

**These English translations are provided as a guide only. The regulations in German language are the only legal text and should be referred to for all official, legal and administrative purposes.**

**For Module Descriptions, please refer to the German version of the examination regulations**

**Examination regulations (FPO-M)  
for the subject**

**Electrical Engineering (ET)**

**in the master's degree**

**one of  
University of Siegen**

**from vw.xy.202z**

(Master's degree in electrical engineering)

Based on § 2, section 4 and § 64, section 1 of the law on Universities of North Rhine-Westphalia (Hochschulgesetz - HG of September 16th, 2014 (GV. NRW. S. 547), last amended by the law of November 3rd, 2021 (GV. NRW. S. 1180)), the University of Siegen has issued the following examination regulations for the framework examination regulations (RPO-M) for the master's degree at the University of Siegen from February 28th, 2019 (official communication 5/2019), last changed by the regulations for changing the framework examination regulations (RPO-M) for master's studies at the university Siegen dated October 26, 2020 (official notification 73/2020):

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## **Article 1**

### **Scope**

(1) These subject examination regulations, together with the general examination regulations (RPO-M), govern the Master's degree at the University of Siegen from February 28, 2019 (official notification 5/2019) in the currently valid version of the course in electrical engineering.

(2) Electrical engineering can be studied as a 1-subject course.

## **Article 2**

### **Regulations for the 1-subject degree in electrical engineering**

#### **§ 1**

##### **Study model**

(1) The master's degree in electrical engineering is studied as a 1-subject degree.

(2) The master's degree in electrical engineering is studied in one of the three course variants:

1. Automation Technology;
2. Communication Technology;
3. Electronics Design and Technology.

The choice of the course variant is made when you enroll in the course.

#### **§ 2**

##### **Aims of the study**

(1) The consecutive master's program in electrical engineering is research oriented. It deepens the scientific principles and methods in the field of electrical engineering. The program gives the students the ability to apply the scientific methods of electrical engineering properly and to further develop them, and, with regard to the impacts of technological change, to act responsibly. Another aim is the procurement of key qualifications such as communication and team skills, presentation, and moderation skills.

(2) Focus of the subjects' content and the further courses offered for the acquisition of qualifications in the master's program in electrical engineering is aimed, in particular, at the qualification for scientific work in research and development as well as for responsible work in management positions in the entire field of electrical engineering.

The professional field of graduates of the master's program in electrical engineering includes all parts of work that deal with the processing and research of fundamental engineering or the development, implementation, operation and maintenance of complex electrotechnical systems and components. The course variants "*Automation Technology*", "*Communications Technology*" and "*Electronics Design and Technology*" enable appropriate specializations.

In the study program variant "Automation Technology", scientific methods for the control and regulation of systems in any application area are taught. Furthermore, the areas of measurement, communication, safety and man-machine interface are addressed.

In the "Communications Technology" course variant, scientific methods for the efficient, safe and trouble-free transmission of information and messages are taught. In addition to the various transmission technologies (electrical/optical), the areas of modulation, channel coding, multiplexing, encryption, security and others are also addressed.

In the "Electronics Design and Technology" course variant, scientific methods for the design and manufacture of semiconductor components and electronic circuits are taught. Analog and digital circuits are covered, as well as semiconductor sensors, RF components and circuits.

### § 3

#### Master's degree

Upon successful completion of the program, the university awards the degree of "Master of Science" (M.Sc.).

### § 4

#### Special entry requirements

(1) In addition to § 4 RPO-M, it is a prerequisite for admission to the master's degree in Electrical Engineering to have a first professional university bachelor's degree program in electrical engineering or dual studies in electrical engineering at the University of Siegen or a comparable bachelor's degree as well as a proof of the following skills for the respective course variants:

1. "Automation technology": theory and practice in the areas of "control technology", "Automation technology" and "Power electronics and drive technology" at a total of at least 20 credit points (CP);
2. "Communications Technology": theory and practice in the areas of "Communications Technology", "Optical Communications Engineering", "High Frequency Engineering", "Electromagnetic Field Theory" and "Signal and System Theory" at a total of at least 20 CP.
3. "Electronics Design and Technology": Theory and practice in the areas of "Semiconductor and Circuit Technology", "Semiconductor Physics", "Power Electronics" and "High-frequency Technology" at a total of at least 20 CP.

(2) The comparable bachelor's degree within the meaning of paragraph 1 must have taught competencies in the following areas to the specified minimum extent:

<b>Academic field</b>	<b>Minimum scope</b>
Mathematical Fundamentals	20 CP
Scientific Fundamentals	15 CP
Fundamentals of electrical engineering and measurement technology	20 CP
Theoretical electrical engineering (field theory, signal and system theory)	10 CP
Project work (including bachelor thesis)	10 CP

- (3) Prerequisite for access to the specialist master's degree in electrical engineering in the course variants "Communications Technology" and "Electronics Design and Technology" is also a proof of knowledge of English language at level B2 of the Common European Framework of Reference for Languages (CEFR), which may be shown by TOEFL iBT (Internet based TOEFEL) of at least 87 or an IELTS 6.0. In case this knowledge cannot be proven, only the degree program variant "Automation Technology" can be studied.
- (4) If the required minimum scope according to paragraph 1 or paragraph 2 is not achieved, admission is only possible under corresponding conditions according to § 4 paragraph 4 RPO-M and/or only for certain study program variants
- (5) The enrollment is to be denied if an applicant in a degree program with a significant content-related proximity to this degree program has definitively failed an examination required by this Examination Regulations.

### § 5

#### Stays abroad and internships

- (1) Stays abroad and curricular or external internships are not mandatory.
- (2) Voluntary stays abroad are recommended from the 3rd semester onwards. Prior to the stay abroad, a learning agreement should be concluded which provides for the creditability of the achievements obtained abroad.

## § 6

### Audit Committee

- (1) For the tasks specified in § 8 RPO-M and in this article, Faculty IV: School of Science and Technology has set up a joint specialist examination board for electrical engineering for the 1-subject bachelor's degree in electrical engineering, the 1-Subject bachelor's degree dual study electrical engineering and the 1-subject master's degree electrical engineering. The examination board can transfer tasks to the examination office for electrical engineering.
- (2) The technical examination board consists of
  1. five members of the group of university teachers,
  2. one member of the group of academic staff and
  3. two members of the group of students.
- (3) The term of office of the members of the group of university teachers as well as of the member of the group of academic staff is three years. The term of office of the members of the group of students is one year.
- (4) In the event that a member is unable to attend, each of the groups from paragraph 2 will have at least one deputy elected, whose term of office is based on paragraph 3.

## § 7

### Examiners and assessors

- (1) Audit authorization is governed by § 9 RPO-M.
- (2) Only those who have a diploma or master's degree in electrical engineering or a comparable degree may be examiners in oral examinations.

## § 8

### Scope and structure of the study program

- (1) For the successful completion of the master's program, 120 credit points (LP) must be earned in the Electrical Engineering program in all program variants, of which 30 LP are allotted to the master's thesis in each case.
- (2) The standard period of study is four semesters. The study is only possible in full-time. The study program can be started in the winter as well as in the summer semester.
- (3) The study program variant "*Automation Technology*" is divided into the following study areas: Eight "compulsory modules" with a total of 51 LP, three "specialization elective modules" with a total of 18 LP, "General Elective Modules" with a total of 12 LP, the module "Studienarbeit" (4ETMA040) or "Project Work" (4ETMA041) with 9 LP each and the module "Master Thesis Electrical Engineering" (4ETMA050).
  1. In the study area "compulsory modules" the following modules must be studied:
    - a. Electromagnetic Field Theory (4ETMA001; 9 LP),
    - b. Optimale und adaptive Regelung linearer und nichtlinearer Systeme (4ETMA100; 6 LP),
    - c. Regelung elektrischer Antriebe (4ETMA101; 6 LP),
    - d. Zustandsraumtheorie (4ETMA102; 6 LP),
    - e. Ereignisdiskrete Prozesse (4ETMA103; 6 LP),

- f. Prozessmesstechnik (4ETMA104; 6 LP),
  - g. Prozessautomation (4ETMA105; 6 LP),
  - h. Laborpraktikum Automstisierungstechnik (4ETMA106; 6 LP).
- 2: In the field of study "Elective modules for specialization", three modules with a total of 18 LP from the module catalogs "Elective modules in automation technology" (cf. Appendix 2) and "Computer Science" (cf. Appendix 5) must be studied, whereby a maximum of one module can be selected from the "Computer Science" module catalog.
- 3: In the field of study "General Elective Modules", a total of 12 LP must be studied from the entire range of modules offered by Faculty IV: School of Science and Technology of the University of Siegen, excluding the modules of the module catalog "Elective Modules Automation Technology" (cf. Appendix 2) are excluded.
- (4) The study program variant "*Communications Technology*" is divided into the following study areas: Eight "compulsory modules" with a total of 51 LP, three "specialization elective modules" with a total of 18 LP, "general elective modules" with a total of 12 LP, the module "Studienarbeit" (4ETMA040) or "Project work" (4ETMA041) with 9 LP and the module "Master thesis in electrical engineering" (4ETMA050).
1. In the study area "compulsory modules" the following modules must be studied:
- a. Electromagnetic Field Theory (4ETMA001; 9 LP),
  - b. Signals and Systems I (4ETMA200; 6 LP),
  - c. Signals and Systems II (4ETMA201; 6 LP),
  - d. Lightwave Technology (4ETMA202; 6 LP),
  - e. Optoelectronics (4ETMA203; 6 LP),
  - f. Data Communications Technology I (4ETMA204; 6 LP),
  - g. High Frequency Engineering (4ETMA205; 6 LP),
  - h. Practical Course Communications Technology (4ETMA206; 6 LP),
2. In the field of study "Specialization Elective Modules" three modules with a total of 18 LP from the module catalogs "Elective Modules Communications Technology" (cf. appendix 3) and "Computer Science (Informatik)" (cf. Appendix 5) must be studied, whereby a maximum of one module can be selected from the module catalog "Computer Science" can be selected from the module catalog "Computer Science".
3. In the study area "General Elective Modules", a total of 12 LP taken from the entire Faculty IV: Faculty of Science and Technology of the University of Siegen, must be studied, excluding the modules of the module catalog "Elective Modules Communications Technology" (cf. Appendix 3).
- (5) The study program variant "Electronics Design and Technology" is divided into the following study areas: Eight "Compulsory Modules" with a total of 51 LP, three "Specialization Elective Modules" with a total of 18 LP, "General Elective Modules" with a total of 12 LP, the module "Studienarbeit" (4ETMA040) or "Project work" (4ETMA041) with 9 LP each and the module "Master thesis in electrical engineering" (4ETMA050).
1. In the field of study "compulsory modules" the following modules must be studied:
- a. Electromagnetic Field Theory (4ETMA001; 9 LP),
  - b. Semiconductor Electronics Design (4ETMA300; 6 LP),
  - c. Semiconductor Electronics (4ETMA301; 6 LP),
  - d. Analogue Integrated Circuits (4ETMA302; 6 LP),
  - e. Digital IC Design (4ETMA303; 6 LP),
  - f. Embedded Systems (4INFBA022; 6 LP),

g. Lightwave Technology (4ETMA202; 6 LP),

h. Optoelectronics (4ETMA203; 6 LP),

2. In the field of study "specialization elective modules" three modules with a total of 18 LP from the module catalogs "Elective Modules Electronics Design and Technology" (cf.8 Appendix 4) and "Computer Science" (cf. Appendix 5) must be studied, whereby a maximum of one module from the module catalog "Computer Science" can be selected.
  3. In the study area "General Elective Modules", a total of 12 LP must be chosen from the entire Faculty IV: School of Science and Technology of the University of Siegen, excluding the modules of the module catalog "Elective Modules Electronics Design and Technology" (cf. Appendix 4) are excluded.
- (6) The choice of the study program variant can be changed once by a written application to the chair of the examination board. The application can only be approved if the requirements according to § 4 paragraph are fulfilled for the new study program variant. If necessary, new or different requirements may be imposed. Study or examination achievements already passed in the previous study program variant will be accepted, provided that the corresponding modules can be selected or are available in the new study program variant. The change of the study program variant becomes effective at the beginning of the following semester with the enrollment in the new study program variant. The enrollment in the new study program variant must be applied for at the Student Services Office after approval by the Examination Board.
  - (7) A module that has already been completed in the previous bachelor's degree program cannot be selected as an elective and compulsory elective module in the master's degree program in electrical engineering.
  - (8) The choice of an elective or compulsory elective module is made by registering for the corresponding course or examination. The selection of an elective or compulsory elective module can no longer be canceled once the first examination attempt has begun. § 8 paragraph 6 and §10 paragraph 4 remains unaffected by this.
  - (9) Module Overview:

Nr.	module	SL <sup>1</sup>	PL <sup>2</sup>	LP <sup>3</sup>	AT <sup>5</sup>	CT <sup>6</sup>	EDT <sup>7</sup>	module description in
<b>Compulsory module of study variants</b>								
4ETMA001	Electromagnetic Field Theory	-	1	9	P	P	P	annex 7
4ETMA040	Studienarbeit Elektrotechnik	-	1	9	P	P	P	annex 7
4ETMA041	Projektarbeit Elektrotechnik	-	1	9	P	P	P	annex 7
4ETMA050	Masterarbeit Elektrotechnik (Master's thesis in electrical engineering)	-	1	30	P	P	P	annex 7
4ETMA100	Optimale und adaptive Regelung linearer und nichtlineare Systeme	-	1	6	P			annex 7
4ETMA101	Regelung elektrischer Antriebe	-	1	6	P			annex 7
4ETMA102	Zustandsraumtheorie	-	1	6	P			annex 7
4ETMA103	Ereignisdiskrete Prozesse	-	1	6	P			annex 7
4ETMA104	Prozessmesstechnik	1	1	6	P			annex 7
4ETMA105	Prozessautomation	-	1	6	P			annex 7
4ETMA106	Laborpraktikum Automatisierungstechnik	1	-	6	P			annex 7
4ETMA200	Signals and Systems I	-	1	6		P		annex 7
4ETMA201	Signals and Systems II	-	1	6		P		annex 7
4ETMA202	Lightwave Technology	-	1	6		P	P	annex 7
4ETMA203	Optoelectronics	-	1	6		P	P	annex 7
4ETMA204	Data Communications Technology I	-	1	6		P		annex 7
4ETMA205	High Frequency Engineering	-	1	6		P		annex 7
4ETMA206	Practical Course Communications Technology	6	-	6		P		annex 7



4ETMA300	Semiconductor Electronics Design	1	1	6			P	annex 7
4ETMA301	Semiconductor Electronics	-	1	6			P	Anlage 7
4ETMA302	Analogue Integrated Circuits	1	1	6			P	annex 7
4ETMA303	Digital IC Design	1	1	6			P	annex 7
4INFBA022	Embedded Systems	1	1	6			P	FPO-B INF

Electives								
Field Electives of automation technology	3 modules from the specialization elective automation technology and computer science (maximum one module from the module catalog computer science)	0-3	1-3	18	WP			annex 2 annex 5
General electives for Automation technology	2 modules from the entire range of modules offered by Faculty IV: School of Science and Technology of the University of Siegen	0-2	0-2	12	WP			
Field Electives for Communications Technology	3 modules from the elective specialization area Communications Technology and Computer Science (Maximum one module from the Computer Science module catalog)	0-3	3	18		WP		annex 3 annex 5
General electives for Communications Technology	2 modules from the entire range of modules offered by Faculty IV: School of Science and Technology of the University of Siegen	0-2	0-2	12		WP		
Field Electives for Electronics Design & Technology	3 modules from the elective specialization area Electronics Design and Technology and Computer Science (maximum one module from the module catalog Computer Science)	0-3	3	18			WP	annex 4 annex 5
General electives for Electronics Design & Technology	2 modules from the entire range of modules offered by Faculty IV: School of Science and Technology of the University of Siegen	0-2	0-2	12			WP	
4ETMA050	Master thesis electrical engineering	-	1	30	P	P	P	annex 7

<sup>1</sup> SL = Course credits | <sup>2</sup> PL = Examination performance | <sup>3</sup> LP = Credit Points | <sup>4</sup> P/WP = Mandatory module/elective module | <sup>5</sup> AT = Automation Technology | <sup>6</sup> CT = Communications Technology | <sup>7</sup> EDT = Electronics Design & Technology | P = compulsory subject included in degree program | WP = compulsory elective subject included in degree program

The recommended semester is shown in the study plan (appendix 1).

- (10) Possible teaching forms are lecture, tutorial, lecture with tutorial, seminar and laboratory practical. The concrete teaching form can be found in the module description.
- (11) The courses are held in German or English. The language of instruction can be found in the module description. If the language of instruction is not clearly specified, the lecturers shall announce the language of instruction no later than two weeks after the start of the of the respective course.
- (12) The board of examiners shall appoint a mentor for each study program variant from § 1 paragraph 2, who will advise the students of this study program variant in their personal study planning At least once a year, each student should discuss with the mentor the course of studies to date and any problems that may have arisen and prepare a plan for the coming

academic year. The mentor advises on the modules that can be combined in a meaningful way in compulsory elective areas, whereby the student's individual previous knowledge and areas of interest will be taken into account.

## § 9

### Study and examination achievements

- (1) In addition to § 10 Paragraph 1 and § 11 Paragraph 6 RPO-M, the following forms are provided for study and examination achievements:

#### 1. Study achievements

- a) Completion of exercises (1 - 12 exercises, total duration approx. 10 - 135 hours)

Exercises have to be solved independently and successfully as homework, and the solutions must be presented to the lecturer in due time. The presentation of the solution can be submitted in written or electronic form and/or by a short oral presentation (5 - 15 hours). The exact form of the submission presentation will be determined by the teacher and announced at the beginning of the course. The number, type and scope of the assignments are determined by the respective module description.

- b) Active and regular participation

The course must be attended on a certain number of compulsory dates. The number of compulsory dates is shown in the module handbook. The active participation is verified by the production/acceptance of software or files, experimental setups, experimental protocols, reports, or short presentations. This includes in detail:

- Software or files: creation of computer programs or other files using appropriate software tools;
- Experimental setups: Set-up and execution of an experiment (usually hardware setup, with configuration if necessary);
- Experimental protocols: written documentation of an experiment in terms of preparation, procedure and result;
- Report: factual reproduction, representation, communication of an event or fact in oral form;
- Short presentation: elaborated paper on a specific topic.

The nature and extent of the respective partial performances are determined by the instructor and announced at the beginning of the course.

- c) Seminar paper (10 - 25 pages)

Preparation of a written paper on a given topic in German or English. The topic will be given by the lecturer.

- d) Laboratory practical course

All experiments of the laboratory practical course must be completed. In addition, written laboratory lab reports (5 - 15 pages per experiment) must be prepared and submitted to the instructor. The results will be presented in a colloquium or final discussion (15 - 30 min. per experiment).

- e) Presentation (60 min)

#### 2. Examination performances

- a) Oral examination (20 - 40 min.)  
b) Technical report with colloquium

A written paper in the form of a technical report (60 - 150 pages) must be prepared. The related colloquium consists of a presentation (20 - 30 min.) and a subsequent discussion (10 - 20 min.). The technical report accounts for 75% of the final grade, the colloquium for 25%.

c) (Seminar) Presentation (30 - 90 min).

Presentation of a paper on a given topic in German or English. The topics and dates of the presentations will be announced no later than two weeks after the start of the course. two weeks after the beginning of the respective course at the latest. The duration of the lecture can be found in the respective module description.

- (2) Course and examination achievements shall only be taken by students who are enrolled in a master's degree program in Electrical Engineering. Students who have already completed at least 150 LP in the bachelor's degree program in Electrical Engineering or in the bachelor's degree program in Dual Studies in Electrical Engineering at the University of Siegen and who have already registered for the Bachelor's thesis may, upon application, complete course and examination work of the Master's degree program in Electrical Engineering amounting to a maximum of 30 LP. The application is to be sent to the Electrical Engineering Examination Board via the Electrical Engineering Examination Office. Sentence 1 does not apply to modules which can be studied according to the regulations in a FPO-B for the completion of a Bachelor's degree program.
- (3) The following prerequisites for admission to the examination performance are provided:
  1. the prerequisite for admission to the examination in module 4ETMA200 is the passing of the course work in this module;
  2. the prerequisite for admission to the examination in module 4ETMA201 is the passing of the course work in this module;
  3. the prerequisite for admission to the examination in module 4ETMA250 is the passing of the course work in this module;
  4. the prerequisite for admission to the examination in module 4ETMA252 is the passing of the course work in this module;
  5. the prerequisite for admission to the examination in module 4ETMA302 is the passing of the course work in this module;
  6. the prerequisite for admission to the examination in module 4ETMA353 is the passing of the course work in this module;
  7. the prerequisite for admission to the examination in module 4ETMA358 is the passing of the course work in this module;
  8. the prerequisite for admission to the examination in module 4INFBA020 is the passing of the course work in this module;
  9. the prerequisite for admission to the examination in module 4INFBA100 is the passing of the course work in this module;
  10. the prerequisite for admission to the examination in module 4INFMA204 is the passing of the course work in this module;
  11. the prerequisite for admission to the examination in module 4INFMA207 is the passing of the course work in this module;
- (4) In deviation from § 11 Paragraph 4 Sentence 7 RPO-M, withdrawal from examination dates that have not been organized and announced via the campus management system or the examination board, but have been agreed individually with the examiner, can be made via the examination office at the latest 7 days before the start of the examination or the agreed deadline.

### **Repetition of examinations**

- (1) The repetition of examinations is governed by § 12 RPO-M.
- (2) Repeat dates for failed examinations are offered in the following semester.
- (3) In the case of examinations in the form of written examinations, the last possible examination attempt is usually in the form of an oral examination; at the request of the student, repetition in written form is also possible, provided that the examination is offered in written form.
- (4) For modules imported from other subject examination regulations, the regulations of the exporting subject examination regulations apply to the repetition of examinations.
- (5) If an elective or compulsory elective module is definitively failed, another module can be chosen twice as a substitute. If this is not possible or no longer possible, another study program variant must be selected in accordance with § 1 Paragraph 2, provided this is possible in accordance with § 8 Paragraph 6; otherwise, the master's degree program in Electrical Engineering is definitively failed.

### **§ 10a**

#### **Free attempt**

- (1) A maximum of 3 examinations which have not yet been repeated in accordance with § 12 Paragraph 5 RPO-M and which have been taken within the standard period of study can be evaluated and repeated as a free attempt upon application by the student to the Electrical Engineering Examination Board.
- (2) Clause 1 does not apply to the modules "Studienarbeit Elektrotechnik" (Student research project electronics engineering) (4ETMA040), "Projektarbeit Electrical Engineering" (Project work electrical engineering) (4ETMA041) and "Master's Thesis in Electrical Engineering" (4ETMA050).
- (3) If a better grade is achieved in the retake than in the previous attempt, the previous attempt shall be deemed not to have been taken and shall be replaced by the retake as an examination attempt. If the same or a worse grade is achieved in the repetition, the grade from the previous attempt remains valid.
- (4) An oral examination must be repeated within six months, all other examinations at the next possible date; otherwise, the right to the free attempt is forfeited. An oral examination date must be requested by the student from the examiner.
- (5) A second free attempt for the same examination performance is excluded.
- (6) An examination that has been declared failed due to irregular behavior, in particular an attempt to deceive, cannot be counted as a free attempt.

### **§ 11**

#### **Master thesis**

- (1) The Master's thesis (Master's thesis and colloquium) accounts for 30 credit points (LP) of the master's program.
- (2) The application for admission to the master's thesis must be submitted in writing to the Electrical Engineering Examination Board via the responsible Electrical Engineering Examination Office. Admission is governed by § 13 RPO-M. In addition, admission can only be granted if
  1. the respective field of study "compulsory modules" has been completed in full;
  2. the candidate has acquired at least 60 LP and
  3. there is only one repeat option in any module still to be completed.
- (3) The candidate has the right to propose the topic of the master's thesis and a reviewer.

- (4) The time required to complete the master's thesis is 26 weeks. The scope should be 80 - 120 pages. The topic can only be returned once within the first 4 weeks after issue.
- (5) Following § 11 paragraph 12 RPO-M, the master's thesis can also be admitted in the form of a group work of two students if the contribution of the individual to be evaluated is clearly distinguishable and assessable due to the indication of sections, page numbers or other objective criteria that allow a clear delimitation and if this contribution fulfills the requirements according to § 14 clause 1 RPO-M. The scope of the work increases accordingly.
- (6) The Master's thesis must be submitted in duplicate in printed, bound form as well as additionally in electronically searchable form via the Electrical Engineering Examination Office to the Examination Committee. If, in addition to the written work, further components created as part of the master's thesis (e.g. program code, models, technical drawings, circuit diagrams) are to be evaluated, these must also be submitted in a suitable electronic form.
- (7) The passages in the work which are taken from other works in terms of wording or meaning must be identified, indicating the original source. The candidate shall add a written assurance to the work that he/she has written the work independently - in the case of a group work, his/her correspondingly marked part of the work - and has not used any sources and aids other than those indicated and that he/ she has marked citations clearly.
- (8) The Master's thesis is defended in a colloquium (minimum 20- to maximum 30-minute presentation followed by a 10- to 20-minute discussion). The result of the colloquium is included in 25% of the overall grade of the master's thesis.

## **§ 12**

### **Assessment, formation of grades**

The evaluation and the formation of grades shall be carried out in accordance with § 21 RPO-M.

## **§ 13**

### **Application and Transitional Provisions**

- (1) These subject examination regulations apply to all students who have enrolled in this master's degree program at the University of Siegen for the first time as of the winter semester 2022/2023.
- (2) The Examination Regulations for the master's degree Program in Electrical Engineering of the Faculty of Science and Technology of the University of Siegen dated April 4, 2013 (Official Notice 24/2013), as last amended by the Fifth Regulation Amending the Examination Regulations for the Master's Degree Program in Electrical Engineering of the School of Science and Technology of the University of Siegen dated June 30, 2020 (Official Notice 37/2020) shall expire on March 31, 2025.
- (3) The "Regulations on the Determination of a Special Course-Related Prior Education and Aptitude for the master's degree Program "Electrical Engineering" with the Degree Program Variant Intelligent Energy Systems at the University of Siegen dated October 7, 2016" (Official Notices 159/2016) shall cease to be in force.
- (4) Studies according to the examination regulations mentioned in paragraph 2 are possible in the study program variants "Automation Technology", "Communications Technology" and "Electronics Design and Technology" until March 31, 2025. In the study program variant "Intelligent Energy Systems", studies according to the examination regulations mentioned in paragraph 2 are still possible until September 30, 2024. Students who were enrolled in the master's degree program in Electrical Engineering before the winter semester 2022/2023 can still complete their studies in the respective variant according to the examination regulations mentioned in paragraph 2 until the dates mentioned in sentence 1 or sentence 2.
- (5) Students who were already enrolled in the master's degree program in Electrical Engineering prior to the winter semester 2022/2023 have the option, upon application, to complete their studies according to the provisions of the Framework Examination Regulations (RPO-M) for the

Master's degree program at the University of Siegen dated February 28, 2019 (Official Notice 5/2019) and these Subject Examination Regulations. The application is to be addressed to the respective responsible examination board and is not revokable.

### **Article 3**

#### **Export modules offered across disciplines**

The electrical engineering subject offers the following modules across subjects for export only (appendix 6):

Nr.	Module title
4ETMAEX900	Elektrische Maschinen und Antriebe I (Maschinenbau, Wirtschaftsingenieurwesen) (Electrical Machines and Drives I (Mechanical Engineering, Industrial Engineering))

### **Article 4**

#### **Entry into force and publication**

These Examination Regulations shall enter into force on the day following their publication, at the latest on October 1, 2022. They will be published in the official gazette "Amtliche Mitteilungen der Universität Siegen".

Issued on the basis of the resolution of the Faculty Council of Faculty IV: School of Science and Technology dated XX.

It is pointed out that, pursuant to Section 12 (5) of the Higher Education Act of the State of North Rhine-Westphalia (Hochschulgesetz - HG NRW), a violation of procedural or formal requirements of the Higher Education Act or of the university's regulatory or other autonomous law can no longer be asserted after the expiration of one year from the date of this announcement, unless

- 1) the regulations have not been published properly,
- 2) the rectorate has previously objected to the decision of the body adopting the regulations,
- 3) the formal or procedural defect has been notified to the university in advance and the violated legal provision and the fact giving rise to the defect have been indicated, or
- 4) the legal consequence of the exclusion of objection was not pointed out when the order was announced to the public.

Siegen, the . 2021

The Rector  
(University Professor Dr. Holger Burckhart)