### Non-official reading version

The subject examination regulations for the Master's program Renewable Energy and E-Mobility have not been published coherently in this form. This publication is intended as a service for the students and other members of the Stralsund University of Applied Sciences to summarize the subject examination regulations and their amendment statutes. The text of the study regulations and the respective amendment statutes published on the homepage of the Stralsund University of Applied Sciences is legally binding.

### **Examination Regulations for the Master's Degree Program Renewable Energy and E-Mobility** at the University of Applied Sciences Stralsund from November 14, 2017

in the version of the fourth statute amending the examination regulations for the Master's degree program Renewable Energy and E-Mobility at Stralsund University of Applied Sciences dated October 27, 2021

#### Amendments:

- 1st Amendment Statute of November 19, 2018.
- 2nd Amendment Articles of November 01, 2019
- 3rd amending statute of October 29, 2020
- 4th amending statute of October 27, 2021

Based on § 2 paragraph 1 in conjunction with § 39 paragraph 1 of the State University Act (Landeshochschulgesetz - LHG M-V) in the version published on January 25, 2011 (GVOBI. M-V p. 18), amended by Article 6 of the Act of June 22, 2012 (GVOBI. M-V p. 208, 211), Stralsund University of Applied Sciences issues the following study regulations for the Master's degree program Renewable Energy and E-Mobility as bylaws:

### **Contents**

§ 1 Scope of application	3
§ 2 Admission requirement	3
§ 3 Duration and structure of the study	5
§ 4 Degree	7
§ 5 Master thesis	7
§ 6 Master Colloquium	8
§ 7 Certificates of achievement and Examination requirements	9
§ 8 Exercise certificates	9
§ 9 Experimental work	.10
§ 10 Module Examinations, Regular Examination Dates, Alternative Examinations servives and Examinations requirementes	.10
§ 11 Overall grade of the Master's examination	.14
§ 12 Certificate and diploma	.15
§ 13 Validity and entry into force	.15
Anlage 1: Diploma Supplement 3-semester Master	20
Anlage 2: Diploma Supplement 4-semester Master	26

## § 1 Scope of application

These examination regulations govern the study and examination procedure in the Master's program Renewable Energy and E-Mobility. For all examination matters not regulated in these regulations, the framework examination regulations of Stralsund University of Applied Sciences of 24 October 2012, (Mitt.bl. BM M-V 2012 p. 1146), last amended by the third statute amending the framework examination regulations of Stralsund University of Applied Sciences of 27 April 2017 (published on the homepage of Stralsund University of Applied Sciences) apply directly.

### § 2 Admission requirements

- (1) The general admission requirements for the study program are determined in accordance with §§ 17 to 19 of the State University Act in conjunction with the matriculation regulations of Stralsund University in the currently valid version. Enrollment in both 4-semester variants takes place only in the summer semester.
- (2) Admission also requires proof of appropriate English language skills. This knowledge must correspond to level B2 according to the Common European Framework of Reference for Languages and must be proven. Applicants whose mother tongue or official language is English, as well as those who have successfully completed a course of study that is predominantly conducted in English, do not require such proof. Applicants who can prove that they have spent at least ten months in an English-speaking foreign country can submit an informal application for individual assessment by Stralsund University with regard to recognition.
- (3) Admission to the 3-semester Master's program in Renewable Energy and E Mobility is restricted to:
- 1. who provides proof of a first professional degree in the fields of study Electrical Engineering, Power Engineering, Renewable Energy, Mechanical Engineering or Physics as well as related degrees.
  - This can be a bachelor's degree obtained in Germany or a degree with a comparable degree with at least 210 ECTS credits

or

- a bachelor's degree or comparable degree with at least 210 ECTS credits obtained abroad.
- 2. who provides proof of relevant practical work experience (internship) of at least 12 weeks prior to commencing studies. Credit will be given for a relevant professional practical activity or a relevant internship realized within the framework of or following a Bachelor's or comparable degree program. The credit must be applied for at the Faculty of Electrical Engineering and Computer Science, enclosing the relevant evidence, via the Department for Study and Examination Matters and International Affairs. The internship representative responsible for the degree program decides on the crediting. Credit may also be given only in part. Students can be given conditions

for the complete fulfillment of the internship. The proof must be submitted at the latest by the time of registration for the Master's thesis.

(4) Students are only admitted to the 4-semester Master's program in Renewable Energy and E Mobility with an internship semester:

Those who provide proof of a first professional degree in the fields of study Electrical Engineering, Energy Engineering, Renewable Energy, Mechanical Engineering or Physics as well as related degrees.

 This can be a bachelor's degree acquired in Germany or a degree completed with a comparable degree with at least 180 ECTS credits

or

- a Bachelor's degree acquired abroad or a degree completed with a comparable degree with at least 180 ECTS credits.
- (5) Only students who have completed a 4-semester Master's degree program in Renewable Energy and E Mobility without an internship semester will be admitted to the program:
- 1. who provides proof of a first professional degree in the fields of study electrical engineering, power engineering, regenerative energies, mechanical engineering or physics as well as related degrees.
  - This can be a Bachelor's degree obtained in Germany or a degree completed with a comparable degree with at least 180 ECTS credits

or

- a bachelor's degree or comparable degree with at least 180 ECTS credits obtained abroad.
- 2. who provides proof of relevant practical work experience (internship) of at least 12 weeks prior to commencing studies. Credit will be given for a relevant professional practical activity or a relevant internship realized within the framework of or following a Bachelor's or comparable degree program. An application for credit must be submitted to the Faculty of Electrical Engineering and Computer Science via the Department of Study and Examination Matters and International Affairs, enclosing the relevant supporting documents. The person responsible for the internship in the course of study decides on the crediting. The credit can also be given only partially. Students may be given requirements to complete the internship. Proof must be submitted by the time of registration for the Master's thesis at the latest.
- (6) In addition, for admission (all three study models), proof of knowledge in the following subject areas must be provided to the extent indicated:
  - Fundamentals of electrical engineering in the scope of at least 4 SWS or 5 FCTS
  - Control engineering in the scope of at least 4 SWS or 5 ECTS
  - Measurement technology in the scope of at least 4 SWS or 5 ECTS
  - Electrical machines in the scope of at least 2 SWS or 3 ECTS

- and the usual mathematical principles underlying these subject areas.
- (7) Access to the master's degree program Renewable Energy and E-Mobility can only be denied, if no admission restriction exists, if a successful completion of the master's degree program is not to be expected. Successful completion of the master's program is not to be expected if one of the requirements of paragraphs 2, 3 or 4 and 5 is not met or if the first professional degree program was not completed with a grade of at least 2.3 or, in the case of another grading system, with a comparable grade. If the grade is 2.3 or better, but worse than 2.0, there is a presumption that successful completion of the master's program is not to be expected.

In this case, the presumption can be invalidated by a statement of reasons for the desired course of study and, if necessary, further evidence of the applicant's subject-and course-specific qualifications.

This self-written statement in German or English, approximately 500 words in length, and the supporting documents should indicate the specific skills and talents that qualify the applicant for a Master's degree. Furthermore, the motivation and goals associated with the desired master's degree program should be outlined. If a positive prognosis for success cannot be derived from the overall picture, admission may be denied.

- (8) If the Master's program Renewable Energy and E-Mobility is subject to limited admission (numerus clausus), the statutes for the implementation of the university's own selection procedure shall apply.
- (9) Compliance with the admission requirements is checked by the Admissions Committee of the Faculty of Electrical Engineering and Computer Science, consisting of the course representatives of the faculty, the Dean of Studies and the Chairperson of the Examination Board of the Faculty of Electrical Engineering and Computer Science.

# § 3 Duration and structure of the study

- (1) The time in which, as a rule, the studies can be completed with the Master's examination as a second professional qualification (standard period of study) is divided into two parts in this degree program. The program offers three study paths with different standard periods of study:
- 3-semester Master
- 4-semester Master with internship semester
- 4-semester Master without internship semester

Students in the two 4-semester variants can change to the other variant up to 4 weeks after the start of the 3rd semester. To do so, an application must be submitted to the examination board.

- (2) The following applies to the 3-semester Master:
  - 1. the time in which, as a rule, the study program can be completed with the Master's degree as a second professional qualification (standard period of

study) is three semesters. The third semester is primarily used for the preparation of the Master's thesis and the colloquium in accordance with §§ 24 to 27 of the Framework Examination Regulations of Stralsund University and §§ 5 and 6 of these Examination Regulations.

The total number of ECTS credits required for successful completion of the program is 90. Of these, the following are allotted

- a) 60 ECTS points for compulsory and elective modules in the first two semesters.
- b) in the third semester, 30 ECTS credits for the Master's thesis including the Master's colloquium.
- (3) For the 4-semester Master with internship semester the following applies:
  - 1. the time in which, as a rule, the study program can be completed with the Master's degree as a second professional qualification (standard period of study) is four semesters. The fourth semester is primarily used for the preparation of the Master's thesis and the colloquium in accordance with §§ 24 to 27 of the Framework Examination Regulations of Stralsund University and §§ 5 and 6 of these Examination Regulations.

The internship semester is usually in the third semester. It is a period of training integrated into the course of study, regulated by the Stralsund University of Applied Sciences, with specific content and supervision, which is usually completed in a company or in another institution of professional practice with an extent of at least 21 weeks. The content and technical requirements for the internship study semester are regulated by the internship guideline as Annex 1 of the study regulations.

The total amount required for successful completion of the program is 120 ECTS credits. Of these, the following are allotted

- a) 60 ECTS points for compulsory and elective modules in the first two semesters,
- b) 30 ECTS credits for the internship semester in the third semester.
- c) in the fourth semester 30 ECTS credits for the Master's thesis including the Master's colloquium.
- (4) For the 4-semester Master's degree without internship semester the following applies:
  - 1. the time in which, as a rule, the study program can be completed with the Master's degree as a second professional qualification (standard period of study) is four semesters. The fourth semester is primarily used for the preparation of the Master's thesis and the colloquium in accordance with §§ 24 to 27 of the Framework Examination Regulations of Stralsund University and §§ 5 and 6 of these Examination Regulations.
  - 2. the total amount required for the successful completion of the program is 120 ECTS credits. Of these:

- a) 90 ECTS credits for compulsory and elective modules in the first three semesters.
- b) in the fourth semester, 30 ECTS credits for the Master's thesis including the Master's colloquium.
- (5) for all three study variants applies:
  - 1. students who have already taken and completed the module "Power Electronics" or a module in this field with similar qualification objectives in their bachelor's degree program must choose another (free) elective module instead. In cases of doubt, the examination board will decide.
  - 2. students who have not completed a bachelor's degree in electrical engineering or a related degree program must take the module "Electrical Energy Conversion and Transmission" as a compulsory course instead of an elective module from the area of "Application oriented". In this case, a renewed enrollment as a compulsory elective module is excluded."
- (6) At least 8 compulsory elective modules are offered for selection. Training in an elective module shall only be provided if at least five students have chosen this module. The examination board shall decide on exceptions with regard to the required minimum number of students upon application by the student. Reference is made to § 3 paragraph 4 of the framework examination regulations.
- (7) The modules and the associated examinations take place in English. Optionally, at the student's request, up to 4 modules can be taken in German, provided that these are also offered in German. Special regulations regarding the Master's thesis and the Master's colloquium can be found in § 5 and § 6 of these regulations.

### § 4 Degree

On the basis of the successful master's examination in the master's program Renewable Energy and E-Mobility, the academic degree "Master of Engineering", abbreviated "M.Eng".

### § 5 Master thesis

- (1) According to § 20 Paragraph 1 Number 2 of the Framework Examination Regulations, only those who have achieved the required ECTS credits in the same degree programme, who have passed the examination at a higher education institution in the Federal Republic of Germany or who have passed an examination that has been recognised as equivalent according to § 22 of the Framework Examination Regulations may register for the Master's examination.
- (2) In the 3-semester Master's programme Renewable Energy and E-Mobility, admission to the Master's thesis can only be granted if a certain proportion of passed module examinations corresponding to at least 54 ECTS credits has been achieved. The last module examination must be successfully passed at the latest before taking the Master's Thesis Colloquium.

- (3) In the 4-semester Master's program Renewable Energy and E-Mobility with internship semester, admission to the Master's thesis can only be granted if a certain proportion of passed module examinations corresponding to at least 54 ECTS points has been achieved. The internship semester according to § 3 Paragraph 3 No. 2 and the last module examination must be successfully proven at the latest before taking the Master's Thesis Colloquium.
- (4) In the 4-semester Master's program Renewable Energy and E-Mobility without a internship semester, admission to the Master's thesis can only be granted if a certain proportion of passed module examinations corresponding to at least 84 ECTS credits has been achieved. The last module examination must be successfully passed at the latest before taking the Master's Thesis Colloquium.
- (5) The Master's thesis must always be written in English.
- (6) The processing time for the Master's thesis is six months. The topic, task and scope of the Master's thesis are to be limited by the supervisor in such a way that the deadline for completing the Master's thesis can be met. If there is an important reason, the processing time can be extended by a maximum of one month upon application.
- (7) The date of issue as well as the topic shall be made a matter of record. The topic can only be returned once and only within one month after issue.

### § 6 Master Colloquium

- (1) The Master's colloquium is an interdisciplinary oral examination based on the topic of the Master's thesis. In the colloquium, the candidate should show that in a presentation he/she
  - 1. can explain and represent the results of the thesis independently,
  - 2. is also able to identify other problems of the course of study related to the topic of the thesis and to point out possible solutions, and
  - 3. is able to apply the scientific knowledge gained in the course of the work to issues from the field of future professional activity.
- (2) The colloquium shall be conducted in the English language.
- (3) The colloquium should take place within three months of the submission of the Master's thesis. The colloquium lasts between 30 and 60 minutes per candidate. The examination shall be conducted by the examiners of the Master's thesis. In the case of a group thesis, the Master's colloquium should be conducted as a group examination.
- (4) The colloquium takes place at Stralsund University of Applied Sciences. The examination board can decide on exceptions.

- (5) The Master's colloquium is open to the public. The university public can be excluded for important reasons. The result is determined under exclusion of the university public and announced to the candidate.
- (6) The colloquium may be repeated once if it has been assessed as "insufficient" (5.0). The repetition takes place at the earliest after one month, at the latest after two months.
- (7) The grade of the colloquium is included with a weighting of 20% and the grade of the master thesis with a weighting of 80% in the grade of the module master thesis and master colloquium.
- (8) More detailed regulations on the Master's thesis (final paper) and the colloquium can be found in §§ 24 to 27 of the Framework Examination Regulations of Stralsund University of Applied Sciences.

# § 7 Certificates of achievement and Examination requirements

- (1) Certificates of achievement document a minimum performance for a course of a module in the sense of an independent examination performance. Concrete forms of a performance record are, among others: Tests, solutions to exercises, laboratory experiments, computer programs and short lectures. The type and scope of the performance record must be announced by the person responsible for the course no later than the second week of the lecture period.
- (2) A performance record is an ungraded examination with its own ECTS rating, which is necessary to pass the module. As a rule, the person responsible for teaching shall announce the results of the performance record at the end of the lecture period.
- (3) Preliminary examination results may be set as prerequisites for admission to a module examination (§ 10, paragraphs 2 and 3).
- (4) If the laboratory-specific part of a module with a practical laboratory course or the practical exercise part of a module with an exercise is not examined by an examination, admission to the respective module examination may be made dependent on the completion of a preliminary examination in accordance with § 9 Paragraph 2. The preliminary examination performance shall be provided without or with the provision of suitable means by the examiner in the form of protocols and the like.

## § 8 Exercise certificates

(1) Practice certificates document a minimum performance for a course of a module in the sense of a preliminary performance for an examination or an oral examination. Concrete forms of an exercise certificate include: Confirmation of participation, tests, solutions to exercises, laboratory experiments, computer programs, short lectures. The type and scope of the exercise certificate are to be announced by the lecturer no later than the second week of the lecture period.

- (2) An exercise certificate is a prerequisite for admission to a written or oral examination. The person responsible for teaching must announce the results of the practice certificate at the latest one week before the start of the examination period and inform the Department of Study and Examination Affairs and International Affairs of Stralsund University.
- (3) In addition to paragraph 2, a practice certificate may provide a bonus for the written or oral examination of up to 20 percent of the assessment of the written or oral examination. The specific arrangement shall also be announced no later than the second week of the lecture period and shall also be reported to the examination board. Students may also use the bonus of such practice slips for repeat examinations.

# § 9 Experimental work

- (1) Through experimental work, students should demonstrate that they can combine practice and theory of the teaching area and work on a practice-oriented task. Experimental work can be assigned in particular as team work. Concrete forms of an experimental paper include: Projects, computer programs, lectures, role-playing, document work, video contributions, laboratory experiments. Experimental work shall be graded examinations, unless otherwise provided for in § 10, paragraph 2.
- (2) The person responsible for teaching shall distribute the assignment of the experimental work to the candidates in the first weeks of the lecture period and shall announce the deadline for the work or the deadline for submission. A record of this is to be made. The assignment must be written in such a way that the experimental work can be completed with the workload specified in § 10 paragraphs 2 and 3.
- (3) Experimental work, the passing of which is a prerequisite for the continuation of studies, shall as a rule, but at least in the case of the 2nd resit examination, be evaluated by two examiners or one examiner. The second examiner is determined by the examination board. The grade results from the arithmetic mean of the individual evaluations. The grading procedure shall not exceed four weeks.
- (4) If the grading of the experimental work in team work differs for the individual team members, the grading must be justified to the team members by the person responsible for teaching.

### § 10 Module Examinations, Regular Examination Dates, Alternative Examinations servives and Examinations requirementes

- (1) A module grade is only calculated if the module contains one or more graded examinations and if all examinations of the module have been passed. Failed examinations cannot be compensated. Passed parts of the examination will be recognized.
- (2) For the 3-semester Master's degree, the following module examinations must be taken for the Master's examination in the modules listed below:

Table I.1 Study programme Renewable Energy and E-Mobility - 3-semester variant

Modul-Nr.	Mandatory Module	Regular	Exam	1. Alternative	2. Alternative	Shares i	n % to	ECTS-
		semester				MN	GN	Points
REEMM1300	System Theory	2	K 2	M 30	EA 75	100	7	6
REEMM1400	Renewable Energy Systems	2	K 2 + ÜS	M 30 + ÜS	EA 75	100	7	6
REEMM2130	Power Electronics A	2	K 2 + ÜS	M 30	EA 75	100	7	6
REEMM2140	Modelling of Physical Systems	2	K 2 + ÜS	M 30	EA 75	100	7	6
REEMM2200	Methods of Power Engineering	2	K 2 + ÜS	M 30 + ÜS	EA 75	100	7	6
REEMM3600	Quality in Automotive Industry *)	2	K 2	M 20	EA 75	100	7	6
REEMM3800	Energy and Environmental Management *)	2	M 30	K 2	EA 75	100	7	6
REEMM2010	Elective Module (AO) I**)	2	According to selected module			100	7	6
REEMM2020	Elective Module (AO) II**)	2	According to selected module			100	7	6
REEMM2030	Elective Module (AO) III**)	2	According to selected module			100	7	6
REEMM2040	Elective Module (AO) IV**) <sup>B</sup>	2	According to selected module			100	7	6
REEMM3900	Master Thesis with Colloquium	3					30	
	Master Thesis		see § 5			80		27
	Colloquium		see § 6			20		3

(3) For the 4-semester Master with internship semester, the following module examinations must be taken in the modules listed below for the Master's examination:

Table I.2. Study programme Renewable Energy and E-Mobility - 4-semester variant with internship semester

Modul-Nr.	Mandatory Module	Regular	Exam	1. Alternative	2. Alternative	Shares i	n % to	ECTS-
		semester				MN	GN	Points
REEMM1300	System Theory	2	K 2	M 30	EA 75	100	7	6
REEMM1400	Renewable Energy Systems	2	K 2 + ÜS	M 30 + ÜS	EA 75	100	7	6
REEMM2130	Power Electronics <sup>A</sup>	2	K 2 + ÜS	M 30+ ÜS	EA 75	100	7	6
REEMM2140	Modelling of Physical Systems	2	K 2 + ÜS	M 30	EA 75	100	7	6
REEMM2200	Methods of Power Engineering	2	K 2 + ÜS	M 30 + ÜS	EA 75	100	7	6
REEMM3600	Quality in Automotive Industry *)	2	K 2	M 20	EA 75	100	7	6
REEMM3800	Energy and Environmental Management *)	2	M 30	K 2	EA 75	100	7	6
REEMM2010	Elective Module (AO) I**)	2	According to selected module			100	7	6
REEMM2020	Elective Module (AO) II**)	2	According to selected module			100	7	6
REEMM2030	Elective Module (AO) III**)	2	According to selected module			100	7	6
REEMM2040	Elective Module (AO) IV**) <sup>B</sup>	2	According to selected module			100	7	6
REEMM4000	Internship Semester	3	LN				0	30
			see StO, Annex 1 Guideline					
			for the internship semester					
REEMM3900	Master Thesis with Colloquium	4					30	
	Master Thesis		see § 5			80		27
	Colloquium		see § 6			20		3

(4) For the 4-semester Master's degree without a internship semester, the following module examinations must be taken for the Master's examination in the modules listed below:

Table I.3. Study programme Renewable Energy and E-Mobility - 4-semester variant without internship semester

Modul-Nr.	Mandatory Module	Regular	Exam	1. Alternative	2. Alternative	Shares	in % to	ECTS-
		semester				MN	GN	Points
REEMM1300	System Theory	2	K2	M 30	EA 75	100	6	6
REEMM1400	Renewable Energy Systems	2	K 2 + ÜS	M 30 + ÜS	EA 75	100	6	6
REEMM2130	Power Electronics A	2	K 2 + ÜS	M 30 + ÜS	EA 75	100	6	6
REEMM2140	Modelling of Physical Systems	2	K 2 + ÜS	M 30	EA 75	100	6	6
REEMM2200	Methods of Power Engineering	2	K 2 + ÜS	M 30 + ÜS	EA 75	100	6	6
REEMM3600	Quality in Automotive Industry *)	2	K 2	M 20	EA 75	100	5	6
REEMM3800	Energy and Environmental Management *)	2	M 30	K 2	EA 75	100	5	6
REEMM2010	Elective Module (AO) I**)	3	According to selected module			100	5	6
REEMM2020	Elective Module (AO)II**)	3	According to selected module			100	5	6
REEMM2030	Elective Module (AO) III**)	3	According to selected module			100	5	6
REEMM2040	Elective Module (AO) IV**) <sup>B</sup>	3	According to selected module			100	5	6
REEMM2060	Elective Module (F) I***)	3	According to selected module			100	5	6
REEMM2070	Elective Module (F) II***)	3	According to selected module			100	5	6
REEMM2080	Elective Module (F) III***)	3	According to selected module			100	5	6
REEMM4100	Project Work	3	LN				0	12
REEMM3900	Master Thesis with Colloquium	4					30	
	Master Thesis		see § 5			80		27
	Colloquium		see § 6			20		3

Open list elect	Open list elective offer (Application oriented - AO)				Open list elective offer (Application oriented - AO)				
Nr.:	Elective module	Exam	1. Alternative	2. Alternative	No.:	Elective Module	Exam	1. Alternative	2. Alternative
REEMM3410	Current subjects of renewable energy use I	M 30	K 2	EA 75	REEMM5400	Vehicle Management Systems	K 2 + ÜS	M 30 + ÜS	EA 75
REEMM3420	Current subjects of renewable energy use II	M 30	K 2	EA 75	REEMM3300	Sustainable non-fossil mobility	K 2 + ÜS	M 30 + ÜS	EA 75
REEMM1700	Solar Systems	M 30 + ÜS	K 2 + ÜS	EA 75	REEMM3500	Advanced Power Electronics	K 2 + ÜS	M 30 + ÜS	EA 75
REEMM3000	Wind Power Plants	K 2 + ÜS	M 30 + ÜS	EA 75	REEMM3100	Hydrogen Technology	M 30 + ÜS	K 2 + ÜS	EA 75
REEMM3200	Fuel Cell Systems	M 30 + ÜS	K 2 + ÜS	EA 75	REEMM3400	Project Seminar E-Mobility	EA 90		
REEMM3610	Project RE	EA 90			REEMM3700	Control of Electrical Drives	K 2 + ÜS	M 30 + ÜS	EA 75
REEMM5500	Vehicle Simulation and Test Drive	EA 30	M 20	K 1					

Open list Elective offer (Free - F)					Open list Elective offer (Free - F)					
Nr.:	Elective Module	Exam	1. Alternative	2. Alternative	No.:	Elective Module	Exam	1. Alternative	2. Alternative	
REEMM2110	Selected Topics of Control Engineering	K2 + ÜS	M30	EA 75	REEMM2120	Electrical Energy Conversion and Transmission	K2 + ÜS	M30	EA 75	
SSDM3500	International Accounting	Siehe FPO SSD			WMSSDM3000	Human Resources Management	Siehe FPO SSD	See FPO SSD		
REEMM2500	German as a foreign Language I	K2 + ÜS			REEMM2510	German as a foreign Language II	K2 + ÜS			

#### **Explanations:**

= Written exam with indication of the duration in hours (hour = 60 minutes), cf. § 11 RPO LN = LN = Performance record, cf. § 7

K + ÜS = Written exam and exercise certificate as admission requirement, cf. §§ 8, 7 and § 11 RPO MN = Module grade

= Oral examination with indication of duration in minutes. cf. § 10 RPO GN = Total grade of the module examinations including master thesis with colloquium

M + ÜS = Oral examination and exercise certificate as admission requirement, cf. § 7, 8 and § 10 RPO EΑ

= Experimental work with indication of the workload in hours, cf. § 9 One of these two modules must be chosen.

- If the students have already taken the subject Power Electronics according to §3 in their bachelor studies, they must choose a module from the list of compulsory elective modules (F) instead. For its examination and alternatives, the specifications for the selected compulsory elective module (F) apply, as well as the specifications for the Power Electronics module with regard to the regular semester and the weighting.
- B) If the students according to §3 do not have a Bachelor's degree in Electrical Engineering or a related degree program, they must take the module REMMM 2120 "Electrical Energy Conversion and Transmission" instead of this elective module. In this case, the module may not be chosen again as an elective.
- Students can choose from the open list of elective modules (AO) of the chosen degree program or, upon application to the examination board, from the pool of subjects of other Master's programs of the faculty or the range of courses offered by the university. The list can be updated annually. (§ 6 Study Regulations of the Master's Program Renewable Energy and E-Mobility at Stralsund University of Applied Sciences).
- Students can choose from the open list of elective modules (F) and (AO) of the chosen study program or on application to the examination board from the pool of subjects of other Master's degree programs of the faculty or from the course offerings of the university. One of the modules REEMM3800 can also be chosen provided that it is not included in the rubric Interdisciplinary qualifications (1 from 2) has been chosen. The list may be updated annually. (§ 6 Study Regulations of the Master's Program Renewable Energy and E-Mobility at Stralsund University of Applied Sciences)

- (5) The non-graded modules are recognized as "passed" or not recognized as "failed".
- (6) Instead of the examination performance listed in paragraphs 2 and 3, up to two alternative forms may be provided if the scope of the examination is equivalent and the examination is assessed according to the same standards. Students are to be informed of the type and scope of examination applicable to them at the start of the courses in the respective module (no later than the second week of the lecture period). The choice of the type of examination and the scope shall be regulated by the examiner uniformly for all candidates of a semester according to the table in paragraphs 2 and 3. The determination of an alternative type of examination must be confirmed by the examination board at the request of the examiner before it is announced. Reference is made to §§ 10 to 13 of the framework examination regulations of Stralsund University.
- (7) The total time required for the preparation of the term paper, a laboratory paper, a document, a paper or a presentation should be limited by the topic in such a way that it is possible to work on it within the total time specified in paragraphs 2 and 3.
- (8) If the student exceeds the required ECTS points through the selection of compulsory elective modules, a selection can be made from the modules passed in the respective compulsory elective module areas.
- (9) The language of the examination must be the same as the language of instruction.

# § 11 Overall grade of the Master's examination

(1) For the formation of the overall grade of the Master's examination, the examination performances are weighted as follows:

the weighted grades of the compulsory and elective module examinations at 70 %, the grade of the Master's thesis including the Master's colloquium at 30 percent.

- (2) The module grades and the overall grade are calculated in accordance with § 15 of the Framework Examination Regulations of Stralsund University.
- (3) The weighting of the individual module grades and their percentage inclusion in the overall grade can be taken from § 10 paragraph 2 for the 3-semester variant and § 10 paragraph 3 for the 4-semester variant.

14

# § 12 Certificate and diploma

The candidate receives the certificate (§ 29 of the Framework Examination Regulations) and the certificate on the award of the academic degree (§ 30 of the Framework Examination Regulations) in both German and English.

## § 13 Validity and entry into force

- (1) These subject examination regulations apply for the first time to students enrolled in the Master's degree program Renewable Energy and E-Mobility in the summer semester 2018.
- (2) The subject examination regulations come into force on the day after their publication on the homepage of Stralsund University of Applied Sciences.

Issued on the basis of the resolution of the Academic Senate of Stralsund University of Applied Sciences of 17 October 2017 and the approval of the Rector of 14 November 2017.

Stralsund, November 14, 2017

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

15

# Anlage 1 Diploma Supplement- 3-semestriger Master

## Diploma Supplement

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 Family Name «Nachname»
- 1.2 First Name
  - «Vorname»
- 1.3 Date, Place, Country of Birth«GebDatum», «GebOrt», «GebLandE»
- 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.
- 2.2 Main Field(s) of Study

  Representation of Francisco and F
  - Renewable Energy and E-Mobility
- 2.3 Institution Awarding the Qualification (in original language)
   Hochschule Stralsund University of Applied Sciences
   Status (Type / Control)
   Fachhochschule (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: 20XX-XX-X	X	

Prof. Dr. rer. nat. Michael Schlereth Chairman Examination Committee

#### 3. LEVEL OF QUALIFICATION

3.1 Level

Second-level degree (postgraduate), scientific orientation.

3.2 Official Length of Programme

3 semesters (1,5 years), 16 weeks of classes per semester, 30 ECTS credits per semester, Master thesis in semester 3

3.3 Access Requirements

Bachelor or equivalent, 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

Master graduates of "renewable energy and E-mobility" are expected to contribute to their field of interest when working in industry, research organisations or the public service sector. Graduates of the master programme find activities in industry (and particularly in research and development) in the various fields of operation and maintenance of energy or vehicle systems, and administration in general. During the Master studies students acquire sound foundations in theory and are trained in practical applications with state of the art equipment available e.g. from industrial partners with special aspects on research work. Students gain deep insight into theory and practice, thus being best well suited for the engineering tasks in their field of activity.

#### 4.3 Programme Details

See "Zeugnis über die Masterprüfung" (Final Examination Certificate) for subjects offered 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 70 %, thesis 30 %); cf. "Zeugnis über die Masterprüfung" (Final Examination Certificate).

Certification Date: 20XX-XX-XX	

Prof. Dr. rer. nat. Michael Schlereth 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 degree entitles its holder to exercise professional work as a scientific engineer in academia, research and industrial settings and in the public service sector. Depending on the focus of study, the holder has special skills in: electrical drive and automotive engineering or in renewable energy technology.

#### 6. ADDITIONAL INFORMATION

6.1 Additional Information

6.2 Further Information Sources

On the institution: <u>www.fh-stralsund.de</u>; on the programme <u>www.fh-stralsund.de</u> > 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 20XX-XX-XX Prüfungszeugnis vom 20XX-XX-XX Transcript of Records

Certification Date: 20XX-XX-XX

Prof. Dr. rer. nat. Michael Schlereth 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 SYSTEM<sup>1</sup>

#### 8.1 Types of Institutions and Institutional Status

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

- 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.

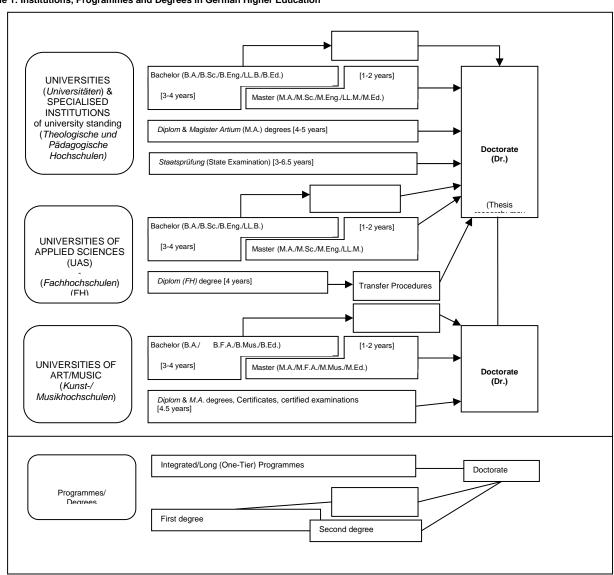
The German Qualification Framework for Higher Education Degrees<sup>3</sup>, the German Qualifications Framework for Lifelong Learning<sup>4</sup> and the European Qualifications Framework for Lifelong Learning<sup>5</sup> describe the degrees of the German Higher Education System. They contain the classification 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). 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. T

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



#### 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

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.<sup>8</sup>

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.).

The Bachelor degree corresponds to level 6 of the German Qualifications Framework/ European Qualifications Framework.

#### 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.9

Study Programmes in Germany.

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. MRA)

The Master degree corresponds to level 7 of the German Qualifications Framework/ European Qualifications Framework.

## 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 professions 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 and correspond to level 7 of the German Qualifications Framework/ European Qualifications Framework.

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 which corresponds to level 6 of the German Qualifications Framework/European Qualifications Framework.

While the FH/IJAS 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- and 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. Comparable degrees from universities of art and music can in exceptional cases (study programmes such as music theory, musicology, pedagogy of arts and music, media studies) also formally qualify for doctoral work. 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.

The doctoral degree corresponds to level 8 of the German Qualifications Framework/ European Qualifications Framework.

#### 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, grade distribution tables as described in the ECTS Users' Guide are used to indicate the relative distribution of grades within a reference group.

#### 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 (Fachgebundende Hochschulreife) allow for admission at Fachhochschulen (UAS), universities and equivalent higher education institutions, but only in particular disciplines. Access to study programmes at Fachhochschulen (UAS) is also possible with a Fachhochschulreife, which can usually be acquired after 12 years of schooling. Admission to study programmes at Universities of Art/Music and comparable study programmes at other higher education institutions as well as admission to a study programme in sports may be based on other or additional evidence demonstrating individual aptitude.

Applicants with a vocational qualification but without a school-based higher education entrance qualification are entitled to a general higher education entrance qualification and thus to access to all study programmes, provided they have obtained advanced further training certificates in particular state-regulated vocational fields (e.g. Meister/Meisterin im Handwerk, Industriemeister/in, Fachwirt/in (IHK und HWK), staatlich geprüfte/r Betriebswirt/in, staatliche geprüfte/r Erzieher/in). Vocationally qualified applicants can obtain a Fachgebundene Hochschulreife after completing a state-regulated vocational education of at least two years' duration plus professional practice of normally at least three years' duration, after having successfully passed an aptitude test at a higher education institution or other state institution; the aptitude test may be replaced by successfully completed trial studies of at least one year's duration. <sup>10</sup> 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]; Graurheindorfer Str.157, D-53117 Bonn; Fax: +49[0]228/501-777; 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
- "Documentation and Educational Information Service" as German EURYDICE-Unit, providing the national dossier on the education system (http://www.kmk.org/dokumentation/zusammenarbeit-aufeuropaeischer-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)

<sup>1</sup> The information covers only aspects directly relevant to purposes of the Diploma Supplement. All information as of January 2015.

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.

German Qualifications 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 April 2005).

German Qualifications Framework for Lifelong Learning (DQR). Joint resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany, the German Federal Ministry of Education and Research, the German Conference of Economics Ministers and the German Federal Ministry of Economics and Technology (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany of 15 November 2012). More information at www.dgr.de

Recommendation of the European Parliament and the European Council on the establishment of a European Qualifications Framework for Lifelong Learning of 23 April 2008 (2008/C 111/01 - European Qualifications Framework for Lifelong Learning - EQF).

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).

<sup>7 &</sup>quot;Law establishing a Foundation 'Foundation for the Accreditation of Study Programmes in Germany", entered into force as from 26 February 2005, GV. NRW. 2005, No. 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 December 2004).

See note No. 7.

<sup>9</sup> See note No. 7.

Access to higher education for applicants with a vocational qualification, but without a school-based higher education entrance qualification (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany of 6 March 2009).

# Anlage 2 Diploma Supplement- 4-semestriger Master

## Diploma Supplement

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 Family Name
  - «Nachname»
- 1.4 First Name
  - «Vorname»
- 1.3 Date, Place, Country of Birth«GebDatum», «GebOrt», «GebLandE»
- 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 StudyRenewable Energy and E-Mobility
- 2.3 Institution Awarding the Qualification (in original language)
   Hochschule Stralsund University of Applied Sciences
   Status (Type / Control)
   Fachochschule (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: 20XX-XX-XX

#### 3. LEVEL OF QUALIFICATION

3.1 Level

Second-level degree (postgraduate), scientific orientation.

3.2 Official Length of Programme

4 semesters (2 years), 16 weeks of classes per semester, 30 ECTS credits per semester, optional with internship semester in semester three, Master thesis in semester 4

3.3 Access Requirements

Bachelor or equivalent, 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

Master graduates of "renewable energy and E-mobility" are expected to contribute to their field of interest when working in industry, research organisations or the public service sector. Graduates of the master programme find activities in industry (and particularly in research and development) in the various fields of operation and maintenance of energy or vehicle systems, and administration in general. During the Master studies students acquire sound foundations in theory and are trained in practical applications with state of the art equipment available e.g. from industrial partners with special aspects on research work. Students gain deep insight into theory and practice, thus being best well suited for the engineering tasks in their field of activity.

4.3 Programme Details

See "Zeugnis über die Masterprüfung" (Final Examination Certificate) for subjects offered 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 70 %, thesis 30 %); cf. "Zeugnis über die Masterprüfung" (Final Examination Certificate).

Certification Date: 20XX-XX-XX

#### 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 degree entitles its holder to exercise professional work as a scientific engineer in academia, research and industrial settings and in the public service sector. Depending on the focus of study, the holder has special skills in: electrical drive and automotive engineering or in renewable energy technology.

#### 6. ADDITIONAL INFORMATION

- 6.1 Additional Information
- 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 20XX-XX-XX Prüfungszeugnis vom 20XX-XX-XX Transcript of Records

Prof. Dr. rer. nat. Michael Schlereth

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 SYSTEM<sup>1</sup>

#### 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).

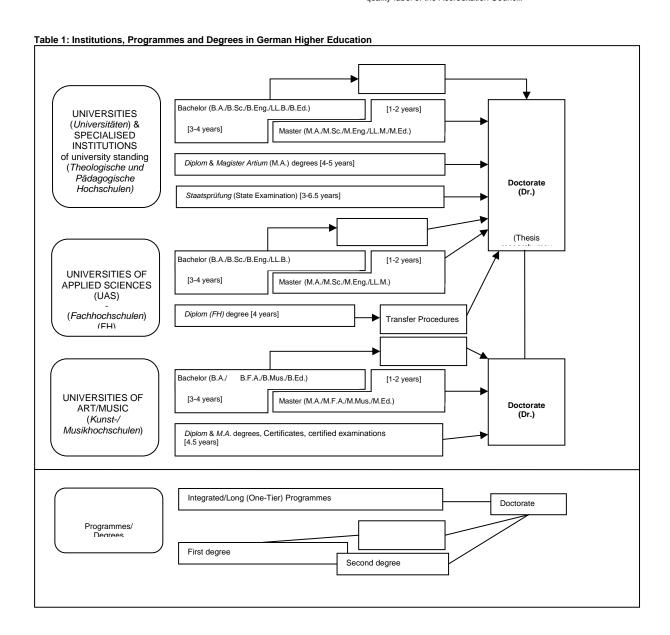
Within the framework of the Bologna-Process one-tier study programmes are successively being replaced by a two-tier study system. Since 1998, a scheme of first- and second-level degree programmes (Bachelor and Master) was introduced to be offered parallel to or instead of integrated "long" programmes. 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 Degrees<sup>3</sup>, the German Qualifications Framework for Lifelong Learning<sup>4</sup> and the European Qualifications Framework for Lifelong Learning<sup>5</sup> describe the degrees of the German Higher Education System. They contain 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). 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. T



#### **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.8

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.).

The Bachelor degree corresponds to level 6 of the German Qualifications Framework/ European Qualifications Framework.

#### 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 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.<sup>9</sup>
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)

The Master degree corresponds to level 7 of the German Qualifications Framework/ European Qualifications Framework.

## 8.4.4 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 degrees, most programmes completed by a *Staatsprulung*) 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 professions 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 and correspond to level 7 of the German Qualifications Framework/ European Qualifications Framework.

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 which corresponds to level 6 of the German Qualifications Framework/ European Qualifications Framework.

While the FH/UAS are non-doctorate granting institutions, qualified graduates may apply for admission to doctoral studies at doctorategranting institutions, cf. sec. 8.5.

- Studies at Kunst- and 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. Comparable degrees from universities of art and music can exceptional cases (study programmes such as music theory, musicology, pedagogy of arts and music, media studies) also formally qualify for doctoral work. 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

The doctoral degree corresponds to level 8 of the German Qualifications Framework/ European Qualifications Framework.

#### **Grading Scheme**

The grading scheme in Germany usually comprises five levels (with nne grading scheme in Germany usually comprises live levels (with numerical equivalents; intermediate grades may be given): "Sehr Gut" (1) = Very Good; "Gut" (2) = Good; "Betriedigend" (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

In addition, grade distribution tables as described in the ECTS Users' Guide are used to indicate the relative distribution of grades within a reference group

#### 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 (Fachgebundende Hochschulreife) allow for admission at (Fachgebundende Hochschulreife) allow for admission at Fachhochschulen (UAS), universities and equivalent higher education institutions, but only in particular disciplines. Access to study programmes at Fachhochschulen (UAS) is also possible with a Fachhochschulreife, which can usually be acquired after 12 years of schooling. Admission to study programmes at Universities of Art/Music and comparable study programmes at other bigher education institutions. and comparable study programmes at other higher education institutions as well as admission to a study programme in sports may be based on other or additional evidence demonstrating individual aptitude.

Applicants with a vocational qualification but without a school-based higher education entrance qualification are entitled to a general higher education entrance qualification and thus to access to all study programmes, provided they have obtained advanced further training certificates in particular state-regulated vocational fields (e.g. Meister/Meisterin im Handwerk, Industriemeister/in, Fachwirt/in (IHK und HWK), staatlich geprüfte/r Betriebswirt/in, staatliche geprüfte/r Gestalter/in, staatlich geprüfte/r Erzieher/in). Vocationally qualified applicants can obtain a Fachgebundene Hochschulreife after completing a state-regulated vocational education of at least two years' duration plus professional practice of normally at least three years' duration, after having successfully passed an aptitude test at a higher education institution or other state institution; the aptitude test may be replaced by successfully completed trial studies of at least one year's duration. <sup>10</sup> Higher Education Institutions may in certain cases apply additional

admission procedures

#### **National Sources of Information** 8.8

- Kultusministerkonferenz (KMK) [Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany]; Graurheindorfer Str.157, D-53117 Bonn; Fax: +49[0]228/501-777; 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 (http://www.kmk.org/dokumentation/zusammenarbeit-aufeuropaeischer-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. (<a href="https://www.higher-education-compass.de">www.higher-education-compass.de</a>)

The information covers only aspects directly relevant to purposes of the Diploma Supplement. All information as of January 2015.

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.

German Qualifications 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 April 2005).

German Qualifications Framework for Lifelong Learning (DQR). Joint resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany, the German Federal Ministry of Education and Research, the German Conference of Economics Ministers and the German Federal Ministry of Economics and Technology (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany of 15 November 2012). More information at www.dgr.de

Recommendation of the European Parliament and the European Council on the establishment of a European Qualifications Framework for Lifelong Learning of 23 April 2008 (2008/C 111/01 - European Qualifications Framework for Lifelong Learning - EQF).

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).

<sup>7 &</sup>quot;Law establishing a Foundation Foundation for the Accreditation of Study Programmes in Germany", entered into force as from 26 February 2005, GV. NRW. 2005, No. 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 December 2004). See note No. 7.

See note No. 7.

Access to higher education for applicants with a vocational qualification, but without a school-based higher education entrance qualification (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany of 6 March 2009).