

Unofficial Translation
Excerpt from the
Examination Regulations for the Degree Program
Master of Science (M.Sc.)

Appendix B. Program-specific provisions for the Examination Regulations for the Master of Science (M.Sc.)

Renewable Energy Engineering and Management

§ 1 Program profile

(1) The Master in Renewable Energy Engineering and Management degree program is research-oriented and consecutive.

(2) The Master in Renewable Energy Engineering and Management degree program provides advanced training in the area of renewable energies. It encompasses content from natural sciences and engineering concerning the sun, wind, water, biomass, and geothermal heat as well as techniques for converting these natural resources into energy. The program focuses on a detailed and critical analysis of the socioeconomic, political, and legal conditions for the further development of renewable energies. The knowledge and skills the students acquire enable them to identify and analyze problematic human–energy relationships and work out solutions by developing new technical methods and shaping negotiation processes between the market, nations, and civil society with the goal of promoting sustainable development in the energy sector. Students receive the opportunity to focus on one of the three specializations Energy Systems Technology, Energy Conversion, and Environmental Planning and Management within the context of the master’s program. Graduates are qualified for work in both science and research as well as for leadership positions in public administration, at national and international organizations, at companies, and in projects involving the planning and implementation of the energy transition at the local, regional, or national level.

§ 2 Program entry and program scope

(1) Students may only enter the Master in Renewable Energy Engineering and Management degree program at the start of the winter semester.

(2) The Master in Renewable Energy Engineering and Management degree program comprises work equivalent to 120 ECTS credits.

§ 3 Language

(1) The courses and examinations in the Master in Renewable Energy Engineering and Management degree program are generally held in English. In the elective area, some courses may be conducted in German.

(2) Students who wish to complete one of the elective modules offered in German must provide evidence of German language skills corresponding to at least level B2 of the Common European Framework of Reference for Languages.

§ 5 Program curriculum

(1) The Master in Renewable Energy Engineering and Management degree program is divided into a required area, a focus area, and an elective area. The modules in these areas as well as the individual courses included in them are listed and described in the current module handbook.

(2) Students must complete all required modules listed in the following table. In the module Scientific Framework for Renewable Energy Engineering and Management, students take appropriate courses with a total of 10 ECTS credits from the areas Physics, Chemistry, Biology, Engineering, Politics, Economics, and Law by arrangement with their departmental student advisor.

Required area (55 ECTS credits)

Module	Type	SWS	ECTS credits	Semester	Form of assessment
Energy and Sustainable Development	V	4	5	1	PL: written/oral
Scientific Framework for Renewable Energy Engineering and Management	V+Ü+S	8	10	1	PL: written exam
Natural Resources and Conversion Technologies	V+Ü+S	8	10	1	PL: written/oral
Climate and Energy Policy	V+Ü+S	4	5	1	PL: written/oral
Generation and Distribution of Energy	V+Ü+S	4	5	2	PL: written/oral
Management 1	V+Ü+S	4	5	2	PL: written/oral
Research Skills	V+Ü+S	4	5	2	PL: written/oral
Society and Economy	V+Ü+S	4	5	2	PL: written/oral
Project	V+Ü+S	4	5	3	PL: written/oral

Abbreviations in table:

Type = type of course; SWS = planned number of contact hours; Semester = recommended program semester; V = lecture; Ü = exercise; S = seminar; PL = exam

(3) In the focus area, students must complete one of the three specializations Energy Systems Technology, Energy Conversion, and Environmental Planning and Management. This is generally the specialization they selected during the admission procedure. The Departmental Examination Committee may allow a student to change his or her specialization once upon request on condition that there are enough available places and that the student fulfills the prerequisites for admission to this specialization. Students are required to complete a total of four modules worth 5 ECTS credits each (four contact hours) in their chosen specialization in the third program semester. Each module contains written and/or oral assessment. The Departmental Examination Committee may allow a student to replace one of the modules from his or her specialization with a module from one of the other specializations upon request.

(4) In the elective area, students must generally earn 5 ECTS credits in the third program semester by completing an elective module from the course offerings of the Master in Renewable Energy Engineering and Management degree program. The elective modules are described in the current module handbook. Most of them cover themes like bioenergy and wind energy as well as other forms of renewable energy. Each elective module is worth 5 ECTS credits (four contact hours) and concludes with written and/or oral assessment. Students may instead earn the required 5 ECTS credits in the elective area by taking suitable courses from degree programs offered by other faculties. The Departmental Examination Committee decides on the suitability of such courses; the type and scope of the required coursework and course-based assessments are set by the faculty offering the courses.

§ 5 Internship

(1) The Master in Renewable Energy Engineering and Management degree program includes as one of its required elements a phase of practical professional training (internship) at an appropriate public or private institution. The internship, which should provide insight into potential areas of professional activity for graduates of the degree program, is worth 10 ECTS credits and should be of at least seven weeks' duration (275 hours of work). As a rule, it should be completed during the semester break between the second and third program semester. It may be completed in Germany or abroad, either continuously or split up into two practical phases of at least three weeks each.

(2) Before completing the internship, the student must seek approval from the Departmental Examination Committee. As a condition for earning ECTS credits for an internship, the student must submit a certificate from the institution in question confirming that he or she completed the required duration of practical training there. Details regarding the completion of internships are handled by the Departmental Examination Committee, which may delegate the responsibility for approving internships to the departmental academic advisors.

(3) Students who have already completed practical training equivalent to that defined in Paragraph (1) within the context of university studies, vocational training, or a profession may request to have the internship requirement waived. Decisions regarding approval for any equivalent practical training are made by the Departmental Examination Committee.

§ 6 Coursework

Coursework may include regular course participation, written exams, or the completion of exercises. The type and scope of coursework are defined in the current module handbook and are announced to the students at the beginning of the courses in each module.

§ 7 Course-based assessments

(1) As a rule, written course-based assessments take the form of supervised written exams, tests, research papers, or reports. Types of oral course-based assessment are presentations and oral exams (exam interviews). The type and scope of course-based assessments are defined in the current module handbook and are announced at the beginning of the courses of each module.

(2) Written examinations have a maximum duration of 30 minutes per ECTS credit. They may consist entirely or partially of multiple-choice questions; the provisions described in § 17a of these examination regulations apply to such exams.

(3) Oral exams have a maximum duration of ten minutes per ECTS credit.

§ 8 Repeating course-based assessments

(1) Course-based assessments that have been graded “not adequate” (5.0) or considered failed may be retaken once. In addition, no more than two failed assessments may be retaken a second time.

(2) As a rule, in order to retake a failed course-based assessments a second time, the student must retake the relevant course. The second retake must be held at the next possible examination session after the first retake. § 24 Paragraphs (3) and (4) of these examination regulations apply accordingly.

(3) Students are not permitted to retake successfully completed course-based assessments for the purpose of achieving a better grade.

§ 9 Admission to prepare the master’s thesis

Admission to prepare the master’s thesis is open only to students who are matriculated in the Master in Renewable Energy Engineering and Management degree program and have successfully completed modules worth a total of at least 70 ECTS credits.

§ 10 Master’s thesis

(1) The master’s thesis must be written within a period of six months and is worth a total of 30 ECTS credits.

(2) As a rule, the master’s thesis must be written in English. The Departmental Examination Committee may grant students permission to write the master’s thesis in another language upon request if its assessment in that language can be guaranteed.

(3) The Departmental Examination Committee may also grant permission for a group of students to prepare a joint master’s thesis. It must be possible to clearly differentiate, assess, and grade the specific contributions of the individual candidates, to be identified by specific page or paragraph numbers or by other objective criteria.

(4) Students must submit the master’s thesis to the Examination Office in three bound hard copies or in another form if requested, as well as in electronic form on a common data storage system (such as CD or DVD). In the case of theses involving empirical research, the student may also be required to submit the data he or she used and the empirical findings.

(5) At least one of the two evaluators of the master’s thesis must be a full-time tenured lecturer at the Faculty of Environment and Natural Resources or the Faculty of Engineering of the University of Freiburg.

(6) Students may request to have the master's thesis complemented by a presentation of the thesis in a final colloquium. In this case, the final colloquium is worth 5 ECTS credits and the master's thesis is worth 25 ECTS credits; the grade for the final colloquium makes up 20 percent of the grade for the master's thesis. The request must be made along with the application for admission to prepare the master's thesis. The student is admitted to the final colloquium only if he or she receives a passing grade on the master's thesis. The final colloquium is held in the form of an individual examination before one of the evaluators of the master's thesis and in the presence of an observer in accordance with § 10 Paragraph (1) Clause 3 of these examination regulations and is generally open to all members of the university.

§ 11 Determination of the overall grade

(1) The overall grade for the master's degree program is calculated on the basis of the simple weighted average (weighted arithmetic mean) of the grades awarded for the master's thesis and the individual modules.

(2) Students who receive the grade "very good" – 1.3 or better – for all modules and for the master's thesis are awarded the distinction "with honors."

§ 12 Departmental Examination Committee

The Departmental Examination Committee appointed by the Faculty of Environment and Natural Resources in accordance with § 9 of these examination regulations is responsible for all master's degree programs offered at the faculty.

Publication of the text of the statute in German:

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