, or economics at Ulm University. If the student's admission to the master's programme in Physics and Management is based on a completed physics bachelor's programme, the master's thesis must be done in the subject areas econophysics, economics, mathematics and management, or any interdisciplinary field.

(3) The master's thesis can also be done in areas not mentioned in paragraph 2 above (external master's thesis). The subject-specific board of examiners checks if the envisaged external master's thesis complies with the scientific principles of the study course.

(4) With the approval of the first thesis examiner, the bachelor's thesis in the bachelor's programmes in Physics and Physics and Management and the master's thesis in the master's programme in Physics and Management can be written in English. With the approval of the first thesis examiner, the master's thesis in the master's programme in Physics can be written in German.

(5) The bachelor's thesis must be submitted to the Studiensekretariat (student administration office) in one bound copy, the master's thesis must be submitted in two bound copies and one electronic copy (PDF) in time and in accordance with § 16c (9) General Framework.

## § 13 Assessment of module examinations, module handbook (§ 17 General Framework)

(1) Modules counting towards the final mark of the bachelor's programme in Physics are the bachelor's thesis with 10 credit points as well as the examinations with the highest marks marked as "counting towards the final mark" according to § 16 (2) corresponding to a minimum of 124 credits points (out of a total of 142 credit points). For the calculation of the final mark, examinations with identical results are considered according to their corresponding credit points. The examination completing and exceeding the 134 credit point total is weighted in full.

(2) The master's thesis at 30 credit points as well as the graded examinations, modules and subjects marked as "counting towards the final mark" under § 16 (4) count towards the final mark of the master's programme in Physics.

(3) Modules counting towards the final mark of the bachelor's programme in Physics and Management are the bachelor's thesis with 10 credit points as well as the examinations with the highest marks marked as "counting towards the final mark" according to § 19 (2) corresponding to a minimum of 137 credits points (out of a total of 155 credit points). For the calculation of the final mark, examinations with identical results are considered according to their corresponding credit points. The examination completing and exceeding the 147 credit point total is weighted in full.

(4) The master's thesis at 30 credit points as well as the graded examinations, modules and subjects marked as "counting towards the final mark" under § 19 (4) count towards the final mark of the master's programme in Physics and Management.

(5) In cases justified by their subject-matter, in particular in the bachelor's programmes, written examinations may also be by way of multiple choice. A module examination is deemed to have been passed if the student answered a minimum of 60 % of the total achievable points correctly or if the number of points achieved by the student falls less than 20 % below the examination average of all examinees in this examination and the examinee achieved a minimum of 50 % of achievable points.

(6) If more elective modules are completed than prescribed, these count towards the final mark with their actual weight. If a single module already fulfils the minimum number of credit points, no further modules may be counted in the calculation of the final mark.

(7) The module handbook states which modules may be taken as elective modules.

(8) Admission to (partial) module examinations in bachelor's and master's programmes may be subject to course work according to § 6 (3) General Framework. The coursework required is described in the module handbook. Type and scope of the respective coursework are published by the course responsible in good time before the start of the course.

## § 14 Retake of module examinations (§ 20 General Framework)

In the bachelor's and master's programmes, (partial) module examinations can be retaken twice.

## II. Bachelor's programme in Physics and master's programme in Physics

## § 15 Objective of the study course Physics

(1) The study course Physics prepares students for a scientific-technical career in research, industry, business or in the public sector. It conveys experimental and theoretical

knowledge and skills in the most important fields of physics. Physicists are able to apply, develop and implement methods from mathematics and the natural sciences in a multi-layered manner with a view to solving practical and theoretical problems.

(2) Graduates of the bachelor's programme in Physics have skills and knowledge based on a sound and broad foundation in mathematics and the natural sciences. They have acquired key competences such as communication and teamwork skills, are capable of continuously expanding their own knowledge in an independent manner, and have gained international and possibly intercultural experience. They are capable of acting in a responsible and goal-oriented way taking into account technical and scientific advances and of familiarizing themselves with new problems.

(3) Graduates of the master's programme in Physics have comprehensive physics knowledge and skills in several areas. They have gained in-depth knowledge in some special areas of experimental and theoretical physics on a par with the current international state of the art. They are capable of independently doing scientific work, reviewing current specialist literature and actively applying it to sub-fields of physics, designing research procedures and developing strategies to solve problems. They have considerable interdisciplinary competence enabling them to take on scientific tasks related to marginal fields of physics or related disciplines. More specifically, the degree qualifies graduates to pursue doctoral studies.

## § 16 Study contents, admission to module examinations

(1) All modules require a module examination or several partial module examinations.

(2) The following modules form part of the bachelor's programme in Physics

| No | Examination area/module | CP | E/U* |
|---|---|---|---|
| **A** | **Experimental physics** | **46** | |
| 1 | Mechanics | 8 | E |
| 2 | Electricity and Magnetism | 8 | E |
| 3 | Thermodynamics | 4 | E |
| 4 | Optics | 4 | E |
| 5 | Atomic Physics | 6 | E |
| 6 | Molecular Physics | 4 | E |
| 7 | Solid State Physics | 6 | E |
| 8 | Nuclear, Particle and Astrophysics | 6 | E |
| **B** | **Theoretical Physics** | **32** | |
| 9 | Theoretical Mechanics | 8 | E |
| 10 | Quantum mechanics I | 8 | E |
| 11 | Electrodynamics | 8 | E |
| 12 | Thermodynamics and Statistics | 8 | E |
| **C** | **Laboratory courses** | **34** | |
| 13 | Computer Applications | 5 | X |
| 14 | Introductory laboratory course Physics I | 9 | U |
| 15 | Introductory laboratory course Physics II | 6 | U |
| 16 | Project-based laboratory course | 6 | E |
| 17 | Advanced laboratory course Physics I | 8 | U |
| **D** | **Advanced seminar and elective area** | **10** | |
| 18 | Advanced seminar Physics | 4 | E |
| 19 | Elective area Physics | 6 | E |
| **E** | **Mathematics** | **30** | |
| 20 | Higher Mathematics I | 10 | E |
| 21 | Higher Mathematics II | 10 | E |
| 22 | Higher Mathematics III (10 CP) or:<br>Elements of Differential Equations (5 CP) and<br>Elements of Complex Analysis (5 CP) | 10 | E |
| **F** | **Subsidiary subject** | **12** | |
| 23 | Subsidiary subject Computer Science or Chemistry; with the approval of the subject-specific board of examiners, another subsidiary subject can be selected. | 12 | E |
| **G** | **Additional key qualifications** | **6** | |
| 24 | Additional key qualifications I | 3 | E |
| 25 | Additional key qualifications II | 3 | E |
| **H** | **Bachelor's thesis** | **10** | |
| 26 | Bachelor's thesis | 10 | E |

* E = counting towards final mark, U = ungraded, X = graded, but not counting towards final mark

(3) Admission to the modules “Advanced laboratory course Physics I” and “Project-based laboratory course” is subject to the previous completion of the modules “Introductory laboratory course Physics I and II“.

(4) The following modules form part of the master’s programme in Physics:

| No | Examination area/module | CP Bachelor Physics | CP Bachelor Physics/Man. | E/U/X* |
|---|---|---|---|---|
| **A** | **Compulsory Modules** | **12** | **28** | |
| 1 | Advanced Physics Lab | 8 | 8 | U |
| 2 | Advanced Physics Seminar (M.Sc.) | 4 | 4 | E |
| 3a | Molecular Physics | --- | 4 | X |
| 3b | Solid State Physics | --- | 6 | X |
| 3c | Project-based Laboratory Course | --- | 6 | X |
| **B** | **Specialisation Modules** | **18** | **18** | |
| 4 | Modules from one of the following specialisation areas:<br>• Biophysics and Soft Matter<br>• Condensed Matter and Nanoscience<br>• Econophysics<br>• Plasma Physics<br>• Quantum Information and Quantum Technologies<br>At least 16 CP must be graded. | 18 | 18 | E |
| **C** | **Elective Modules in Physics** | **9** | **9** | |
| 5 | Elective modules to be chosen from the lectures offered in the Physics master.<br>All 9 CPs must be graded. | 9 | 9 | E |
| **D** | **General Elective Modules** | **18** | **2** | |
| 6 | Elective modules to be chosen from the vast offer of master lectures in either Physics or other relevant subjects. Some modules (maximum 6 CP) can be chosen from lectures in Humanities and Languages offered at Ulm University. | 18 | 2 | U/X |
| **E** | **Additional key qualifications** | **3** | **3** | |
| 6 | Additional key qualifications (German Language Course for non-native speakers) | 3 | 3 | E |
| **F** | **Research Phase** | **60** | **60** | |
| 7 | Methodology and Project Planning I | 15 | 15 | E |
| 8 | Methodology and Project Planning II | 15 | 15 | E |
| 9 | Master’s thesis | 30 | 30 | E |

* E = counting towards final mark, U = ungraded, X = graded, but not counting towards final mark

(5) Students admitted to the Physics master’s programme based on a completed bachelor’s programme in Physics and Management must additionally complete the modules listed in paragraph 4, no 3a, 3b and 3c, above. The elective area of the master’s programmes as

described in paragraph 4, no 6, above only requires modules corresponding to 2 credit points.

(6) Students must register for the examinations in the modules “Knowledge of Methods and Project Planning I and II” at the same time as for the master’s thesis, and these examinations must be assessed by one of the two examiners of the master’s thesis.

(7) In the module “Additional Key Qualifications”, students in the master’s programme in Physics who are native speakers of German as well foreign nationals holding a German university entrance qualification and students with a good command of German (corresponding to DSH-1) may not take any German courses. Students not covered by sentence 1 above must take German courses in the module “Additional Key Qualifications”. In exceptional cases, the board of examiners decides on the type of courses to be taken.

### § 17 Subject-specific admission requirements for the bachelor’s and master’s thesis in Physics

(1) Admission to the bachelor’s thesis is subject to successful completion of the modules ”Introductory laboratory course Physics I and II” and either the module “Project-based laboratory course” or the module “Advances laboratory course Physics I” and to having obtained a total minimum of 120 CP.

(2) Admission to the master’s thesis is subject to having obtained a minimum of 12 CP in the Physics specialisation and a minimum of 9 CP in the Physics elective area as well as the successful completion of the Advanced laboratory course Physics II and the Advanced seminar Physics.

## II. Bachelor’s and master’s programmes in Physics and Management

### § 18 Objectives of the study course Physics and Management

(1) The study course Physics and Management prepares students for a scientific-technical career in industry and business or in the public sector. It conveys experimental and theoretical knowledge and skills in the most important fields of physics und connects them with fundamental knowledge in economics, also with a view to applying and translating concepts of theoretical physics and mathematics to problems in economics.

(2) Graduates of the bachelor’s programme in Physics and Management have acquired skills and knowledge qualifying them to work in an interdisciplinary context based on a sound and broad foundation in mathematics and natural sciences as well as economics. They have acquired key competences such as communication and teamwork skills, are capable of continuously expanding their own knowledge in an independent manner, and have gained international and possibly intercultural experience. Their interdisciplinary skills and their flexibility form an ideal basis for further qualification and specialisation. Thus the study course enables them to familiarize themselves with new problems and to act in a responsible and goal-oriented way in science and the economy, in particular at the interface of technology development and its implementation in businesses.

(3) Graduates of the master’s programmes in Physics and Management have comprehensive and in-depth knowledge and skills in physics. Moreover, they have broadened their knowledge in economics und reached the current international state of the art in research in some fields. They possess comprehensive skills using modelling and simulation and

translating concepts in theoretical physics to economic processes. They are capable of independently doing scientific work, reviewing current specialist literature and actively applying it to sub-fields of economics, designing research procedures and developing strategies to solve problems. They have considerable interdisciplinary and generic competence. More specifically, the degree qualifies them to pursue doctoral studies.

## § 19 Study contents, admission to module examinations

(1) All modules require a module examination or several partial module examinations.

(2) The bachelor's programme in Physics and Management requires the following modules:

| No | Examination area/Module | CP | E/U/X* |
|---|---|---|---|
| **A** | **Experimental Physics** | **30** | |
| 1 | Mechanics | 8 | E |
| 2 | Electricity and Magnetism | 8 | E |
| 3 | Thermodynamics | 4 | E |
| 4 | Optics | 4 | E |
| 5 | Atomic Physics | 6 | E |
| **B** | **Theoretical Physics** | **24** | |
| 6 | Theoretical Mechanics | 8 | E |
| 7 | Quantum Mechanics I | 8 | E |
| 8 | Thermodynamics and Statistics | 8 | E |
| **C** | **Laboratory courses and advanced seminar** | **15** | |
| 9 | Computer Applications | 5 | X |
| 10 | Introductory lab course Physics for Physics and Management students | 6 | U |
| 11 | Advanced seminar Physics | 4 | E |
| **D** | **Mathematics** | **25** | |
| 12 | Higher Mathematics I | 10 | E |
| 13 | Higher Mathematics II | 10 | E |
| 14 | Higher Mathematics III for Physics and Management students (5 CP) or<br>Elements of Differential Equations (5 CP) | 5 | E |
| **E** | **Compulsory areas Economics** | **12** | |
| 15 | Introduction to Business Administration | 6 | E |
| 16 | Introduction to Economics | 6 | E |
| **F** | **Elective area Economics basics** | **12** | |
| 17 | 12 CP from the following modules:<br>Financial Accounting (6 CP)<br>Financing (6 CP)<br>Management Accounting (3 CP)<br>Investment (3 CP) | 12 | E |
| **G** | **Elective area Mathematics and Management** | **8** | |
| 18 | 8 CP from the following modules:<br>Applied Stochastic I (4 CP)<br>Applied Stochastic II (4 CP)<br>Elementary Probability Calculus and Statistics (9 CP) | 8 | E |

| No | Examination area/module | CP | E/U/X* |
|---|---|---|---|
| **H** | **Specialisation Economics** | **12** | |
| 19 | Modules from of the specialisation areas:<br>- Economics<br>- Finance and Insurance Industry<br>- Accounting and Auditing<br>- Technology and Process Management<br>- Management and Controlling<br>A minimum of 12 CP must be graded. | 12 | E |
| **I** | **Elective area Economics** | **14** | |
| 20 | Work experience (10 CP) and/or elective modules from economics, Information Systems, Mathematics and Management, Physics and Management | 14 | U/X |
| **J** | **Subsidiary subject** | **12** | |
| 21 | Subsidiary Subject Computer Science<br>With the approval of the subject-specific board of examiners, a different subsidiary subject can be selected. | 12 | E |
| **K** | **Additional key qualifications** | **6** | |
| 22 | Additional key qualifications I | 3 | E |
| 23 | Additional key qualifications II | 3 | E |
| **L** | **Bachelor's thesis** | **10** | |
| 24 | Bachelor's thesis | 10 | E |

* E = counting towards final mark, U = ungraded, X = graded, but not counting towards final mark

(3) The following module are part of the master's programme in Physics and Management:

| No | Module | CP Bachelor Physics/Manag. | CP Bachelor Physics | E/U/X* |
|---|---|---|---|---|
| **A** | **Physics** | **22** | **16** | |
| 1a | Advanced lab course Physics II | 8 | --- | U |
| 1b | Elective modules Physics Master's | --- | 12 | U/X |
| 2 | Advanced seminar Physics (M.Sc.) | 4 | 4 | E |
| 3 | Molecular Physics (4 CP) or Nuclear, Particle and Astrophysics (6 CP) | 4 | --- | E |
| 4 | Solid State Physics | 6 | --- | E |
| **B** | **Elective area Econophysics** | **12** | **12** | |
| 5 | Elective modules from Econophysics | 12 | 12 | E |
| **C** | **Elective area Economics** | **35** | **35** | |
| 6 | Modules from one or two of the specialisations in the economics master's programme:<br>- Economics<br>- Financial Management<br>- Accounting and Auditing<br>- Insurance Industry<br>- Technology and Process Management<br>- Management and Controlling<br>If two specialisations are selected, each requires a minimum of 10 CP.<br>21 or more CP must be graded. | 25 | 25 | E |
| 7a | Work experience or elective modules from the economics master's programme | 10 | --- | U/X |
| 7b | Elective modules from the economics master's programme<br>10 or more CP must be graded. | --- | 10 | E |
| **D** | **Elective area master's programmes** | **18** | **24** | |
| 8a | Elective modules from the master's programmes and the humanities offer of Ulm University | 18 | 12 | U/X |
| 8b | Elective modules from the bachelor's or master's programmes in economics | --- | 12 | U/X |
| **E** | **Additional key qualifications** | **3** | **3** | |
| 9 | Additional key qualifications | 3 | 3 | E |
| **F** | **Master's thesis** | **30** | **30** | |
| 10 | Master's thesis | 30 | 30 | E |

* E = counting towards final mark, U = ungraded, X = graded, but not counting towards final mark

(4) Students admitted to the master's programme in Physics and Management based on a completed bachelor's programme in Physics must do the modules listed in paragraph 4 no 1b, 7b and 8b above instead of the modules listed in paragraph 4 no 1a, 3, 4, 7a and 8a above.

## § 20 Subject-specific admission requirements for the bachelor's and master's thesis in Physics and Management

(1) Admission to the bachelor's thesis is subject to having obtained a total minimum of 120 CP.

(2) For students admitted to the master's programme in Physics and Management based on a bachelor's degree in Physics and Management, the following applies:

Admission to the master's thesis is subject to having passed the modules "Molecular Physics", "Solid State Physics", "Advanced Seminar Physics (M.Sc.)", "Advanced lab course Physics II", and to having obtained a minimum of 31 CP from modules in the elective area economics and a minimum of 12 CP from modules in the elective area econophysics.

(3) For students admitted to the master's programme in Physics and Management based on a bachelor's degree in Physics, the following applies:

Admission to the master's thesis is subject to having passed the "Advanced seminar Physics (M.Sc.)", and to having obtained a minimum of 8 CP from elective modules in the Physics master's programme, a minimum of 31 CP from modules in the elective area economics and a minimum of 12 CP from modules in the elective area econophysics.

# IV. Final provisions

## § 22 Effective date, provisions on transition

(1) These study and examination regulations come into force with effect from summer semester 2014. They are published in the Official Bulletin ("Amtliche Bekanntmachungen") of Ulm University. The Subject-Specific Study and Examination Regulations for the Bachelor's and Master's Programmes in Physics und Physics and Management offered by the Faculty of Natural Sciences of Ulm University dated 8 July 2013, published in the Official Bulletin, no 26, of 16 August 2013, p. 291 – 303 cease to have effect.

(2) Paragraph 1 above does not apply to students enrolled, in the winter semester 2013/14, in the bachelor's or master's programmes in Physics or Physics and Management according to the Subject-Specific Study and Examination Regulations for the Bachelor's and Master's Programmes in Physics und Physics and Management offered by the Faculty of Natural Sciences of Ulm University dated 9 June 2010 who have not yet terminated their studies. Such students terminate their studies under the Subject-Specific Study and Examination Regulations for the Bachelor's and Master's Programmes in Physics und Physics and Management offered by the Faculty of Natural Sciences of Ulm University dated 9 June 2010.

The above statutes are approved. They are hereby executed and are to be published.

Ulm, 2 June 2014

Professor Karl Joachim Ebeling

- President -