

**Study and Examination Regulations  
for the full-time Master's degree program in  
Sustainable Water Management and Engineering  
at the Hof University of Applied Sciences**

**From 29th January 2021**

***Only the German version of this document is legally binding.  
This English translation is for your convenience only.***

Based on Article 13, Paragraph 1, Clause 2 and Article 43, Paragraph 5, Clause 2 of the Bavarian University Act - BayHSchG - (BayRS 2210-1-1-WFK), Hof University of Applied Sciences enacts the following statutes:

**Preliminary Note**

The present statutes have been formulated in a gender-neutral manner as far as possible. Even where this is not the case for linguistic reasons, references to persons in the following provisions mean members of any gender.

**§1**

**Purpose of the Study and Examination Regulations**

<sup>1</sup> These regulations govern the content and structure of the full-time Master's degree program in Sustainable Water Management and Engineering. <sup>2</sup> In addition, it makes the guidelines on the examinations in this degree program required to fulfil the Framework Examination Regulations for Universities of Applied Sciences - RaPO - (BayRS 2210-4-1-4-1-WFK) and the General Examination Regulations of the Hof University of Applied Sciences (APO).

**§ 2**

**Admission requirements for the Master's degree program**

(1) Admission requirements are

1. a successfully completed first professional degree at a German or foreign university with a minimum of 210 credits (credit points according to the European Credit Transfer and Accumulation System - ECTS) or an equivalent degree in an engineering or natural science program that has provided a basic knowledge of water management and water technology sufficient for the study in the Master's program Sustainable Water Management and Engineering,
2. proof of suitability for the specific course of study in accordance with § 3.

(2) <sup>1</sup> A sufficient basic knowledge of water management and water technology within the meaning of paragraph 1 number 1 is present, provided that corresponding competences were the subject of study and examination at least in the same breadth and depth as is the case if at Hof University of Applied Sciences

1. the module 2105 (Fundamentals of Environmental Engineering)
2. either module 2107 (Water Extraction and Treatment) or module 2108 (Process Water Technology) or module 2109 (Wastewater Treatment Technology) as well as
3. module 0201 (General and Inorganic Chemistry)

were completed with success. <sup>2</sup>The examination board shall decide whether this requirement has been met; in doing so, it shall be guided by the standard of Article 63, Paragraph 1, Clause 1 BayHSchG (no significant differences). <sup>3</sup>In so far as such a decision is relevant, the applicants concerned shall, without being requested to do so, submit descriptions of the modules from the relevant module catalogues or curricula together with their written application documents.

(3) The admission requirement according to paragraph 2 is considered to have been met if missing modules are successfully completed by the end of the second semester in the Master's program in accordance with the study and examination regulations for the Bachelor's program in Environmental Engineering (Umweltingenieurwesen) or the study and examination regulations for the Bachelor's program in Innovative Textiles (Innovative Textilien).

(4) In the case of applicants who have only completed a first degree qualifying them for a profession with a scope of 180 credits or with an equivalent scope, the minimum number of 210 credits pursuant to paragraph 1 number 1 shall be deemed to have been achieved if they acquire an additional 30 credits by the end of the second semester in the Master's degree program pursuant to the following paragraphs.

(5) In order to fulfill the requirement of the previous paragraph, modules amounting to 30 credits must be completed in accordance with the study and examination regulations for the Bachelor's degree program in Environmental Engineering (Umweltingenieurwesen) or the study and examination regulations for the Bachelor's degree program in Innovative Textiles (Innovative Textilien); this amount is reduced by the credits that the students concerned may already have to acquire in accordance with paragraph 3. <sup>2</sup>The modules can in principle be freely chosen by the students concerned. <sup>3</sup>The choice must, however, be made in such a way that it essentially leads to the acquisition of further competences, taking into account the competences acquired in the first professional-qualifying degree program; whether this is the case shall be determined by the examination board, whose approval in this respect is an entrance requirement for the examinations in the chosen modules. <sup>4</sup>The choice of modules 3511 (Environmental Engineering Project), 4003 (Practical Work) and 4004 (Bachelor's Thesis) is excluded.

(6) <sup>1</sup>Applicants who have not completed a practical semester or similar practical study phases as part of their first professional degree may fulfill the requirement under paragraph 4 by completing an internship. <sup>2</sup>This must take place in a company or research institution and must be devoted to an activity with a water

management or water technology orientation to the extent of 900 hours, which in terms of its importance and difficulty corresponds to the degree in accordance with paragraph 1 number 1. <sup>3</sup>Compliance with these requirements shall be evidenced by a certificate issued by the enterprise or research institution describing the subject of the practical activity in the manner required for this purpose.

(7) <sup>1</sup>Transferring credits from the first-degree program leading to a professional qualification towards the achievements to be made according to paragraphs 3 and 4 can only take place, irrespective of the other prerequisites for crediting, in so far as these achievements did not relate to any of the modules required for the completion of this degree program. <sup>2</sup>Examinations for the completion of modules according to paragraphs 3 and 5 may be repeated up to two times in the event of failure, without prejudice to the deadlines regulated therein; second repetitions in such modules shall not affect the number of possible second repetitions in the modules of the Master's degree program. <sup>3</sup>For the extension of the deadlines specified in these paragraphs, § 8 paragraph 4 of the Framework Examination Regulations for Universities of Applied Sciences (RaPO) shall apply accordingly. <sup>4</sup>The final grades of the modules completed according to paragraphs 3 and 5 are not included in the overall grade of the Master's examination.

### **§ 3**

#### **Proof of suitability for the specific degree program**

<sup>1</sup>A candidate is qualified for the Master's degree program if he or she has completed the program in accordance with § 2 Paragraph 1 Number 1 with an overall examination grade of at least 2.5 or an equivalent grade. <sup>2</sup>The overall examination grade referred to in the previous sentence shall be deemed equivalent if the applicant proves that he or she is among the best 50 % of the graduates of his or her final year in the relevant degree program.

### **§ 4**

#### **Degree program objective**

<sup>1</sup>The aim of the application-oriented Master's program Sustainable Water Management and Engineering is to prepare students for challenging technological and managerial tasks in public administration, politics and policy consulting, NGOs as well as globally operating companies. <sup>2</sup>The program provides an in-depth and practice-oriented engineering qualification in the field of water management and engineering, which is oriented towards the requirements of globalization, sustainability, and resilience as well as climate change. <sup>3</sup>In addition, management skills required for the tasks mentioned in sentence 1 are acquired.

## **§ 5**

### **Standard course length, compulsory internship**

<sup>1</sup>The standard course length is three semesters. <sup>2</sup>The program includes a compulsory internship, namely the module "Master Thesis" in the amount of 900 hours (30 credits). <sup>3</sup>The module "Master's Thesis" can be completed in another form as an exception under the conditions of § 8 paragraph 2 sentence 3. <sup>4</sup>During the compulsory internship, students are supervised professionally by professors at Hof University of Applied Sciences.

## **§ 6**

### **Modules**

(1) The modules required to pass the Master's examination, the type and scope of the courses, the form of the examinations including the processing times for the preparation of the scheduled supervisory work as well as the assessment according to the ECTS are specified in the Annex.

(2) <sup>1</sup>Completion of the core elective module "Intercultural Communication" is equivalent to completion of modules offered by the Language Center which comprise a total of at least six credits and meet the requirements of the following sentences. <sup>2</sup>Students who have neither acquired their higher education entrance qualification nor a university or equivalent degree in German may choose modules for language training in German as a foreign language with learning objectives above level A1. <sup>3</sup>For other students, modules for educational training in English or in another foreign language above level B2 are eligible.

## **§ 7**

### **Module catalogue, program curriculum**

(1) <sup>1</sup>The Engineering Department shall prepare a module catalogue. <sup>2</sup>The module catalogue specifies the course content and educational objectives of the modules in detail. <sup>3</sup>In addition, it contains more detailed provisions on the examinations listed in the appendix as well as the professional guidance during the preparation of the final thesis and during the internship. <sup>4</sup>If the same module is offered more than once in a semester the module catalogue determines the criteria according to which the students are distributed among the modules with the same content.

2) <sup>1</sup>In addition, the Engineering Department shall prepare a program curriculum. <sup>2</sup>The curriculum provides detailed information on the courses offered by the department and the recommended course of study.

(3) <sup>1</sup>The module catalogue and the program curriculum shall be adopted by the departmental council in agreement with the examination board and shall be published by the university. <sup>2</sup>The announcement of new regulations must be made at the latest at the beginning of the lecture period of the semester in which the regulations are to be applied for the first time.

(4) <sup>1</sup>In addition to the electives listed in the appendix, modules from other Master's degree programs may also be selected as electives. <sup>2</sup>The program curriculum shall regulate the details.

(5) <sup>1</sup>There is no entitlement to all electives listed in the appendix being offered. <sup>2</sup>The relevant offer is determined in the curriculum, considering the demand.

## **§ 8**

### **Master's thesis**

(1) <sup>1</sup>The topic of the Master's thesis is assigned at the beginning of the third semester of study, subject to the admission requirement stated in sentence 2. <sup>2</sup>The assignment requires that the student has acquired at least 48 credits in this degree program. <sup>3</sup>The time from the issue of the topic of the Master's thesis to its submission is five months. <sup>4</sup>Only professors who hold teaching positions in the Master's degree program Sustainable Water Management and Engineering or who have done so in the last two years before the topic was assigned may be appointed as examiners.

(2) <sup>1</sup>In the Master's thesis, students shall demonstrate their ability to apply the knowledge acquired during study in an independent application-related scientific work to solve a holistic problem. <sup>2</sup>The Master's thesis is generally intended to deal with a concrete operational problem or research task and is therefore written in the context of a special internship related to this (§ 5, sentence 2). <sup>3</sup>On application, the examination board may allow the Master's thesis to be written outside of an internship, in deviation from sentence 2, if the application of the thesis is nevertheless ensured and the topic is suitable for a special theoretical in-depth study.

## **§ 9**

### **Language of teaching and examination**

<sup>1</sup>The courses and examinations are held in English. <sup>2</sup>In the case of elective modules that can be selected from the range of other degree programs, the language of teaching and examination is determined by the regulations of the corresponding study and examination regulations.

## **§ 10**

### **Academic Degree**

On the basis of the successful completion of the Master's degree examination, Hof University of Applied Sciences awards students the degree of Master of Engineering (M.Eng.)

**§ 11**

**Examination board**

<sup>1</sup>An examination board for the Master's degree program in Sustainable Water Management and Engineering shall be established in the Engineering Department. <sup>2</sup>The examination board is composed of the chairperson and two other members. <sup>3</sup>The members shall be elected by the departmental council.

**§ 12**

**Effective date**

This statute shall come into effect on March 15, 2021.

Issued on the basis of the decision of the Senate of Hof University of Applied Sciences of January 20, 2021, and the approval of the President of the University of Applied Sciences of January 29, 2021.

Hof, January 29, 2021

signed

Prof. Dr. Dr. h. c. Jürgen Lehmann

President

This statute was deposited in the university on January 29, 2021. The laying down was announced on January 29, 2021, by posting in the university. The day of announcement is therefore January 29, 2021.

**Annex (to § 6)**

1	2	3	4	5	6	7
					<b>Examination</b>	
<b>Ongoing No.</b>	<b>Modules</b>	<b>SWS</b>	<b>Credits</b>	<b>Course format</b>	<b>format</b>	<b>Entrance requirements</b>
1	Sustainability Management	4	6	SU, Ü	<b>schrP90</b>	
2	International Water and Risk Management	4	6	SU, Ü	<b>P</b>	
3	Water and Society	2	3	S	<b>StA mit Präs</b>	
4	Advanced Water Treatment	4	6	SU, Pr	<b>schrP90</b>	TN Pr
5	Wastewater Discharge and Sewer Network with Structures	4	6	SU, Ü	<b>schrP90</b>	
6	International Water Resources Management	4	6	SU, Ü	<b>StA mit Präs</b>	
7	Water Quality and Water Cycle	4	6	SU, Pr	<b>schrP90</b>	TN Pr
8	Smart Water	4	6	SU	<b>schrP90</b>	
9	R&D or Industrial Project	4	6	Pr	<b>StA mit Präs</b>	
10	New Technologies in the Water Sector	2	3	S	<b>StA mit Präs</b>	
	<b>Electives</b>	<b>4</b>	<b>6</b>			
11	Project Simulation	4	6	Pr	<b>StA mit Präs</b>	
12	Agile, Traditional and Hybrid Methods in International Project Management	4	6	SU	<b>schrP90</b>	
13	Intercultural Communication	4	6	SU, Ü	<b>P</b>	
14	International Human Resource Management	4	6	SU, Ü	<b>schrP90</b>	
15	Energy Efficiency in Water Management Systems	4	6	SU, Ü	<b>P</b>	
16	<b>Master Thesis</b>		<b>30</b>	Pr	<b>AA</b>	
	Total	56	90			

**Explanation of abbreviations:**

AA	final thesis
P	Possible examination formats (P) are schrP90 or StA with Präs. A combination of two of these examination formats as well as the determination of admission requirements for participation in examinations are also possible. Further details are regulated in the program curriculum.
Pr	internship
Präs	presentation (duration approx. 15 to 25 minutes)
S	seminar
schrP90	written exam with 90 minutes duration
StA	student research project (regular workload 50 hours)
SU	seminar teaching
SWS	hours (per week)
TN	attendance record (with indication of the attendance in the courses in percent)
Ü	exercise