This is a translation for information purposes. Only the German wording of the study and examination regulations of May 30th 2016 is legally binding.

Faculty **Civil Engineering/ Architecture** 



HOCHSCHULE FÜR TECHNIK UND WIRTSCHAFT DRESDEN UNIVERSITY OF APPLIED SCIENCES

# **Study Regulations** for the **Master Study Course**

# **Environmental Engineering**

at the Hochschule für Technik und Wirtschaft Dresden University of Applied Sciences

dated

## 30.05.2016

On the basis of § 36 Paragraph 1 of the University Freedom Act in the Free State of Saxony (SächsHSFG) in the version published on 15th January 2013 (Gazette on Laws and Ordinances for Saxony - SächsGVBI.) p. 3), most recently amended by Article 11 of the Act on 29th April 2015 (SächsGVBI. pp. 349, 354), the Hochschule für Technik und Wirtschaft Dresden (University of Applied Sciences), hereinafter referred to as the HTW Dresden, has decreed these study regulations as statutes.

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Appendix: Study schedule

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## § 1

## Scope

These Study Regulations govern the content and structure of the study programme in the consecutive Environmental Engineering Master study course of the Civil Engineering/Architecture Faculty at the HTW Dresden on the basis of the Examination Regulations.

## § 2

#### Aim of the study programme

- (1) The Environmental Engineering Master study course has as its goal a training that is characterised in equal measure by scientific requirements, practical application, interdisciplinarity and internationality. Internationality is particularly achieved by the use of English as the language of instruction. Graduates will acquire the skills to:
  - master demanding professional activities in environmental engineering with the emphasis on resource management.
  - independently apply scientifically sound knowledge and methods,
  - work in the disciplines afforded in the field of environmental engineering in a scientific and evolving manner.
  - assess and design technological, structural and environmental processes,
  - work in an interdisciplinary context and present complex issues of a technical and natural science-oriented nature in a comprehensible manner,
  - understand the German engineering culture and applied research strategy and with this knowledge develop new bilateral teaching and research cooperations,
  - expand their abilities in relation to interculturality as well as information and team skills in order to be able to become active on the international stage.
- (2) Furthermore, the goal and benchmarks of the Environmental Engineering Master study course are also expressed in the division of the modularised curriculum into compulsory and compulsory elective modules.
- (3) The Environmental Engineering Master degree awarded enables a wide range of professional activities to be taken up. Abilities in environmental engineering, environmental sciences, environmental planning and management are acquired in the study course. Following successful accreditation, the study course opens up access to the higher echelons of public administration and development opportunities in all sectors of the economy while also paving the way to a post-graduate qualification in the form of a doctoral study in Germany or abroad.

## § 3

#### Entrance requirements

- (1) General entrance requirements to study in the Environmental Engineering Master study course consist of a first university degree in engineering, natural or environmental sciences leading on to a professional career or in a similar area, with a minimum of 180 ECTS and evidence of proficiency in the English language. In case of doubt, suitability has to be recognised by the Examinations Committee of the Faculty of Civil Engineering/Architecture.
- (2) The entrance requirements for the Master study course can be acquired at a university in Germany or abroad. The Examinations Committee of the Faculty of Civil Engineering/Architecture shall control that the requirements have been fulfilled.
- (3) English language skills have to be verified by suitable tests, such as TOEFL (min. 550 points, computer-based 213 points, internet-based 79 points), IELTS (min. 6.5),

Cambridge Certificate in Advanced English (min. B); Cambridge Certificate of Proficiency in English (min. B). Nationals of countries, in which English is the official language, are exempted from proving proficiency in English. German language proficiency at the A2 level is recommended.

- (4) For students at partner universities (university or faculty agreements), participation in individual semesters is possible without a M. Eng. degree.
- (5) If the number of applicants should exceed the number of study places available, a selection process shall take place. The awarding of study places shall ensue in accordance with the Selection Regulations of the HTW Dresden based on the overall grade of the first certificate of higher education leading on to a professional career.

#### § 4

#### Structure of the study programme

- (1) The study in the Environmental Engineering Master study course at the HTW Dresden is in the form of a direct study. The course begins in the winter semester and can be undertaken on a full-time or part-time study basis. The standard period of study for the full-time course is four semesters. The standard period of study for the part-time course is governed by the Part-time Study Regulations of the HTW Dresden. These study regulations, together with the examination regulations, the study contents and the course offerings are so designed as to enable the study to be successfully completed in the fulltime course.
- (2) The first three study semesters ensue in the form of attendance and self study. In the fourth study semester, the Master thesis is written and defended.
- (3) not applicable
- (4) The study is modularised. The modules comprise self-contained learning units, each one defined in terms of learning objectives described as competences, knowledge, abilities and skills. They consist of lectures and self-study units and are completed by a module examination, which can be composed of one or more examination performances. Insofar as academic performances represent an admission requirement to module examinations (pre-examination performances), this is identified in the examination schedule (Appendix to the Examination Regulations).
- (5) not applicable
- (6) The credit point system corresponds to the European Credit Transfer System (ECTS). Credits (performance points) are allocated to each module. Credits are the quantitative measure for the workload of the students. One credit corresponds to a student workload of 40 full hours. The number of credits is based on the average workload to be provided by the students for the respective module. The workload includes participation in lectures (attendance study) and all types of self-study, such as preparation and follow-up times relating to lectures, preparation for examinations, completion of study and examination performances including practical study periods. Each module generally corresponds to five ECTS credits. A total of 30 credits are awarded per semester, corresponding to a workload of 900 full hours. These figures can be different for part-time studies.
- (7) Please refer to the study schedule (Appendix) for the number of weekly hours per semester.

## § 5 not applicable

## § 6

## Study schedule

- (1) The study schedule (Appendix) is a recommendation to the students for a proper conduct of the study on a full-time basis. For part-time studies, an individually coordinated study schedule is prepared between the student and the Academic Dean.
- (2) In studying abroad, the respective study programme is applicable as the study schedule set in consultation with the HTW Dresden supervising tutor and the partner university abroad in a learning agreement and as appropriate a cooperation agreement.

## § 7

## Study contents / Forms of lectures

- (1) The Environmental Engineering Master study course modules are explained in a module description indicating the following criteria:
  - Period and frequency of module/module type,
  - Workload,
  - Subject areas and forms of teaching,
  - Performance points (credits),
  - Requirements for participation,
  - Learning objectives/Competences,
  - Contents,
  - Pre-examination performances and examination performances
  - Learning materials,
  - Usability of module.

The module descriptions can be viewed on the website of the HTW Dresden.

- (2) not applicable
- (3) Teaching events in the Environmental Engineering Master study course at the HTW Dresden are differentiated into:
  - Lectures,
  - Exercises and seminars,
  - Internships.
- (4) Lectures serve the concentrated acquisition of knowledge. Exercises contribute to the consolidation of the lecture material. They are conducted in the form of calculative or practical exercises in seminars. Seminars act as a guide to working independently on a scientific basis. In addition, they are intended to prepare the students for writing (and defending) the Master thesis. Particular importance is attached to the exercises and internships in laboratories and computer pools, which contribute to the acquisition of material knowledge as well as analytical and computer skills. Part of the self-study will be realised in the laboratory.
- (5) The course offerings consist of compulsory and compulsory elective modules. Compulsory modules are modules that are binding for all students. Compulsory elective modules can be chosen from the Student Compulsory Elective Module Catalogue. For the number of modules to be attended, refer to the Appendix (Study Schedule). In addition, additional modules can be attended at the HTW Dresden or other universities on an optional basis. These include the Studium Integrale. Following notification to the Examinations Office at the end of a semester (or not later than the date of defence), an additional module from the compulsory elective studies passed by a student can replace a selected compulsory elective module.
- (6) At the student's request and with the consent of the Examinations Committee, other modules offered at the HTW Dresden inside and outside the Faculty of Civil

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Engineering/Architecture, which are equivalent both in scope and requirements, can also be attended as compulsory elective modules up to five ECTS credits per semester.

(7) The choice of a compulsory elective module shall be declared in the first semester within the first two weeks of the lecture period, and for the second and third semesters at the end of the lecture period for the following semester, with the modalities (type of enrolment, dates, lower and upper capacity limitation, etc.) to be set by the Dean. Participation in additional modules shall be declared within the first two weeks of the lecture period with the university teacher responsible. Participation in a compulsory elective module is limited by the number of available capacities. The selection ensues following receipt of the participation declaration. In the event of insufficient participants, the Faculty reserves the right to forego conducting individual compulsory elective modules. In the cases of sentences 3 and 4, the Dean shall inform the students within which deadline other compulsory elective modules can be chosen.

## § 8 not applicable

#### § 9

#### **Academic Advice**

- (1) The technical advice relating to studies is provided at the Faculty of Civil Engineering/Architecture of the HTW Dresden by the Academic Dean and the university teachers. The Academic Advice Service supports students in their studies with study support, subject-related advice – particularly relating to study opportunities and study techniques in the study course in question, on the design, structure and realisation of the study an of the examinations.
- (2) Making use of the Academic Advice Service is voluntary with the restriction that students, who have not provided any of the examination performances envisaged in the examination schedule (Appendix on Examination Regulations) by the beginning of the third study semester, should attend course guidance in the third semester.

## § 10

#### Graduation

- (1) The required examination performances as well as the manner of their performance are set forth in the Examination Regulations for the Environmental Engineering Master study course; in addition, they are also explained and – as appropriate – clarified by the teaching staff at the beginning of the module.
- (2) The requirements for graduation are the successful completion of all modules from the compulsory and compulsory elective subjects in the attendance study and self-study (90 ECTS credits) and the Master thesis (30 ECTS credits). Students can therefore acquire a total of 120 ECTS credits.
- (3) Following successful completion of the Master study, the

## Master of Engineering, M. Eng.

university degree is conferred.

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## § 11 not applicable

## § 12 Entry into force

These Study Regulations apply to students who begin their study in the Environmental Engineering Master study course at the HTW Dresden from the 2016/17 winter semester. The Study Regulations were decided on by the Civil Engineering/Architecture Faculty Council on 20.04.2016 and approved by the Rectorate of the HTW Dresden on 30.05.2016. They shall enter into force on 31.05.2016 and be published.

Drawn up on the basis of a decision by the Civil Engineering/Architecture Faculty Council on 20.04.2016 and the approval of the Rectorate of the HTW Dresden on 30.05.2016.

Dresden, 30.05.2016

Prof. Dr.-Ing. habil. Roland Stenzel Rector