

# Regulation of Study and Examination Procedures of the Advanced Training International Master Program “Energy Management”

*Studien- und Prüfungsordnung für den weiterbildenden internationalen Masterstudiengang „Energy Management“ (EM) am TU-Campus EUREF der Technischen Universität Berlin vom 23. Januar 2015*  
non-official translation



On January 23rd 2015, the Joint Commission with Authority to Decide TU-Campus EUREF of the Technical University Berlin enacted the following Regulation of Program and Examination Procedures of the Advanced Training International Master Program “Energy Management”, according to §18 para. 12 no. 1 of the *Grundordnung* of Technical University Berlin, and §74 of the *Berliner Hochschulgesetz* (BerlHG) as of June 26st 2011.

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# 1 General Part

## § 1 Scope of application

This Regulation of Study and Examinations Procedures regulates the aims and form of the program, and the procedures of the examinations, in the advanced training master program “Energy Management”. It complements the Regulation Governing General Study and Examination Procedures (*AllgStuPO*) in details concerning the specific program.

## § 2 Legal effect, annulment

(1) This regulation comes into force the day after its publication.

(2) The Regulations on Studies and on Examination for the Advanced Training Program “Energy Management” of October 22nd 2013 (AMBl. TU 21/2014 p. 238, p. 241) become invalid as this Regulation on Program and Examination enters into force.

## 2 Objectives and Form of Study

### § 3 Qualification objectives, contents and professional areas of practise

(1) The aim of the program is to convey common theoretical and practical knowledge in the area of energy management, in respect to the different prior knowledge of students. Against the background of climate change and economic changes, the advanced training program “Energy Management” covers the challenges and opportunities to shape our future infrastruc-

ture. A comprehensive approach regarding the topic “cities and energy” forms the core of this master course, ranging from the understanding of economic processes to the optimisation of technical and economic investment in human living space. In this area, technical innovations mirror a specific challenge, to be investigated in cooperation with partners outside academia. The learning process of the students takes central stage. Fundamental abilities are conveyed with state-of-the-art teaching processes, and a nexus to professional practise and research is established. The master course is conducted in English to also be internationally attractive, and combines classic in-house learning with e-learning classes in a blended-learning program. The in-house classes take place on the campus around the Schöneberg gasometer. Here, students can experience the transfer of knowledge and technology between the Technical University Berlin and enterprises in practise, and help shaping it. This gives them the opportunity to gain social and subject specific specialist competences and put them into practise; they can hence not only improve their own personal skills, but also shape the future of society.

(2) In today’s world, responsible enterprises have to adapt to solutions in line with sustainability criteria. The resulting large extra demand for experts trained broadly and adequate subject specific command of English is not yet covered by present advanced training courses, which are more oriented on management functions. This TU master programme closes the gap in this area of education and prepares students for new technical leadership positions in the corresponding utilities.

(3) The knowledge gained in this programme qualifies graduates from this master course for a career in the energy sector, in energy intensive undertakings, in regulation authorities, in associations concerned with consumer protection or protection of the environment, or the boards of utility companies. This ranges from a career as manager for energy, energy contracts, member of central management departments up to an energy related career as procurement of project manager.

#### **§ 4 Start dates, standard duration and extent**

- (1) The program starts in the Winter Term.
- (2) The standard duration of the program, including work on the master thesis, is three terms.
- (3) The extent of the program is 90 credit points.
- (4) The content of the program and the entire examination procedure are designed and optimised to allow students to finish the program within the standard duration.

#### **§ 5 Structure**

- (1) The advanced training program is structured in compulsory and optional compulsory modules, which build upon one another. The order of the modules is shown in the example schedule attached to this regulation.
- (2) In the first two terms, modules with classic in-house teaching are offered in combination with e-learning (blended learning program). In the third term, after a compulsory elective module in the form of a pure e-learning course, the master thesis is written.

(3) Achievements totalling up to 90 credit points are to be gathered; 72 CP in modules and 18 CP in the master thesis.

(4) In the compulsory part, 7 modules totalling 62 CP must be completed, and in the compulsory optional part 1 module of 10 CP. The contents of the modules are the following:

In the first term of the program, the technical, economic and legal foundations of the activities on management level in the energy industries are conveyed. The second term deals with the infrastructure of grid-based industries, the conditions for investment in grids, storage and power plants, and deepens the knowledge of energy related management. In the third term, either management of buildings or management of technology and innovation are enhanced through an online-course, and the master thesis is written. Excursions in the first two terms and the selection of lecturers assures the required link to the practise.

### **3 Requirements and examination procedures**

#### **§ 6 Objectives of master examination**

The master examination proves that candidates have reached the qualification objectives according to §3 of this Regulation.

#### **§ 7 Master degree**

Upon successful completion of the master examination, through the Common Commission with Decision Authority (*Gemeinsame Kommission mit Entscheidungsbefugnis, GKME*) TU-Campus EUREF, Technische

University Berlin bestows the academic title: Master of Business Administration (MBA).

### **§ 8 Extent of the master examination, overall grade**

(1) The master examination consists of the module examinations as shown in the list of modules (annex 1), and the master thesis according to §9.

(2) The overall grade is formed according to the regulations in §47 para. 6 AllgStuPO from the results of the exams in those modules which are marked as graded and part of the overall grade.

### **§ 9 Master thesis**

(1) The master thesis is generally to be written in the 3rd term. It has an extent of 18 CP, the time frame is maximum 4 months (for ca. 50 pages). Upon substantial reason, the Chair of the Examination Board (*Prüfungsausschuss*) may grant a prolongation of the period of up to one month, in case of illness of up to three months. The Examination Board decides upon other exceptions.

(2) For the application of admission to the master thesis, the responsible office needs to be supplied with proof of successful completion of modules totalling at least 62 CP.

(3) The topic of the master thesis can be rejected once, albeit only within two weeks after the topic was given. In a second attempt to the master thesis, the topic can only be rejected if this right to rejection has not been exercised in the first attempt.

(4) The master thesis is to be written in English.

(5) The procedures regarding the application to admission and the grading of final theses are regulated in the AllgStuPO in its applicable form.

(6) According to §42 para. 2 AllgStuPO, persons versed in practise and education may be appointed as evaluators for master theses.

### **§ 10 Forms of examinations and admission to examination**

Forms of examinations and the procedures for admission to the module examinations are regulated in the AllgStuPO in its applicable form. In addition, examinations in the following forms are offered: paper, and business simulation.

#### **§ 10a Forms of papers and business simulation**

(1) A paper is a written academic paper, in which students shall proof their ability to work scientifically on a specific question from the topic area of the module and put it into the context of the module.

The examiner determines possible tasks, exact extent, time frame, allowed resources, rules for the form of the paper and the grading criteria and announces these at the beginning of the module. Grades are given according to the grading scale of AllgStuPO.

(2) A business simulation is an oral task in the form of an enterprise planning game, in which students shall prove their ability to work on and solve an entrepreneurial task with business sense and the methods conveyed in the module (strategic thinking, financial analysis, market analysis, operations, teamwork and leadership). The aim is to proof negotiating

skills, argumentation skills, teamwork and leadership qualities in a group setting.

The examiner determines the tasks, groups, the exact extent of preparation, the time frame for the execution of the entrepreneurial planning game, allowed resources, rules for the execution of the business simulation and the grading criteria and announces these at the beginning of the module. Grades are given according to the rules as set out in AllgStuPO.

## **4 Annexes**

Annex I: List of Modules

Annex II: Example Schedule

<b>Master Examination</b>	<b>CP</b>	<b>Examination Form</b>	<b>graded</b>
<b>Compulsory</b>			
Energy Management – Technical Fundamentals	6	written (exam)	yes
Energy Management – Economic Fundamentals of (renewable) Energy Industries	6	written (exam)	yes
Strategic Leadership and Global Management	10	oral (business simulation)	no
Energy Law	10	written (paper)	yes
Advanced Course: Power Grids	10	written (exam)	yes
Advanced Course: Energy Economy and Energy Business	10	written (exam)	yes
Advanced Course: Investment in Grids, Storage, and Power Plants	10	written (exam)	yes
<b>Compulsory Elective</b>			
Building Energy Efficiency	10	portfolio	no
Technology and Innovation Management	10	portfolio	no
<b>master thesis</b>			
master thesis (individual topic)	18	written (master thesis)	yes
$\Sigma$	90		

Table 1: Annex 1: List of Modules

Winter Term	CP	Summer Term	CP	Winter Term	CP
Energy Management – Technical Fundamentals	6 CP	Advanced Course: Power Grids	10 CP	Building Energy Efficiency (compulsory optional)	10 CP
Energy Management – Economic Fundamentals of (renewable) Energy Industries	6 CP	Advanced Course: Energy Economy and Energy Business	10 CP	Technology and Innovation Management (compulsory optional)	10 CP
Strategic Leadership and Global Management	10 CP	Advanced Course: Investment in Grids, Storage, and Power Plants	10 CP	master thesis	18 CP
Energy Law	10 CP				
ECTS total	32 CP	ECTS total	30 CP		

Table 2: Annex 2: Example Schedule