

***Fachprüfungsordnung* (Subject-Specific Examination Regulations)
for the Master's Degree Course Simulation and System Design
at Hochschule Stralsund, University of Applied Sciences**

of 18th May 2017

Based on § 2(1) in conjunction with § 38 of the *Landeshochschulgesetz* (State Higher Education Law) of Mecklenburg-Vorpommern, in the version announced on 25th January 2011 (Law and Ordinance Gazette of Mecklenburg-Vorpommern (GVOBl. M-V) p. 18), last amended by Article 3 of the law of 11th July 2016 (GVOBl. M-V p. 550, 557) Hochschule Stralsund, University of Applied Sciences (hereinafter UAS Stralsund) hereby passes the following *Fachprüfungsordnung* (hereinafter Subject-Specific Examination Regulations) for the master's degree course in Simulation and System Design as statute:

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I. Scope of Application, Study Requirements and Degree Structure

§ 1 Scope of Application

These Subject-Specific Examination Regulations regulate the study and examination procedure in the master's degree course Simulation and System Design at UAS Stralsund. The *Rahmenprüfungsordnung* (hereinafter Framework Examination Regulations) of 24th October 2012 (Mitt.bl. BM M-V 2012 p. 1146), last amended by the third amendment statutes of the Framework Examination Regulations of 27th April 2017 (published on UAS Stralsund's website on 28th April 2017) will apply directly for all examination matters that are not covered by these regulations.

§ 2 Admission Requirements

(1) The general admission requirements for the degree course are regulated in accordance with §§ 17 to 19 of the *Landeshochschulgesetz* (State Higher Education Law) in conjunction with UAS Stralsund's *Immatrikulationsordnung* (hereinafter Enrolment Regulations) in the respective valid versions.

(2) For admission to be granted, proof of the required English language skills for the degree course must be provided. These skills must correspond with the B2 level of the Common European Framework of Reference for Languages. Proof can be provided, in accordance with the regulations that apply for foreign study applicants in § 5(2)(5) of the Enrolment Regulations, by submitting language certificates or providing credible evidence that make language certificates superfluous.

(3) Only students meeting the following requirements will be admitted to study the 3-semester master's degree course Simulation and System Design:

1. Proof that s/he has obtained an undergraduate degree.

- This can be a Bachelor of Engineering or a completed university degree at a similar level in a related subject with at least 210 ECTS points, obtained from a tertiary education institution in Germany.

or

- a Bachelor of Engineering or a completed university degree at a similar level in a related subject with at least 210 ECTS points, obtained from a tertiary education institution abroad.

2. Proof that s/he has

- completed a period of professional work experience (internship) prior to commencing studies. Recognition will be given to relevant professional work experience or a relevant practice semester as part of or following a bachelor's or similar university degree. The relevant professional work experience must have covered a period of at least 12 weeks. For recognition to be granted, a request including the corresponding proof must be submitted to the Study and Examination Matters and International Affairs Division at the Faculty of Engineering. The person responsible for internships for that degree course will decide on the recognition of the work experience.

(4) Only students meeting the following requirements will be admitted to study the 4-semester master's degree course Simulation and System Design:

1. Proof that s/he has obtained an undergraduate degree.

- This can be a Bachelor of Engineering or a completed university degree at a similar level in a related subject with at least 180 ECTS points, obtained from a tertiary education institution in Germany.

or

- a Bachelor of Engineering or a completed university degree at a similar level in a related subject with at least 180 ECTS points, obtained from a tertiary education institution abroad.

(5) Applicants, whose undergraduate degree is neither a Bachelor of Engineering nor a similar university degree of a subject-related course, can be granted admission by the admissions board, subject to conditions, in accordance with § 2(5) of the Framework Examination Regulations.

(6) The University's statute for the university's own selection procedure will find application if the master's degree course Simulation and System Design has admission restrictions (numerus clausus).

(7) The admissions board of the degree course, which is made up of the course manager of the master's degree course Simulation and System Design and the Faculty of Engineering's Dean of Studies, will check whether the subject-specific admission requirements have been met.

§ 3

Duration and Structure of the Degree

(1) This degree course offers two options for the period of time in which studies can be completed to obtain a postgraduate degree by taking the master's examination (standard length of study). The degree course offers two different degree paths with differing standard lengths of study:

- 3-semester master's degree
- 4-semester master's degree

(2) the following applies to the 3-semester master's degree:

1. The length of time in which the course can usually be completed with a master's degree as a postgraduate university degree (standard length of study) is three subject semesters. It comprises three semesters of theory and the examinations, including the master's dissertation and the colloquium. The third subject semester is mainly used for completing the master's dissertation and the colloquium in accordance with §§ 24 to 27 of the Framework Examination Regulations and § 7 of these Subject-Specific Examination Regulations.

2. A total of 90 ECTS points is required for successfully completing the degree course.

(3) The following applies for the 4-semester master's degree:

1. The length of time in which the course can usually be completed with a master's degree as a postgraduate university degree (standard length of study) is four subject semesters. It comprises one internship semester and three semesters of theory and the examinations, including the master's dissertation and the colloquium. The fourth subject semester is mainly used for completing the master's dissertation and the colloquium in accordance with §§ 24 to 27 of the Framework Examination Regulations and § 7 of these Subject-Specific Examination Regulations.

2. The internship semester usually takes place during the first or the third subject semester. It is a supervised period of training that is integrated into the degree, the content of which is defined and regulated by UAS Stralsund, that usually takes place in a company or at another institution related to professional practice and covering a period of at least 21 weeks. The contents and the subject requirements for the internship semester are regulated by the Internship Guidelines set out in Appendix 1 of the *Studienordnung* (hereinafter Study Regulations).

3. A total of 120 ECTS points is required for successfully completing the degree course.

4. The following applies for admissions to winter semester

- if the internship semester is to take place in the first subject semester, the second subject semester will cover the contents of the modules and marked coursework of the third standard semester and the third subject semester will cover the modules and marked coursework of the second standard semester and
 - if the internship semester is to take place in the third subject semester, the first subject semester will cover the modules and marked coursework of the second standard semester and the second subject semester will cover the modules and marked coursework of the first standard semester,
- each with the corresponding deadlines. Please refer to § 7(3).

(4) An elective module will only be taught if at least five students have elected this module. The faculty governance will decide on exceptions to the minimum required number of students after a request has been submitted by the student(s). Please refer to § 3(4) of the Framework Examination Regulations.

(5) One of the three required compulsory elective modules that amount to 6 ECTS points can be chosen from one of UAS Stralsund's other master's degree courses, as long as the chosen module is taught in English. The examination board of the Faculty of Engineering decides on the authorisation of compulsory elective modules from other master's degree courses at UAS Stralsund, after submission of a written request. The compulsory elective modules from other master's degree courses at UAS Stralsund are subject to the admission requirements, examination requirements and regulations about the kind, duration and extent of the module examination, stipulated in the examination regulations of the respective degree course.

§ 4 Degree

The university degree "Master of Engineering", abbreviated to "M.Eng.", is awarded on successful completion of the master's examination in the master's degree course Simulation and System Design.

II. Examinations, Evaluation of Examinations and Examination Procedure

§ 5

Master's Dissertation and Master Colloquium

(1) In accordance with § 20(1)(2) of the Framework Examination Regulations, only students who have obtained the required ECTS points in the same degree course at a tertiary education institution in Germany, or who have successfully passed marked coursework that is recognised as being equivalent in accordance with § 22 of the Framework Examination Regulation, can be admitted to the master's dissertation.

(2) In the 3-semester master's degree Simulation and System Design, only students who have passed module examinations to cover a total of at least 54 ECTS points will be admitted to the master's dissertation. Proof that all module examinations have been passed successfully must be provided prior to attending the master's dissertation colloquium.

(3) In the 4-semester master's degree Simulation and System Design, only students who have passed module examinations to cover a total of at least 54 ECTS points will be admitted to the master's dissertation. Proof that the internship semester was completed in accordance with § 3(3)(2) and all module examinations have been passed successfully must be provided prior to attending the master's dissertation colloquium.

(4) As a general rule, the master's dissertation must be written in English.

(5) The writing-up period for the master's dissertation covers twenty weeks. The topic, the problem being addressed and the extent of the master's dissertation must be limited by the first supervisor in such a way that it is possible to complete the master's dissertation within the writing-up period.

(6) The colloquium shall be held in English.

(7) The colloquium shall take place at UAS Stralsund. The examination board can make exceptions.

(8) The colloquium is open to all members of the university. Other members of the university can be excluded due to important reasons. The result will be determined and made known to the candidate behind closed doors.

(9) The mark for the colloquium will be weighted with 30 % and the mark for the master's dissertation weighted with 70 % of the overall mark of the module Master's Dissertation and Colloquium.

(10) More detailed regulations regarding the master's dissertation and the colloquium are found in §§ 24 to 27 of the Framework Examination Regulations.

§ 6

Prerequisites for Admission to Examinations

(1) Certificates of achievement or passed modules count as prerequisites for admission to examinations that are required to have been fulfilled for admission to the respective module examination (§ 7(2-3)).

(2) A certificate of achievement is proof of a clearly recognisable individual achievement that has been passed with a mark of at least “sufficient”; more precise marks will not be given. A certificate of achievement does not replace marked coursework and is not subject to the rules set out in § 21 of the Framework Examination Regulations. A certificate of achievement is issued by the respective examiner as proof of successful participation.

(3) If the lab-specific part of a module with lab or the practical part of a module with practical is not assessed with marked coursework, admission to the respective module examination will only be granted by if the prerequisites for admission to examinations have been met, in so far as this is stipulated in § 7(2-3). The prerequisites for admission to examinations are fulfilled by producing a report or similar, after suitable means have/have not been provided by the examiner.

(4) The students must be informed at the start of teaching in each respective module (one week after the start of the course at the latest) about the prerequisites for admission to examinations and their scope. The type and scope of the respective prerequisites for admission to examinations must be the same for all students of one semester.

§ 7

Module Examinations, Regular Examination Dates, Other Types of Marked Coursework and Prerequisites for Admission to Examinations

(1) If a module examination is made up of several pieces of marked coursework, marked coursework that has not been passed can be made up for. A module examination is passed if an average mark of “sufficient” (4.0) has been achieved in the various pieces of marked coursework. Passed parts of examinations will not be recognised.

(2) The following module examinations shall be taken for the modules named below to achieve the master’s examination in the 3-semester master’s degree:

Compulsory Module	Regular Examination Date for the Module Examination	Type and Scope of Marked Coursework	1 st Alternative	2 nd Alternative	Prerequisite for Admission to Examinations	ECTS Points per Module	Non-Marked Modules	Marked Modules without Weighting for Overall Mark	Marked Modules with Weighting for Overall Mark (in %)
SSDM 1000 Selected Chapters of Mathematics	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6			13
SSDM 1200 Applied Computer Science	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6			13
SSDM 2300 Applied Computational Fluid Dynamics	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)	Draft (60 hrs.)		6			13
SSDM 2400 Simulation in Mechanics & Processes	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)		Project (semester work)	6			14
SSDM 3200 International Economics & Trade	2 nd Semester	Case study (116 hours)	Coursework essay (90 hrs.) and Presentation (20 min.)			6	x		0
SSDM 3500 International Accounting	2 nd Semester	Written examination (120 min.)				6			13
SSDM 5400 Vehicle Management Systems (incl. Simulation)	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)		Laboratory	6			14
WMSSDM XXXX Compulsory Elective Modules	2 nd Semester					18		x	0
SSDM 9000 Master's Dissertation and Colloquium									20
Master's Dissertation	3 rd Semester	see FPO			54 ECTS points from passed module examinations	27			70
Master's Dissertation Colloquium	3 rd Semester	see FPO			60 ECTS points from passed module examinations	3			30
Total						90			100

The English translation of the *Fachprüfungsordnung für den Master-Studiengang Simulation and System Design an der Hochschule Stralsund* is intended solely as a convenience to non-German-reading students/members of the university. Only the German text published on Hochschule Stralsund, University of Applied Sciences' website on the 13th July 2017 is legally binding. In the event of any conflict between the English and German text, its structure, meaning or interpretation, the German text, its structure, meaning or interpretation shall prevail.

Compulsory Elective module	Regular Examination Date for the Module Examination	Type and Scope of Marked Coursework	1 st Alternative	2 nd Alternative	Prerequisite for Admission to Examinations	ECTS Points per Module	Non-Marked Modules	Marked Modules without Weighting for Overall Mark	Marked Modules with Weighting for Overall Mark (in %)
WMSSDM 2000 Lightweight Materials and Materials Selection	2 nd Semester	Written examination (120 min.)	Written examination (60 min.) and coursework essay (30 hrs.)		Laboratory	6		x	0
WMSSDM 2100 Renewable Energy Technology	2 nd Semester	Presentation (30 min.)	Written examination (120 min.)	Oral examination (30 min.)		6		x	0
WMSSDM 2200 Project work	2 nd Semester	Presentation (30 min.)				6		x	0
WMSSDM 2500 Automotive Lighting Engineering	2 nd Semester	Written examination (90 min.)	Oral examination (30 min.)	Coursework essay (90 hrs.)	Presentation (15 min.) of simulation results (laboratory)	6		x	0
WMSSDM 2600 Advanced Technical Mechanics	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6		x	0
WMSSDM 2700 Thermodynamics of Multicomponent Systems	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6		x	0
WMSSDM 3000 Human Resources Management	2 nd Semester	Case study (116 hours)	Coursework essay (90 hrs.) and Presentation (20 min.)			6		x	0
WMSSDM 3600 Quality in Automotive Industry	2 nd Semester	Written examination (120 min.)	Oral examination (20 min.)			6		x	0
WMSSDM 5100 Production	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6		x	0
WMSSDM 5500 Vehicle Simulation & Test Drive	2 nd Semester	Coursework essay (30 hrs.)	Oral examination (20 min.)	Written examination (60 min.)		6		x	0
WMSSDM 5600 Simulation in Logistics and Production	2 nd Semester	Presentation with colloquium (45 min.)	Oral examination (30 min.)		Simulation programme, seminar	6		x	0

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(3) The following module examinations shall be taken for the modules named below to achieve the master's examination in the 4-semester master's degree:

a) If the practice semester (internship semester) is taking place in the first subject semester:

Compulsory Module	Regular Examination Date for the Module Examination	Type and Scope of Marked Coursework	1 st Alternative	2 nd Alternative	Prerequisite for Admission to Examinations	ECTS Points per Module	Non-Marked Modules	Marked Modules without Weighting for Overall Mark	Marked Modules with Weighting for Overall Mark (in %)
SSDM 8000 Practice Semester (Internship Semester)	3 rd Semester	Internship report (approx. 20 pages) and presentation (30 min.) see StO, Appendix 1 Internship Guidelines				30	x		0
SSDM 1000 Selected Chapters of Mathematics	3 rd Semester	Written examination (120 min.)	Oral examination (30 min.)			6			13
SSDM 1200 Applied Computer Science	3 rd Semester	Written examination (120 min.)	Oral examination (30 min.)			6			13
SSDM 2300 Applied Computational Fluid Dynamics	3 rd Semester	Written examination (120 min.)	Oral examination (30 min.)	Draft (60 hrs.)		6			13
SSDM 2400 Simulation in Mechanics & Processes	3 rd Semester	Written examination (120 min.)	Oral examination (30 min.)		Project (semester work)	6			14
SSDM 3200 International Economics & Trade	3 rd Semester	Case study (116 hours)	Coursework essay (90 hrs.) and Presentation (20 min.)			6	x		0
SSDM 3500 International Accounting	3 rd Semester	Written examination (120 min.)				6			13
SSDM 5400 Vehicle Management Systems (incl. Simulation)	3 rd Semester	Written examination (120 min.)	Oral examination (30 min.)		Laboratory	6			14
WMSSDM XXXX Compulsory Elective Modules	3 rd Semester					18		x	0
SSDM 9000 Master's Dissertation and Colloquium									20

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Master's Dissertation	4 th Semester	see FPO			54 ECTS points from passed module examinations	27			70
Master's Dissertation Colloquium	4 th Semester	see FPO			90 ECTS points from passed module examinations	3			30
Total						120			100

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Compulsory Elective Module	Regular Examination Date for the Module Examination	Type and Scope of Marked Coursework	1 st Alternative	2 nd Alternative	Prerequisite for Admission to Examinations	ECTS Points per Module	Non-Marked Modules	Marked Modules without Weighting for Overall Mark	Marked Modules with Weighting for Overall Mark (in %)
WMSSDM 2000 Lightweight Materials and Materials Selection	3 rd Semester	Written examination (120 min.)	Written examination (60 min.) and coursework essay (30 hrs.)		Laboratory	6		x	0
WMSSDM 2100 Renewable Energy Technology	3 rd Semester	Presentation (30 min.)	Written examination (120 min.)	Oral examination (30 min.)		6		x	0
WMSSDM 2200 Project work	3 rd Semester	Presentation (30 min.)				6		x	0
WMSSDM 2500 Automotive Lighting Engineering	3 rd Semester	Written examination (90 min.)	Oral examination (30 min.)	Coursework essay (90 hrs.)	Presentation (15 min.) of simulation results (laboratory)	6		x	0
WMSSDM 2600 Advanced Technical Mechanics	3 rd Semester	Written examination (120 min.)	Oral examination (30 min.)			6		x	0
WMSSDM 2700 Thermodynamics of Multicomponent Systems	3 rd Semester	Written examination (120 min.)	Oral examination (30 min.)			6		x	0
WMSSDM 3000 Human Resources Management	3 rd Semester	Case study (116 hours)	Coursework essay (90 hrs.) and Presentation (20 min.)			6		x	0
WMSSDM 3600 Quality in Automotive Industry	3 rd Semester	Written examination (120 min.)	Oral examination (20 min.)			6		x	0
WMSSDM 5100 Production	3 rd Semester	Written examination (120 min.)	Oral examination (30 min.)			6		x	0
WMSSDM 5500 Vehicle Simulation & Test Drive	3 rd Semester	Coursework essay (30 hrs.)	Oral examination (20 min.)	Written examination (60 min.)		6		x	0
WMSSDM 5600 Simulation in Logistics and Production	3 rd Semester	Presentation with colloquium (45 min.)	Oral examination (30 min.)		Simulation programme, seminar	6		x	0

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b) If the practice semester (internship semester) is taking place in the third subject semester:

Compulsory Module	Regular Examination Date for the Module Examination	Type and Scope of Marked Coursework	1 st Alternative	2 nd Alternative	Prerequisite for Admission to Examinations	ECTS Points per Module	Non-Marked Modules	Marked Modules without Weighting for Overall Mark	Marked Modules with Weighting for Overall Mark (in %)
SSDM 1000 Selected Chapters of Mathematics	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6			13
SSDM 1200 Applied Computer Science	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6			13
SSDM 2300 Applied Computational Fluid Dynamics	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)	Draft (60 hrs.)		6			13
SSDM 2400 Simulation in Mechanics & Processes	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)		Project (semester work)	6			14
SSDM 3200 International Economics & Trade	2 nd Semester	Case study (116 hours)	Coursework essay (90 hrs.) and Presentation (20 min.)			6	x		0
SSDM 3500 International Accounting	2 nd Semester	Written examination (120 min.)				6			13
SSDM 5400 Vehicle Management Systems (incl. Simulation)	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)		Laboratory	6			14
WMSSDM XXXX Compulsory Elective Modules	2 nd Semester					18		x	0
SSDM 8000 Practice Semester (Internship Semester)	3 rd Semester	Internship report (approx. 20 pages) and presentation (30 min.) see <i>StO</i> , Appendix 1 Internship Guidelines				30	x		0
SSDM 9000 Master's Dissertation and Colloquium									20
Master's Dissertation	4 th Semester	see <i>FPO</i>			54 ECTS points from passed module examinations	27			70
Master's Dissertation Colloquium	4 th Semester	see <i>FPO</i>			90 ECTS points from passed module examinations	3			30
Total						120			100

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Compulsory Elective Module	Regular Examination Date for the Module Examination	Type and Scope of Marked Coursework	1 st Alternative	2 nd Alternative	Prerequisite for Admission to Examinations	ECTS Points per Module	Non-Marked Modules	Marked Modules without Weighting for Overall Mark	Marked Modules with Weighting for Overall Mark (in %)
WMSSDM 2000 Lightweight Materials and Materials Selection	2 nd Semester	Written examination (120 min.)	Written examination (60 min.) and coursework essay (30 hrs.)		Laboratory	6		x	0
WMSSDM 2100 Renewable Energy Technology	2 nd Semester	Presentation (30 min.)	Written examination (120 min.)	Oral examination (30 min.)		6		x	0
WMSSDM 2200 Project work	2 nd Semester	Presentation (30 min.)				6		x	0
WMSSDM 2500 Automotive Lighting Engineering	2 nd Semester	Written examination (90 min.)	Oral examination (30 min.)	Coursework essay (90 hrs.)	Presentation (15 min.) of simulation results (laboratory)	6		x	0
WMSSDM 2600 Advanced Technical Mechanics	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6		x	0
WMSSDM 2700 Thermodynamics of Multicomponent Systems	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6		x	0
WMSSDM 3000 Human Resources Management	2 nd Semester	Case study (116 hours)	Coursework essay (90 hrs.) and Presentation (20 min.)			6		x	0
WMSSDM 3600 Quality in Automotive Industry	2 nd Semester	Written examination (120 min.)	Oral examination (20 min.)			6		x	0
WMSSDM 5100 Production	2 nd Semester	Written examination (120 min.)	Oral examination (30 min.)			6		x	0
WMSSDM 5500 Vehicle Simulation & Test Drive	2 nd Semester	Coursework essay (30 hrs.)	Oral examination (20 min.)	Written examination (60 min.)		6		x	0
WMSSDM 5600 Simulation in Logistics and Production	2 nd Semester	Presentation with colloquium (45 min.)	Oral examination (30 min.)		Simulation programme, seminar	6		x	0

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(4) The scope of the alternative marked coursework named in subsections 2 and 3 must be equivalent to the originally planned marked coursework and the evaluation must be assessed according to the same criteria. The students must be informed at the start of teaching in each respective module (one week after the start of the course at the latest) about the kind of marked coursework and its scope. The examiner will select the type and scope of the marked coursework for all candidates in the same semester according to the tables found in subsections 2 and 3. Prior to announcement, the examiner must seek the approval of the examination board if s/he is to choose an alternative form of marked coursework. Please refer to §§ 10-13 of the Framework Examination Regulations.

(5) The total amount of time for an alternative oral examination as stipulated in subsections 2 and 3, is defined by the amount of hours for the written examination. Usually this means that oral examinations are expected to last 15 minutes for a one-hour written examination, 30 minutes for a two-hour written examination, and 45 minutes for a three-hour written examination.

(6) The total amount of time needed to produce a coursework essay, a lab report, a written assignment, a paper or a presentation should be limited in such a way by the topic, that it is possible to complete the assignment within the total amount of time stipulated in subsections 2 and 3.

(7) The examination language must correspond with the language of instruction.

(8) If the student exceeds the required 18 ECTS points due to his/her selection of elective modules, a selection can be made from the passed modules.

§ 8

Overall Mark of the Master's Examination

(1) 80 % of the overall mark of the master's examination comes from the weighted mean of the marks of those examination modules that count towards the final mark; the remaining 20 % comes from the mark for the module Master's Dissertation and Colloquium.

(2) The module marks and the overall mark are calculated in accordance with § 15 of the Framework Examination Regulations.

(3) The weighting of the individual module marks and their proportional share of the overall mark can be found in § 7(2-3).

§ 9
Transcript of Records and Degree Certificate

The candidate will receive the transcript of records (§ 29 of the Framework Examination Regulations) and certificate announcing the bestowal of the university degree (§ 30 Framework Examination Regulations) in both German and English.

III. Final Provisions

§ 10
Validity and Entry into Force

(1) These Subject-Specific Examination Regulations apply for the first time to students who enrolled for the master's degree course Simulation and System Design in winter semester 2017/2018.

(2) The Subject-Specific Examination Regulations enter into force on the day after they have been published on UAS Stralsund's website.

Issued on the basis of the resolution made by the Academic Senate of UAS Stralsund on 25th April 2017 and after approval by the Rector from 18th May 2017.

Stralsund, 18th May 2017

**The Rector
of Hochschule Stralsund,
University of Applied Sciences,
Dr. Matthias Straetling**

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The English translation of the *Fachprüfungsordnung für den Master-Studiengang Simulation and System Design an der Hochschule Stralsund* is intended solely as a convenience to non-German-reading students/members of the university. Only the German text published on Hochschule Stralsund, University of Applied Sciences' website on the 13th July 2017 is legally binding. In the event of any conflict between the English and German text, its structure, meaning or interpretation, the German text, its structure, meaning or interpretation shall prevail.

Appendix

Diploma Supplement 3 Semester Master's Degree

This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended.

It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

1. HOLDER OF QUALIFICATION

- 1.1 *Surname*
«Nachname»
- 1.2 *First Name*
«Vorname»
- 1.3 *Date, Place, Country of Birth*
«GebDatum», «GebOrt», «GebLand»
- 1.4 *Student ID Number or Code*
not of public interest

2. QUALIFICATION

- 2.1 *Name of Qualification (full, abbreviated; in original language)*
Master of Engineering, M.Eng.; Master of Engineering
- 2.2 *Main Field(s) of Study*
Mechanical Engineering, especially with regard to simulation and system design
- 2.3 *Institution Awarding the Qualification (in original language)*
Hochschule Stralsund - University of Applied Sciences
Status (Type / Control)
Hochschule Stralsund (University of Applied Sciences / State Institution)
- 2.4 *Institution Administering Studies (in original language)*
same as 2.3
- 2.5 *Language(s) of Instruction/Examination*
English

Certification Date:

Prof. Dr.-Ing. Olaf Lotter
Chairman Examination Committee

The English translation of the *Fachprüfungsordnung für den Master-Studiengang Simulation and System Design an der Hochschule Stralsund* is intended solely as a convenience to non-German-reading students/members of the university. Only the German text published on Hochschule Stralsund, University of Applied Sciences' website on the 13th July 2017 is legally binding. In the event of any conflict between the English and German text, its structure, meaning or interpretation, the German text, its structure, meaning or interpretation shall prevail.

3. LEVEL OF QUALIFICATION

3.1 Level

Second-level degree (postgraduate), scientific orientation.

3.2 Official Length of Programme

Three semesters (1.5 years), 16 weeks of classes per semester, 30 ECTS credits per semester, Master's Thesis included in semester 3

3.3 Access Requirements

Bachelor of Engineering or comparable degree, 210 ECTS credits or equivalent, English proficiency (B2 level)

4. CONTENTS AND RESULTS GAINED

4.1 Mode of Study

Full time

4.2 Programme Requirements/Qualification Profile of the Graduate

Graduates of the Master's programme in Simulation and System Design are expected to contribute to their field of interest when working in industry, research organisations or the public service sector. The field of employability covers the range of modern systems of simulation and system design using state-of-the-art methods in mathematics and informatics.

Graduates of this master programme are suitable for jobs in research and development departments in various fields of industry and research organisation as well as administrations. During the Master's programme, students acquire knowledge in theory and trained in practical applications of these theories. The topics cover the field of selected chapters of mathematics, applied computer sciences, applied computational fluid dynamics, simulation in mechanics and processes, vehicle management systems as well as international economics and trade, international accounting and a catalogue of elective modules.

4.3 Programme Details

See „Zeugnis über die Masterprüfung“ (Final Examination Certificate) for subjects tested in final examinations (written and oral) and topic of thesis, including evaluations.

4.4 Grading Scheme

For general grading scheme cf. sec. 8.6.

4.5 Overall Classification (in original language)

«GesNoteT» («GesNote»)

Based on comprehensive Final Examination (written exams 80 %, thesis 20 %); cf. „Zeugnis über die Masterprüfung“ (Final Examination Certificate).

Certification Date:

Prof. Dr.-Ing. Olaf Lotter
Chairman Examination Committee

5. FUNCTION OF QUALIFICATION

5.1 Access to Further Study

Graduates of this programme are entitled to admission to doctoral studies.

5.2 Professional Status

The Master's degree entitles its holder to exercise professional work as a scientific engineer in academic, research and industrial settings and in the public service. Depending on the focus of study, there are special skills in: simulation and system design with special orientation to the chosen elective modules.

6. ADDITIONAL INFORMATION

6.1 Additional Information

Accreditation is scheduled for 2018 / 2019

6.2 Further Information Sources

On the institution: www.fh-stralsund.de; on the programme www.fh-stralsund.de > studium.

For national information sources cf. sec. 8.8.

7. CERTIFICATION

This Diploma Supplement refers to the following original documents:

Urkunde über die Verleihung des Grades vom [Date]

Prüfungszeugnis vom [Date]

Transcript of Records vom [Date]

Certification Date:

Prof. Dr.-Ing. Olaf Lotter
Chairman Examination Committee

8. NATIONAL HIGHER EDUCATION SYSTEM

The information on the national higher education system on the following pages provides a context for the qualification and the type of higher education institution that awarded it.

8. INFORMATION ON THE GERMAN HIGHER EDUCATION SYSTEM¹

8.1 Types of Institutions and Institutional Status

Higher education (HE) studies in Germany are offered at three types of Higher Education Institutions (HEI).²

- *Universitäten* (Universities) including various specialized institutions, offer the whole range of academic disciplines. In the German tradition, universities focus in particular on basic research so that advanced stages of study have mainly theoretical orientation and research-oriented components.

- *Fachhochschulen* (Universities of Applied Sciences) concentrate their study programmes in engineering and other technical disciplines, business-related studies, social work, and design areas. The common mission of applied research and development implies a distinct application-oriented focus and professional character of studies, which include integrated and supervised work assignments in industry, enterprises or other relevant institutions.

- *Kunst- und Musikhochschulen* (Universities of Art/Music) offer studies for artistic careers in fine arts, performing arts and music; in such fields as directing, production, writing in theatre, film, and other media; and in a variety of design areas, architecture, media and communication.

Higher Education Institutions are either state or state-recognized institutions. In their operations, including the organization of studies and the designation and award of degrees, they are both subject to higher education legislation.

8.2 Types of Programmes and Degrees Awarded

Studies in all three types of institutions have traditionally been offered in integrated "long" (one-tier) programmes leading to *Diplom-* or *Magister Artium* degrees or completed by a *Staatsprüfung* (State Examination).

Within the framework of the Bologna-Process one-tier study programmes are successively being replaced by a two-tier study system. Since 1998, a scheme of first- and second-level degree programmes (Bachelor and Master) was introduced to be offered parallel to or instead of integrated "long" programmes. These programmes are designed to provide enlarged variety and flexibility to students in planning and pursuing educational objectives, they also enhance international compatibility of studies.

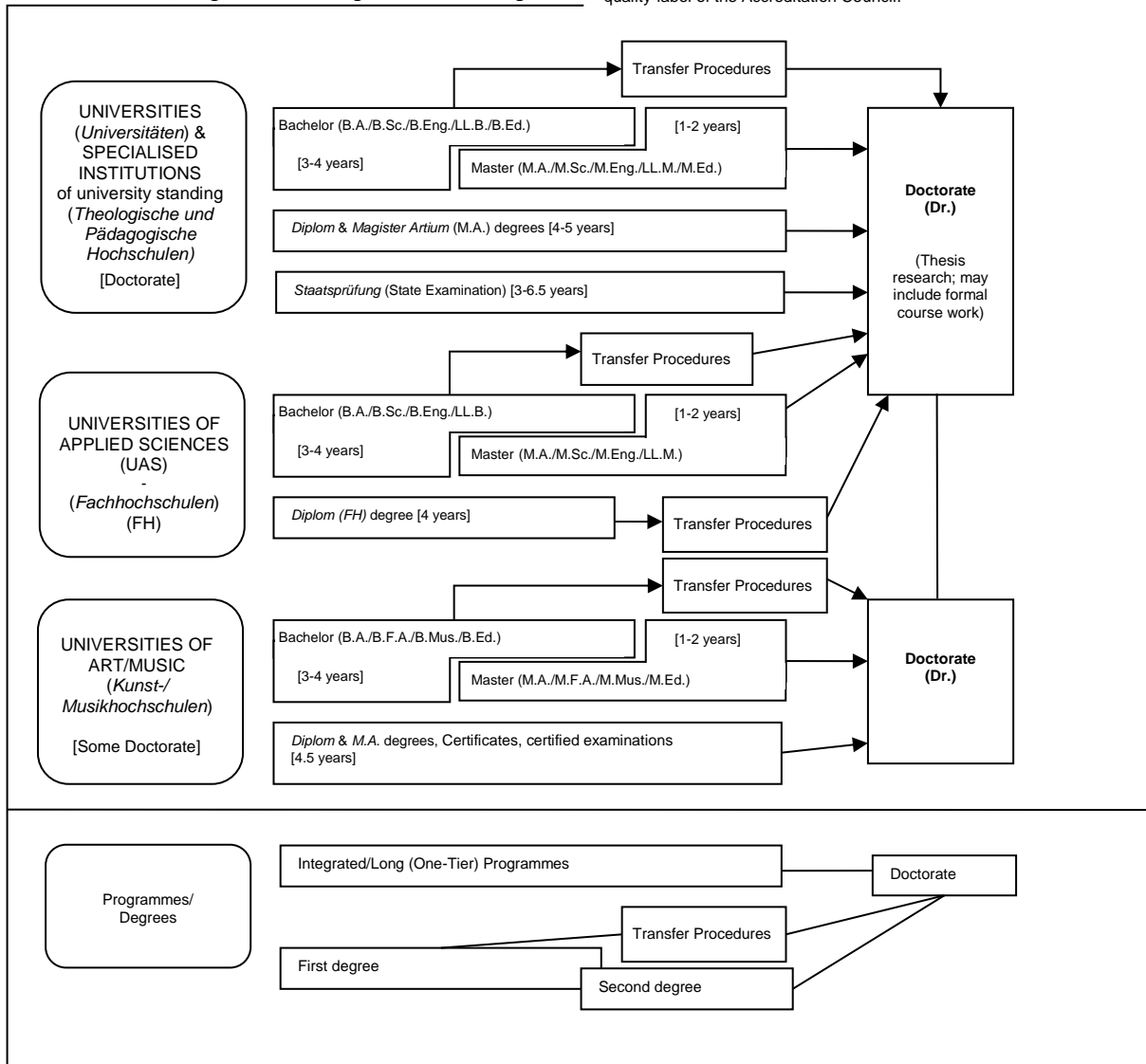
The German Qualification Framework for Higher Education Degrees³ describes the degrees of the German Higher Education System. It contains the classification of the qualification levels as well as the resulting qualifications and competencies of the graduates.

For details cf. sec. 8.4.1, 8.4.2, and 8.4.3 respectively. Table 1 provides a synoptic summary.

8.3 Approval/Accreditation of Programmes and Degrees

To ensure quality and comparability of qualifications, the organization of studies and general degree requirements have to conform to principles and regulations established by the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK).⁴ In 1999, a system of accreditation for programmes of study has become operational under the control of an Accreditation Council at national level. All new programmes have to be accredited under this scheme; after a successful accreditation they receive the quality-label of the Accreditation Council.⁵

Table 1: Institutions, Programmes and Degrees in German Higher Education



The English translation of the *Fachprüfungsordnung für den Master-Studiengang Simulation and System Design an der Hochschule Stralsund* is intended solely as a convenience to non-German-reading students/members of the university. Only the German text published on Hochschule Stralsund, University of Applied Sciences' website on the 13th July 2017 is legally binding. In the event of any conflict between the English and German text, its structure, meaning or interpretation, the German text, its structure, meaning or interpretation shall prevail.

8.4 Organization and Structure of Studies

The following programmes apply to all three types of institutions. Bachelor's and Master's study courses may be studied consecutively, at various higher education institutions, at different types of higher education institutions and with phases of professional work between the first and the second qualification. The organization of the study programmes makes use of modular components and of the European Credit Transfer and Accumulation System (ECTS) with 30 credits corresponding to one semester.

8.4.1 Bachelor

Bachelor degree study programmes lay the academic foundations, provide methodological skills and lead to qualifications related to the professional field. The Bachelor degree is awarded after 3 to 4 years. The Bachelor degree programme includes a thesis requirement. Study courses leading to the Bachelor degree must be accredited according to the Law establishing a Foundation for the Accreditation of Study Programmes in Germany.⁶ First degree programmes (Bachelor) lead to Bachelor of Arts (B.A.), Bachelor of Science (B.Sc.), Bachelor of Engineering (B.Eng.), Bachelor of Laws (LL.B.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.Mus.) or Bachelor of Education (B.Ed.).

8.4.2 Master

Master is the second degree after another 1 to 2 years. Master study programmes may be differentiated by the profile types "practice-oriented" and "research-oriented". Higher Education Institutions define the profile. The Master degree study programme includes a thesis requirement. Study programmes leading to the Master degree must be accredited according to the Law establishing a Foundation for the Accreditation of Study Programmes in Germany.⁷ Second degree programmes (Master) lead to Master of Arts (M.A.), Master of Science (M.Sc.), Master of Engineering (M.Eng.), Master of Laws (LL.M.), Master of Fine Arts (M.F.A.), Master of Music (M.Mus.) or Master of Education (M.Ed.). Master study programmes, which are designed for continuing education may carry other designations (e.g. MBA).

8.4.3 Integrated "Long" Programmes (One-Tier): *Diplom degrees, Magister Artium, Staatsprüfung*

An integrated study programme is either mono-disciplinary (*Diplom* degrees, most programmes completed by a *Staatsprüfung*) or comprises a combination of either two major or one major and two minor fields (*Magister Artium*). The first stage (1.5 to 2 years) focuses on broad orientations and foundations of the field(s) of study. An Intermediate Examination (*Diplom-Vorprüfung* for *Diplom* degrees; *Zwischenprüfung* or credit requirements for the *Magister Artium*) is prerequisite to enter the second stage of advanced studies and specializations. Degree requirements include submission of a thesis (up to 6 months duration) and comprehensive final written and oral examinations. Similar regulations apply to studies leading to a *Staatsprüfung*. The level of qualification is equivalent to the Master level.

- Integrated studies at *Universitäten (U)* last 4 to 5 years (*Diplom* degree, *Magister Artium*) or 3 to 6.5 years (*Staatsprüfung*). The *Diplom* degree is awarded in engineering disciplines, the natural sciences as well as economics and business. In the humanities, the corresponding degree is usually the *Magister Artium (M.A.)*. In the social sciences, the practice varies as a matter of institutional traditions. Studies preparing for the legal, medical and pharmaceutical are completed by a *Staatsprüfung*. This applies also to studies preparing for teaching professions of some *Länder*.

The three qualifications (*Diplom*, *Magister Artium* and *Staatsprüfung*) are academically equivalent. They qualify to apply for admission to doctoral studies. Further prerequisites for admission may be defined by the Higher Education Institution, cf. sec. 8.5.

- Integrated studies at *Fachhochschulen (FH)/Universities of Applied Sciences (UAS)* last 4 years and lead to a *Diplom (FH)* degree. While the *FH/UAS* are non-doctorate granting institutions, qualified graduates may apply for admission to doctoral studies at doctorate-granting institutions, cf. sec. 8.5.

- Studies at *Kunst- und Musikhochschulen* (Universities of Art/Music etc.) are more diverse in their organization, depending on the field and individual objectives. In addition to *Diplom/Magister* degrees, the integrated study programme awards include Certificates and certified examinations for specialized areas and professional purposes.

8.5 Doctorate

Universities as well as specialized institutions of university standing and some Universities of Art/Music are doctorate-granting institutions. Formal prerequisite for admission to doctoral work is a qualified Master (UAS and U), a *Magister* degree, a *Diplom*, a *Staatsprüfung*, or a foreign equivalent. Particularly qualified holders of a Bachelor or a *Diplom (FH)* degree may also be admitted to doctoral studies without acquisition of a further degree by means of a procedure to determine their aptitude. The universities respectively the doctorate-granting institutions regulate entry to a doctorate as well as the structure of the procedure to determine aptitude. Admission further requires the acceptance of the dissertation research project by a professor as a supervisor.

8.6 Grading Scheme

The grading scheme in Germany usually comprises five levels (with numerical equivalents; intermediate grades may be given): "Sehr Gut" (1) = Very Good; "Gut" (2) = Good; "Befriedigend" (3) = Satisfactory; "Ausreichend" (4) = Sufficient; "Nicht ausreichend" (5) = Non-Sufficient/Fail. The minimum passing grade is "Ausreichend" (4). Verbal designations of grades may vary in some cases and for doctoral degrees.

In addition institutions partly already use an ECTS grading scheme.

8.7 Access to Higher Education

The General Higher Education Entrance Qualification (*Allgemeine Hochschulreife, Abitur*) after 12 to 13 years of schooling allows for admission to all higher educational studies. Specialized variants (*Fachgebundene Hochschulreife*) allow for admission to particular disciplines. Access to *Fachhochschulen* (UAS) is also possible with a *Fachhochschulreife*, which can usually be acquired after 12 years of schooling. Admission to Universities of Art/Music may be based on other or require additional evidence demonstrating individual aptitude. Higher Education Institutions may in certain cases apply additional admission procedures.

8.8 National Sources of Information

- Kultusministerkonferenz (KMK) [Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany]; Lennéstrasse 6, D-53113 Bonn; Fax: +49[0]228/501-229; Phone: +49[0]228/501-0
- Central Office for Foreign Education (ZaB) as German NARIC; www.kmk.org; E-Mail: zab@kmk.org
- "Documentation and Educational Information Service" as German EURYDICE-Unit, providing the national dossier on the education system (www.kmk.org/dokumentation/zusammenarbeit-auf-europaeischer-ebene-im-eurydice-informationsnetz.html; E-Mail: eurydice@kmk.org)
- Hochschulrektorenkonferenz (HRK) [German Rectors' Conference]; Ahrstrasse 39, D-53175 Bonn; Fax: +49[0]228/887-110; Phone: +49[0]228/887-0; www.hrk.de; E-Mail: post@hrk.de
- "Higher Education Compass" of the German Rectors' Conference features comprehensive information on institutions, programmes of study, etc. (www.higher-education-compass.de)

- 1 The information covers only aspects directly relevant to purposes of the Diploma Supplement. All information as of 1st July 2010.
- 2 *Berufsakademien* are not considered as Higher Education Institutions, they only exist in some of the *Länder*. They offer educational programmes in close cooperation with private companies. Students receive a formal degree and carry out an apprenticeship at the company. Some *Berufsakademien* offer Bachelor courses which are recognized as an academic degree if they are accredited by a German accreditation agency.
- 3 German Qualification Framework for Higher Education Degrees (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 21.04.2005).
- 4 Common structural guidelines of the *Länder* for the accreditation of Bachelor's and Master's study courses (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 10.10.2003, as amended on 04.02.2010).
- 5 "Law establishing a Foundation 'Foundation for the Accreditation of Study Programmes in Germany'", entered into force as from 26.2.2005, GV. NRW. 2005, nr. 5, p. 45 in connection with the Declaration of the *Länder* to the Foundation "Foundation for the Accreditation of Study Programmes in Germany" (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 16.12.2004).
- 6 See note No. 5.
- 7 See note No. 5.

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Diploma Supplement 4 Semester Master's Degree

This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended.

It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

1. HOLDER OF QUALIFICATION

1.3 *Surname*
«Nachname»

1.4 *First Name*
«Vorname»

1.3 *Date, Place, Country of Birth*
«GebDatum», «GebOrt», «GebLand»

1.4 *Student ID Number or Code*
not of public interest

2. QUALIFICATION

2.1 *Name of Qualification (full, abbreviated; in original language)*
Master of Engineering, M.Eng.; Master of Engineering

2.2 *Main Field(s) of Study*
Mechanical Engineering, especially with regard to simulation and system design

2.3 *Institution Awarding the Qualification (in original language)*
Hochschule Stralsund - University of Applied Sciences
Status (Type / Control)
Hochschule Stralsund (University of Applied Sciences / State Institution)

2.4 *Institution Administering Studies (in original language)*
same as 2.3

2.5 *Language(s) of Instruction/Examination*
English

Certification Date:

Prof. Dr.-Ing. Olaf Lotter
Chairman Examination Committee

3. LEVEL OF QUALIFICATION

3.1 Level

Second-level degree (postgraduate), scientific orientation.

3.2 Official Length of Programme

Four semesters (2 years), 16 weeks of classes per semester, 30 ECTS credits per semester, internship semester in semester one or three, Master's Thesis included in semester four

3.3 Access Requirements

Bachelor of Engineering or comparable degree, 180 ECTS credits or equivalent, English proficiency (B2 level)

4. CONTENTS AND RESULTS GAINED

4.1 Mode of Study

Full time

4.2 Programme Requirements/Qualification Profile of the Graduate

Graduates of the Master's programme in Simulation and System Design are expected to contribute to their field of interest when working in industry, research organisations or the public service sector. The field of employability covers the range of modern systems of simulation and system design using state-of-the-art methods in mathematics and informatics.

Graduates of this master programme are suitable for jobs in research and development departments in various fields of industry and research organisation as well as administrations. During the Master's programme, students acquire knowledge in theory and trained in practical applications of these theories. The topics cover the field of selected chapters of mathematics, applied computer sciences, applied computational fluid dynamics, simulation in mechanics and processes, vehicle management systems as well as international economics and trade, international accounting and a catalogue of elective modules.

4.3 Programme Details

See „Zeugnis über die Masterprüfung“ (Final Examination Certificate) for subjects tested in final examinations (written and oral) and topic of thesis, including evaluations.

4.4 Grading Scheme

For general grading scheme cf. sec. 8.6.

4.5 Overall Classification (in original language)

«GesNoteT» («GesNote»)

Based on comprehensive Final Examination (written exams 80 %, thesis 20 %); cf. „Zeugnis über die Masterprüfung“ (Final Examination Certificate).

Certification Date:

Prof. Dr.-Ing. Olaf Lotter
Chairman Examination Committee

5. FUNCTION OF QUALIFICATION

5.1 Access to Further Study

Graduates of this programme are entitled to admission to doctoral studies.

5.2 Professional Status

The Master's degree entitles its holder to exercise professional work as a scientific engineer in academic, research and industrial settings and in the public service. Depending on the focus of study, there are special skills in: simulation and system design with special orientation to the chosen elective modules.

6. ADDITIONAL INFORMATION

6.1 Additional Information

Accreditation is scheduled for 2018 / 2019

6.2 Further Information Sources

On the institution: www.fh-stralsund.de; on the programme www.fh-stralsund.de > studium.

For national information sources cf. sec. 8.8.

7. CERTIFICATION

This Diploma Supplement refers to the following original documents:

Urkunde über die Verleihung des Grades vom [Date]

Prüfungszeugnis vom [Date]

Transcript of Records vom [Date]

Certification Date:

Prof. Dr.-Ing. Olaf Lotter
Chairman Examination Committee

8. NATIONAL HIGHER EDUCATION SYSTEM

The information on the national higher education system on the following pages provides a context for the qualification and the type of higher education institution that awarded it.

8. INFORMATION ON THE GERMAN HIGHER EDUCATION SYSTEM¹

8.1 Types of Institutions and Institutional Status

Higher education (HE) studies in Germany are offered at three types of Higher Education Institutions (HEI).²

- *Universitäten* (Universities) including various specialized institutions, offer the whole range of academic disciplines. In the German tradition, universities focus in particular on basic research so that advanced stages of study have mainly theoretical orientation and research-oriented components.

- *Fachhochschulen* (Universities of Applied Sciences) concentrate their study programmes in engineering and other technical disciplines, business-related studies, social work, and design areas. The common mission of applied research and development implies a distinct application-oriented focus and professional character of studies, which include integrated and supervised work assignments in industry, enterprises or other relevant institutions.

- *Kunst- und Musikhochschulen* (Universities of Art/Music) offer studies for artistic careers in fine arts, performing arts and music; in such fields as directing, production, writing in theatre, film, and other media; and in a variety of design areas, architecture, media and communication.

Higher Education Institutions are either state or state-recognized institutions. In their operations, including the organization of studies and the designation and award of degrees, they are both subject to higher education legislation.

8.2 Types of Programmes and Degrees Awarded

Studies in all three types of institutions have traditionally been offered in integrated "long" (one-tier) programmes leading to *Diplom-* or *Magister Artium* degrees or completed by a *Staatsprüfung* (State Examination).

Within the framework of the Bologna-Process one-tier study programmes are successively being replaced by a two-tier study system. Since 1998, a scheme of first- and second-level degree programmes (Bachelor and Master) was introduced to be offered parallel to or instead of integrated "long" programmes. These programmes are designed to provide enlarged variety and flexibility to students in planning and pursuing educational objectives, they also enhance international compatibility of studies.

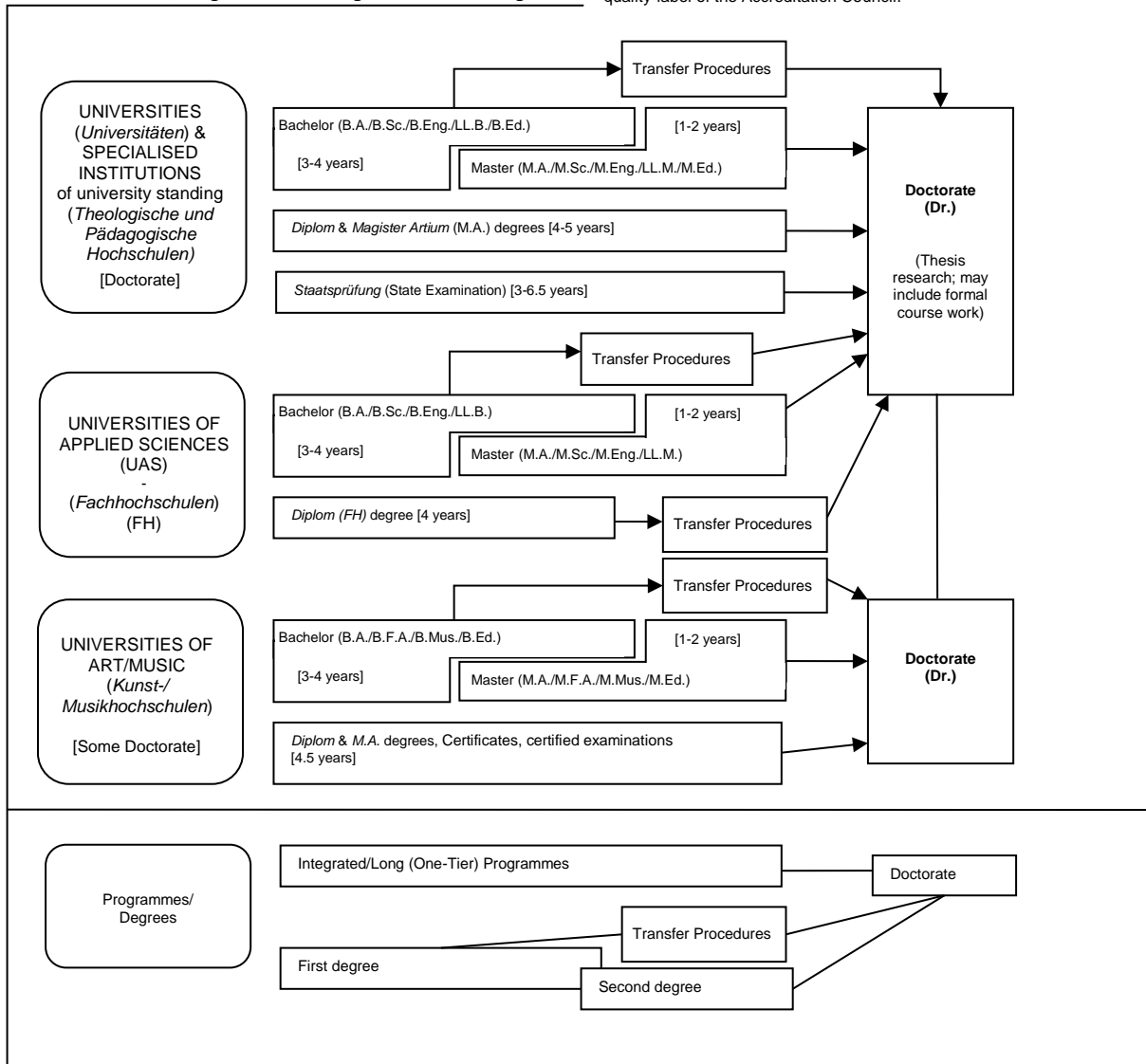
The German Qualification Framework for Higher Education Degrees³ describes the degrees of the German Higher Education System. It contains the classification of the qualification levels as well as the resulting qualifications and competencies of the graduates.

For details cf. sec. 8.4.1, 8.4.2, and 8.4.3 respectively. Table 1 provides a synoptic summary.

8.3 Approval/Accreditation of Programmes and Degrees

To ensure quality and comparability of qualifications, the organization of studies and general degree requirements have to conform to principles and regulations established by the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK).⁴ In 1999, a system of accreditation for programmes of study has become operational under the control of an Accreditation Council at national level. All new programmes have to be accredited under this scheme; after a successful accreditation they receive the quality-label of the Accreditation Council.⁵

Table 1: Institutions, Programmes and Degrees in German Higher Education



The English translation of the *Fachprüfungsordnung für den Master-Studiengang Simulation and System Design an der Hochschule Stralsund* is intended solely as a convenience to non-German-reading students/members of the university. Only the German text published on Hochschule Stralsund, University of Applied Sciences' website on the 13th July 2017 is legally binding. In the event of any conflict between the English and German text, its structure, meaning or interpretation, the German text, its structure, meaning or interpretation shall prevail.

8.4 Organization and Structure of Studies

The following programmes apply to all three types of institutions. Bachelor's and Master's study courses may be studied consecutively, at various higher education institutions, at different types of higher education institutions and with phases of professional work between the first and the second qualification. The organization of the study programmes makes use of modular components and of the European Credit Transfer and Accumulation System (ECTS) with 30 credits corresponding to one semester.

8.4.1 Bachelor

Bachelor degree study programmes lay the academic foundations, provide methodological skills and lead to qualifications related to the professional field. The Bachelor degree is awarded after 3 to 4 years. The Bachelor degree programme includes a thesis requirement. Study courses leading to the Bachelor degree must be accredited according to the Law establishing a Foundation for the Accreditation of Study Programmes in Germany.⁶ First degree programmes (Bachelor) lead to Bachelor of Arts (B.A.), Bachelor of Science (B.Sc.), Bachelor of Engineering (B.Eng.), Bachelor of Laws (LL.B.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.Mus.) or Bachelor of Education (B.Ed.).

8.4.2 Master

Master is the second degree after another 1 to 2 years. Master study programmes may be differentiated by the profile types "practice-oriented" and "research-oriented". Higher Education Institutions define the profile. The Master degree study programme includes a thesis requirement. Study programmes leading to the Master degree must be accredited according to the Law establishing a Foundation for the Accreditation of Study Programmes in Germany.⁷ Second degree programmes (Master) lead to Master of Arts (M.A.), Master of Science (M.Sc.), Master of Engineering (M.Eng.), Master of Laws (LL.M.), Master of Fine Arts (M.F.A.), Master of Music (M.Mus.) or Master of Education (M.Ed.). Master study programmes, which are designed for continuing education may carry other designations (e.g. MBA).

8.5.3 Integrated "Long" Programmes (One-Tier): *Diplom degrees, Magister Artium, Staatsprüfung*

An integrated study programme is either mono-disciplinary (*Diplom* degrees, most programmes completed by a *Staatsprüfung*) or comprises a combination of either two major or one major and two minor fields (*Magister Artium*). The first stage (1.5 to 2 years) focuses on broad orientations and foundations of the field(s) of study. An Intermediate Examination (*Diplom-Vorprüfung* for *Diplom* degrees; *Zwischenprüfung* or credit requirements for the *Magister Artium*) is prerequisite to enter the second stage of advanced studies and specializations. Degree requirements include submission of a thesis (up to 6 months duration) and comprehensive final written and oral examinations. Similar regulations apply to studies leading to a *Staatsprüfung*. The level of qualification is equivalent to the Master level.

- Integrated studies at *Universitäten (U)* last 4 to 5 years (*Diplom* degree, *Magister Artium*) or 3 to 6.5 years (*Staatsprüfung*). The *Diplom* degree is awarded in engineering disciplines, the natural sciences as well as economics and business. In the humanities, the corresponding degree is usually the *Magister Artium (M.A.)*. In the social sciences, the practice varies as a matter of institutional traditions. Studies preparing for the legal, medical and pharmaceutical are completed by a *Staatsprüfung*. This applies also to studies preparing for teaching professions of some *Länder*.

The three qualifications (*Diplom*, *Magister Artium* and *Staatsprüfung*) are academically equivalent. They qualify to apply for admission to doctoral studies. Further prerequisites for admission may be defined by the Higher Education Institution, cf. sec. 8.5.

- Integrated studies at *Fachhochschulen (FH)/Universities of Applied Sciences (UAS)* last 4 years and lead to a *Diplom (FH)* degree. While the *FH/UAS* are non-doctorate granting institutions, qualified graduates may apply for admission to doctoral studies at doctorate-granting institutions, cf. sec. 8.5.

- Studies at *Kunst- und Musikhochschulen* (Universities of Art/Music etc.) are more diverse in their organization, depending on the field and individual objectives. In addition to *Diplom/Magister* degrees, the integrated study programme awards include Certificates and certified examinations for specialized areas and professional purposes.

8.6 Doctorate

Universities as well as specialized institutions of university standing and some Universities of Art/Music are doctorate-granting institutions. Formal prerequisite for admission to doctoral work is a qualified Master (UAS and U), a *Magister* degree, a *Diplom*, a *Staatsprüfung*, or a foreign equivalent. Particularly qualified holders of a Bachelor or a *Diplom (FH)* degree may also be admitted to doctoral studies without acquisition of a further degree by means of a procedure to determine their aptitude. The universities respectively the doctorate-granting institutions regulate entry to a doctorate as well as the structure of the procedure to determine aptitude. Admission further requires the acceptance of the dissertation research project by a professor as a supervisor.

8.9 Grading Scheme

The grading scheme in Germany usually comprises five levels (with numerical equivalents; intermediate grades may be given): "Sehr Gut" (1) = Very Good; "Gut" (2) = Good; "Befriedigend" (3) = Satisfactory; "Ausreichend" (4) = Sufficient; "Nicht ausreichend" (5) = Non-Sufficient/Fail. The minimum passing grade is "Ausreichend" (4). Verbal designations of grades may vary in some cases and for doctoral degrees.

In addition institutions partly already use an ECTS grading scheme.

8.10 Access to Higher Education

The General Higher Education Entrance Qualification (*Allgemeine Hochschulreife, Abitur*) after 12 to 13 years of schooling allows for admission to all higher educational studies. Specialized variants (*Fachgebundene Hochschulreife*) allow for admission to particular disciplines. Access to *Fachhochschulen* (UAS) is also possible with a *Fachhochschulreife*, which can usually be acquired after 12 years of schooling. Admission to Universities of Art/Music may be based on other or require additional evidence demonstrating individual aptitude. Higher Education Institutions may in certain cases apply additional admission procedures.

8.11 National Sources of Information

- Kultusministerkonferenz (KMK) [Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany]; Lennéstrasse 6, D-53113 Bonn; Fax: +49[0]228/501-229; Phone: +49[0]228/501-0
- Central Office for Foreign Education (ZaB) as German NARIC; www.kmk.org; E-Mail: zab@kmk.org
- "Documentation and Educational Information Service" as German EURYDICE-Unit, providing the national dossier on the education system (www.kmk.org/dokumentation/zusammenarbeit-auf-europaeischer-ebene-im-eurydice-informationsnetz.html; E-Mail: eurydice@kmk.org)
- Hochschulrektorenkonferenz (HRK) [German Rectors' Conference]; Ahrstrasse 39, D-53175 Bonn; Fax: +49[0]228/887-110; Phone: +49[0]228/887-0; www.hrk.de; E-Mail: post@hrk.de
- "Higher Education Compass" of the German Rectors' Conference features comprehensive information on institutions, programmes of study, etc. (www.higher-education-compass.de)

¹ The information covers only aspects directly relevant to purposes of the Diploma Supplement. All information as of 1st July 2010.

² *Berufsakademien* are not considered as Higher Education Institutions, they only exist in some of the *Länder*. They offer educational programmes in close cooperation with private companies. Students receive a formal degree and carry out an apprenticeship at the company. Some *Berufsakademien* offer Bachelor courses which are recognized as an academic degree if they are accredited by a German accreditation agency.

³ German Qualification Framework for Higher Education Degrees (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 21.04.2005).

⁴ Common structural guidelines of the *Länder* for the accreditation of Bachelor's and Master's study courses (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 10.10.2003, as amended on 04.02.2010).

⁵ "Law establishing a Foundation 'Foundation for the Accreditation of Study Programmes in Germany'", entered into force as from 26.2.2005, GV. NRW. 2005, nr. 5, p. 45 in connection with the Declaration of the *Länder* to the Foundation "Foundation: Foundation for the Accreditation of Study Programmes in Germany" (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 16.12.2004).

⁶ See note No. 5.

⁷ See note No. 5.