I. Legal and Administrative Provisions

Faculties

Study and Examination Regulations for the International Continuing Education Master's Program in Energy Management (MBA) at TU-Campus EUREF of Technische Universität Berlin of 23 October 2018

Application and Admission Regulations for the International Continuing Education Master's Program in Energy Management (MBA) at TU-Campus EUREF of Technische Universität Berlin of 23 October 2018
I. Legal and Administrative Provisions

Faculties

Study and Examination Regulations for the International Continuing Education Master’s Program in Energy Management (MBA) at TU-Campus EUREF of Technische Universität Berlin of 23 October 2018

On 23 October 2018, the TU-Campus EUREF Joint Decision-Making Committee of Technische Universität Berlin adopted the following study and examination regulations for the continuing education master’s program in Energy Management in accordance with Section 18 (1) no. 1 of the Constitution of Technische Universität Berlin and Section 71 (1) no.1 of the Berlin State Higher Education Act (Berliner Hochschulgesetz - BerlHG) in the version of 26 July 2011 (Berlin Gazette of Laws and Ordinances - GVBl., p. 378), last amended by Section 6 of the BerlHG on 2 February 2018 (GVBl. p. 160).*

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I. General regulations

Section 1 – Scope of application

These study and examination regulations set out the aims and structure of this degree program as well as the requirements and arrangements of the examinations in the international continuing education master’s program in European and International Energy Management. The program-specific provisions included herein supplement the Regulations Governing General Study and Examination Procedures of Technische Universität Berlin (Ordnung zur Regelung des allgemeinen Studien- und Prüfungsverfahrens - AllgStuPO).

Section 2 – Entry into force / expiration

(1) These regulations take effect on the day after their publication and apply to students enrolled from the 2019/2020 winter semester onwards.

(2) The Study and Examination Regulations for the international master’s program in Energy Management of 31 October 2016 (Official Gazette TU 12/2017, p. 212) cease to be effective upon the entry into force of the present regulations.

In addition to the students mentioned in paragraph 1, these study and examination regulations apply to all students that are already enrolled in the master’s program in Energy Management.

II. Program objectives and structure

Section 3 – Learning outcomes, program content and professional fields

(1) Students in the application-oriented, continuing master's program acquire the knowledge, skills, and competencies required of a manager, taking into account technological, social, economic, ecological, cultural, political and legal aspects in the field of energy.

The degree has a firm academic basis and is at the same time practice-oriented. Students gain knowledge in engineering, business studies, economics, and legal knowledge in order to achieve a holistic view of management practice in the energy sector. Program topics include but are not limited to: the technical principles of energy generation, distribution and use; the economic, environmental and social context; the legal framework; management tasks in the areas of organization, planning, implementation and controlling; leadership; basic principles of accounting, investment planning, marketing, financing, balance sheets and innovation management; knowledge of and contact with leading companies and research institutes in the energy sector.

The competencies students acquire include but are not limited to: applying knowledge gained in the program to concrete tasks; independent use of new media and information technology; public relations; interpersonal and cross-cultural dialog and discussion skills; managing social networks; and independently applying the methods and technologies needed.

(2) Graduates of this program are able to assume responsibility as part of management roles in business, primarily in the energy sector, but also elsewhere. These include, but are not limited to: Energy utilities, energy service providers, energy-intensive companies, regulatory authorities, consumer and environmental associations, consultancies, energy technology companies, specialized investment firms, and the mobility and transport sector. Graduates will be able to evaluate investments and technologies; design and implement plans; select and steer organizational forms; anticipate, plan and shape changes; evaluate results; and determine and communicate actions and research to be performed. They will be able to accomplish these tasks independently and in teams, in networks, and in society.

* Approved by the TU Berlin Executive Board on 10 February 2019.
Section 4 – Program start, standard period of study and required coursework, language of instruction and examination language

(1) The program starts in the winter semester.

(2) The standard period of study, including completion of the master’s thesis, is three semesters. The program can be completed on a part-time basis in accordance with Section 23 of the Regulations Governing General Study and Examination Procedures AllgStuPO.

(3) The program is worth 90 credit points.

(4) The teaching curriculum and the entire examination procedure are structured and organized in such a way as to enable students to complete the program within the standard period of study.

(5) The program is organized in such a way that an optional study-related stay abroad can be completed within the standard period of study. For this purpose, mobility windows in full-time and part-time degrees are possible in the second semester or (preferably) in the third semester in accordance with Section 4, Subsection 2, Sentence 2 of AllgStuPO.

(6) The teaching and examination language in the compulsory modules and compulsory elective modules is English.

Section 5 – Program structure

(1) Students have the right to individually determine the order of progression of their own course of study. They are, however, obliged to comply with the provisions laid out in these Study and Examination Regulations. The recommended sequence in which modules should be taken is shown in the proposed course schedule in Annex 2 of these regulations. This does not affect any possible constraints resulting from subject-specific admission requirements for modules.

(2) Students must earn a total of 90 credits; 72 for taught modules and 18 for the master’s thesis.

(3) The compulsory part of the program is worth 60 credits. The modules assigned to the different fields can be found in the module catalog (Annex 1).

(4) The compulsory elective component of the program is worth 12 credit points. The modules assigned to the different fields can be found in the module catalog (Annex 1).

(5) In accordance with Section 33 (4) of the Regulations Governing General Study and Examination Procedures (AllgStuPO), the skills and knowledge to be taught in specific modules, the requirements for module examinations, and the relevant admission requirements, if any, are updated annually in the form of course-specific module catalogs and are published in the Official Gazette of TU Berlin at the beginning of the winter semester in October and the beginning of the summer semester in April.

III. Examination requirements and conduct of examinations

Section 6 – Aim of the master’s examination

The master’s examination determines whether a candidate has achieved the learning outcomes in accordance with Section 3 of these regulations.

Section 7 – The master’s degree

Students who have passed the master’s examination are awarded the academic title Master of Business Administration (MBA) by the Technische Universität Berlin through the Joint Decision-Making Committee (GKmE).

Section 8 – Scope of the master’s examination; calculation of the overall grade

(1) The master’s examination comprises the module examinations listed in the module catalog (Annex 1) and the master’s thesis according to Section 9.

(2) According to the principles stipulated in Section 47 of the Regulations Governing General Study and Examination Procedures (AllgStuPO), the overall grade is to be determined by combining the grades achieved for those examinations arising from modules taken from the module catalog that are marked both as graded and for inclusion in the overall grade together with the grade achieved for the master’s thesis.

Section 9 – The master’s thesis

(1) The master’s thesis is usually completed in the third-course semester. It equals 18 credits and a workload of 18 weeks. In the event that important grounds exist that prevent the completion of the thesis within this time frame, and these grounds lie outside of the student’s control, the examination board may grant an extension of the deadline for so long as the grounds in question continue to exist. The total maximum extension possible is 18 weeks. In the event that the combined extensions exceed the stipulated maximum period of extension, the student may withdraw from the examination.

(2) To apply for admission to the master’s thesis, students must submit evidence of having successfully completed module examinations worth at least 60 credit points to the responsible office. The examination board may grant exceptions to students who make a justified request to this effect.

(3) The topic of the master’s thesis may be rejected once, however only within the first four weeks of being issued by the responsible office.

(4) The procedures for applying for admission to and assessment of a final thesis are regulated in the current version of the Regulations Governing General Study and Examination Procedures (AllgStuPO).

(5) Persons with experience in professional practice and training can be appointed as examiners of final papers. It is generally more important that second examiners meet this criterion.

(6) The master’s thesis must be written in English. It is approximately 50 pages in length.

Section 10 – Types of assessment and examination registration

The different types of assessments and the procedure for registering for module examinations are established in the AllgStuPO as amended. In addition, the following types of assessment are possible:

a. Term paper in accordance with Section 10a.

b. Presentation in accordance with Section 10b.

Section 10a – Term paper

(1) The term paper is a written assignment through which students are expected to demonstrate their ability to work scientifically on a specific topic from the thematic area covered by the module while placing it in the module’s overall context. The written term paper can be combined with an oral component in the framework of the respective course.

(2) The examiner specifies the exact length of the term paper, the resources permitted, rules for the paper’s presentation as well as the assessment criteria and informs students accordingly at the start of the module. The term paper may exceed or be less than the number of pages set by the examiner with the consent of the examiner. The requirements for registering a term paper can be found in the Module Handbook.
(3) The examiner provides the students with a selection of topics for term papers. When assigning term paper topics, the examiner pays attention to the parity of the various topics and must ensure that students can work on and complete these topics independently, using scientific methods and within the limits of the workload foreseen in the module description.

(4) If several examiners are authorized and appointed to conduct examinations for a module in which a term paper is foreseen, students are entitled to choose from amongst all those examiners whose courses they have attended in the module. Module supervisors can appoint another examiner in agreement with the candidate if important reasons apply, in particular, if the chosen examiner has an excessive workload in conjunction with examinations.

(5) In some cases, a joint term paper can be produced by several students (group term paper). The module supervisor specifies the details.

(6) The term paper must include page numbers, a table of contents, and a list of sources and resources used. It must be submitted to the examiner in electronic form (pdf). When writing the term paper, students must apply accepted rules of referencing and of academic work, e.g. MLA, APA, Harvard, Turabian or similar guidelines. If a candidate is shown to have violated these rules, the module examination is deemed a fail.

(7) The final result of the examination is forwarded to the responsible office for information and filing. The same applies to the term paper.

(8) If the term paper is graded as “Insufficient”, it can be repeated up to two times. The student must be informed via the notice board at the latest by the end of the semester in which the term paper was submitted as to whether the term paper was graded as at least "Sufficient" (4.0).

Section 10b – Presentation

(1) The presentation is an assessment through which students are expected to demonstrate their ability to hold an academic lecture for a specified duration in front of other students on a specific question from the thematic area covered by the module while placing the specific topic in the module's overall context.

(2) The presentation takes place on a date set by the examiner during a course’s contact hours. As a rule, the actual presentation lasts 10 to 45 minutes. At the start of the course leading to the examination, the examiner informs students whether and which material is to be produced to accompany the presentation (e.g. handout, slides) and whether and in which form presenters must participate in a subsequent discussion or chair such a discussion. The total time for presentation and discussion may not exceed 90 minutes.

(3) At the start of the module, the examiner sets the presentation topics, examination dates for the module and exact scope of the presentations, permitted resources, rules for presenting the work, procedure for allocating presentation topics, and assessment criteria.

(4) When assigning presentation topics, the examiner pays attention to the parity of the various topics and must ensure that students can work on and complete these topics within the limits of the workload foreseen in the module description.

(5) Each presentation topic is bound to a specific date. Students must, therefore, hold their presentation on the date set by the examiner. The module supervisor decides on exceptions.

(6) A joint presentation can be produced by several students (group presentation). The module supervisor specifies the details.

IV. Annexes

Annex 1: Module Catalog
Annex 2: Sample Course Schedule
Annex 3: Module Descriptions
Annex 1: Module Catalog

<table>
<thead>
<tr>
<th>Module</th>
<th>Credit Points (ECTS)</th>
<th>Type of assessment</th>
<th>Graded</th>
<th>Weighting in overall grade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compulsory modules</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Technologies</td>
<td>9</td>
<td>Written (examination)</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Energy Economics</td>
<td>6</td>
<td>Written (examination)</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Energy Business</td>
<td>9</td>
<td>Portfolio</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Legal Aspects in the Energy Sector</td>
<td>6</td>
<td>Written (term paper)</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Management in the Energy Sector</td>
<td>12</td>
<td>Portfolio</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Investments in Energy</td>
<td>6</td>
<td>Written (examination)</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Energy Grids</td>
<td>6</td>
<td>Written (examination)</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Regulation of the Energy Sector</td>
<td>6</td>
<td>Portfolio</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td><strong>Compulsory elective modules</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialist management: Efficiency Management A</td>
<td>6</td>
<td>Portfolio</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Specialist management: Innovation Management A</td>
<td>6</td>
<td>Portfolio</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Specialist management: Efficiency Management B</td>
<td>6</td>
<td>Portfolio</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Specialist management: Innovation Management A</td>
<td>6</td>
<td>Portfolio</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td><strong>Master’s thesis</strong></td>
<td>18</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 The module descriptions are published annually in the Official Gazette of TU Berlin at the beginning of the winter semester in October and at the beginning of the summer semester in April. The version published therein is then valid. (See Section 33 (4) of the Regulations Governing Study and Examination Procedures (AllgStuPO)).

2 Specification “1” means that the grade will be weighted according to the number of credits (Section 47 (6) of the Regulations Governing General Study and Examination Procedures – AllgStuPO); “-” means the grade is not weighted; every further figure is a multiplication factor of the number of credits.
Annex 2: Sample Course Schedule

<table>
<thead>
<tr>
<th>1st SEMESTER</th>
<th>2nd SEMESTER</th>
<th>3rd SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Management</td>
<td>Elective 1</td>
</tr>
<tr>
<td>9 ECTS</td>
<td>12 ECTS</td>
<td>6 ECTS</td>
</tr>
<tr>
<td>Economics</td>
<td>Investment</td>
<td>Elective 2</td>
</tr>
<tr>
<td>6 ECTS</td>
<td>6 ECTS</td>
<td>6 ECTS</td>
</tr>
<tr>
<td>Business</td>
<td>Energy Grids</td>
<td>Master thesis</td>
</tr>
<tr>
<td>9 ECTS</td>
<td>6 ECTS</td>
<td>18 ECTS</td>
</tr>
<tr>
<td>Law</td>
<td>Regulations</td>
<td></td>
</tr>
<tr>
<td>6 ECTS</td>
<td>6 ECTS</td>
<td></td>
</tr>
</tbody>
</table>

ECTS TOTAL: 30 ECTS  
ECTS TOTAL: 30 ECTS  
ECTS TOTAL: 30 ECTS

Practical Application
Annex 3: Module Descriptions

<table>
<thead>
<tr>
<th>Module title:</th>
<th>Credit Points (ECTS):</th>
<th>Short title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological Fundamentals</td>
<td>9</td>
<td>Technology (EM)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module supervisor:</th>
<th>Office:</th>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Dr.-Ing. Joachim MÜLLER-KIRCHENBAUER</td>
<td>Sandra Lubahn</td>
<td><a href="mailto:Sandra.lubahn@campus.tu-berlin.de">Sandra.lubahn@campus.tu-berlin.de</a></td>
</tr>
</tbody>
</table>

**Module description**

1. **Module aims**

In this module, students review and gain more in-depth general technical knowledge and knowledge of energy technologies and systems in the context of current developments taking into account social responsibility and sustainable development. The module also covers the most important technological insights, and the technological foundations of the subsequent modules are explained.

Students will be able to define and evaluate various procedures and apply them to selected cases in the energy sector.

The module primarily develops the following competencies (in %):

- Subject-specific competence [60]
- Methodological competence [10]
- Systems competence [20]
- Social competence [10]

2. **Content**

Principles of physics (basic units of physics, mechanics, thermodynamics, electromagnetism, optics), principles of energy technology, principles of chemistry (fuels, combustion, batteries, fuel cells), principles of electrical engineering (electrical energy technology), principles of mechanical engineering (combustion engines, turbines, pumps and compressors), principles of process engineering, biomass, fossil fuels, renewable energy sources, geothermal energy, hydropower, wind power, solar thermal energy, photovoltaics, power grids, switchover processes, Carnot cycle & method, storage and transport technology, building technology, and specific content from the field of building management.

3. **Module components**

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits:</th>
<th>Compulsory (C) / Elective (E)</th>
<th>Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology I</td>
<td>IV</td>
<td>1.6</td>
<td></td>
<td>C</td>
<td></td>
<td>Winter semester</td>
</tr>
<tr>
<td>Technology II</td>
<td>IV</td>
<td>1.6</td>
<td>9</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology Tutorial</td>
<td>Tut</td>
<td>1.6</td>
<td></td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>1.6</td>
<td></td>
<td>C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **Description of course types**

Integrated courses (IV) in the form of seminar-style lectures, e-learning course, tutorial and excursions

5. **Participation requirements**

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin (1st-course semester)
6. Module can be taken in following programs

Continuing education master's in Energy Management (MBA) at TU Berlin

7. Workload and credits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 hours per week of seminar-style lectures (in person)</td>
<td>48 h</td>
</tr>
<tr>
<td>1.6 hours per week of tutorials (in person)</td>
<td>24 h</td>
</tr>
<tr>
<td>1.6 hours per week of case studies and accompanying program</td>
<td>24 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>128 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>46 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **270 hours** per semester, which is equivalent to **9 credits**.

8. Module completion

Graded

Type of assessment: written exam
- There will be one assessed test (written; duration 120 mins) at the end of the module.
- Students who fail the exam may repeat it at the beginning of the following semester.

9. Module duration

The module can be completed in **one** semester.

10. Number of participants

Technology I: Maximum number of participants: 90
Technology II: Maximum number of participants: 30

11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

12. Reading list and lecture notes

Lecture notes available in hard copy: No
Lecture notes available in electronic format: Yes
On the Moodle platform for the program:
https://www.isis.tu-berlin.de/2.0/

Reading list:
The reading list is provided in the e-learning course on Moodle.
### Module title:
Economics Fundamentals  

### Credit Points (ECTS):
6  

### Short title:
Economics (EM)  

### Module supervisor:
Prof. Dr. Georg Erdmann  

### Office:
Sandra Lubahn  

### Email:
Sandra.lubahn@campus.tu-berlin.de  

### Module description

#### 1. Module aims
This module is an introduction to economics. It covers the most important principles of economics taking into account social responsibility and sustainable development. The module engages with the latest research and encourages a critical and reflective approach in providing a foundation in economics for subsequent modules. Students are able to identify specialized knowledge and aspects of economics and compare general and selected cases from the energy sector.

The module primarily develops the following competencies:  

#### 2. Content
Concepts in microeconomics (microeconomic analysis and market interaction of businesses, households and governmental organizations), aggregated demand, factors in production decisions, supply and demand, markets (competitive market, monopoly market, functioning markets, market failure, market regulation, price regulation, energy and commodity markets), taxation, principles of investment decisions, societal welfare, merit order effect, sustainability, commodities sector, energy industry and public utilities.

Principles of macroeconomics, capitalism as an economic system (private property, companies, markets), technological change & economic growth, competitive markets, banks, fiscal and monetary policy, unemployment, inflation, and the global economic crisis.

Application of economic theories and methods with links to energy management.

#### 3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits:</th>
<th>Compulsory (C) / Elective (E) Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics I</td>
<td>IV</td>
<td>1.6</td>
<td>6</td>
<td>C</td>
<td>Winter semester</td>
</tr>
<tr>
<td>Economics II</td>
<td>IV</td>
<td>0.5</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Economics Tutorial</td>
<td>Tut</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 4. Description of course types
Integrated courses (IV) with lectures, exercises, tutorials, e-learning course and accompanying program.

#### 5. Participation requirements
Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin (1st-course semester)
6. Module can be taken in following programs

Continuing education master's in Energy Management (MBA) at TU Berlin.

7. Workload and credits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 hours per week of seminar-style lectures (in person)</td>
<td>32 h</td>
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<tr>
<td>1.1 hours per week of tutorials (in person)</td>
<td>16 h</td>
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<tr>
<td>1.1 hours per week of case studies and accompanying program</td>
<td>16 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>98 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>18 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **180 hours** per semester, which is equivalent to **6 credits**.

8. Module completion

Graded

Type of assessment: written exam

There will be one assessed test (written; duration 90 min) at the end of the module. Students who fail the exam may repeat it at the beginning of the following semester.

9. Module duration

The module can be completed in **one** semester.

10. Number of participants

Economics I: Maximum number of participants: 90
Economics II: Maximum number of participants: 30

11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

12. Reading list and lecture notes

Lecture notes available in hard copy: No
Lecture notes available in electronic format: Yes

If yes, provide link: On the Moodle platform for the program: [https://www.isis.tu-berlin.de/2.0/](https://www.isis.tu-berlin.de/2.0/)

The reading list is provided in the e-learning course on Moodle.
Module title: **Business Fundamentals**  
Credit Points (ECTS): **9**  
Short title: **Business (EM)**

**Module supervisor:**  
Prof. Dr. Dodo zu Knyphausen-Aufseß  
**Office:** Sandra Lubahn  
**Email:** Sandra.lubahn@campus.tu-berlin.de

### Module description

#### 1. Module aims

This module is an introduction to business studies. It covers the most important principles of business studies taking into account social responsibility and sustainable development. The module engages with the latest research and encourages a critical and reflective approach in providing a foundation in business studies for subsequent modules.

Students will be able to define the main features of business studies, apply problem-solving skills to case studies using different fields of knowledge and present options for optimizing the energy sector.

The module primarily develops the following competencies (in %):  

#### 2. Content

Evaluation of companies, corporate accounting (balance sheets, financial reporting, financial control), taxes, depreciation, basic principles of strategy development, production management, business ethics, investment & financing (corporate finance), liquidity, marketing & sales (consumer behavior, SWOT, Ansoff matrix, BCG matrix, demand analysis, advertising, etc.), organizational behavior (HR management, leadership), sustainability and links to the energy sector and energy management.

#### 3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits:</th>
<th>Compulsory (C) / Elective (E) Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business I</td>
<td>IV</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business II</td>
<td>IV</td>
<td>1.6</td>
<td>9</td>
<td>C</td>
<td>Winter semester</td>
</tr>
<tr>
<td>Business Tutorial</td>
<td>Tut</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 4. Description of course types

Integrated courses (IV) in the form of seminar-style lectures, e-learning course, tutorial, exercise and accompanying program

#### 5. Participation requirements

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin (1st-course semester)

#### 6. Module can be taken in following programs

Continuing education master’s in Energy Management (MBA).
7. Workload and credits

<table>
<thead>
<tr>
<th>Task</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 hours per week of seminar-style lectures (in person)</td>
<td>48 h</td>
</tr>
<tr>
<td>1.6 hours per week of tutorials (in person)</td>
<td>24 h</td>
</tr>
<tr>
<td>0.8 hours per week of case studies and accompanying program</td>
<td>12 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>156 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>30 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **270 hours** per semester, which is equivalent to 9 credits.

8. Module completion

**Type of assessment:** Ungraded portfolio

Students who do not pass may repeat at the beginning of the following semester by taking a graded written exam (duration: 120 minutes).

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Output evaluation) Written Test (duration: 60 minutes)</td>
<td>20</td>
</tr>
<tr>
<td>(Output evaluation) Business simulation - Presentation</td>
<td>40</td>
</tr>
<tr>
<td>(Output evaluation) Business simulation - Term paper</td>
<td>40</td>
</tr>
</tbody>
</table>

9. Module duration

The module can be completed in **one** semester.

10. Number of participants

Business I: Maximum number of participants: 90
Business II: Maximum number of participants: 30

11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

12. Reading list and lecture notes

Lecture notes available in hard copy: No
Lecture notes available in electronic format: Yes
If yes, provide link: On the Moodle platform for the program:
https://www.isis.tu-berlin.de/2.0/
The reading list is provided in the e-learning course on Moodle.
Module title: Legal Fundamentals  
Credit Points (ECTS): 6  
Short title: Energy Law (EM)

Module supervisor: Prof. Dr. Jochen Mohr  
Office: Sandra Lubahn  
Email: Sandra.lubahn@campus.tu-berlin.de

Module description

1. Module aims

This module is an introduction to legal principles and the legal framework for modern energy market at the international, European and national level. Students will be able to use their own initiative to combine legal knowledge and skills in solving complex problems, evaluate cases independently and analyze and summarize legal situations. The module primarily develops the following competencies (in %): Subject-specific competence [60] Methodological competence [20] Systems competence [10] Social competence [10]

2. Content

Principles of civil law, private and commercial law, energy law, energy trading and international contracts; competition law, the EU legal system, and the third energy package; Germany's energy transformation and the German Renewable Energy Sources Act (EEG); EU secondary law vs. regional developments, renewable energy sources.

3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits</th>
<th>Compulsory (C) / Elective (E) Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law I</td>
<td>IV</td>
<td>0.5</td>
<td></td>
<td></td>
<td>Winter semester</td>
</tr>
<tr>
<td>Law II</td>
<td>IV</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law Tutorial</td>
<td>Tut</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Description of course types

Integrated courses (IV) in the form of seminar-style lectures, e-learning course, and tutorial

5. Participation requirements

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin (1st-course semester)

6. Module can be taken in following programs

Continuing education master's in Energy Management (MBA) at TU Berlin.
## 7. Workload and credits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 hours per week of integrated courses (in person)</td>
<td>32 h</td>
</tr>
<tr>
<td>0.8 hours per week of tutorials (in person)</td>
<td>12 h</td>
</tr>
<tr>
<td>0.5 hours per week of case studies and accompanying program</td>
<td>8 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>48 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>80 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **180 hours** per semester, which is equivalent to **6 credits**.

## 8. Module completion

Graded

Type of assessment: written exam
- One term paper (written, 10 pages, 10 days) will be set at the end of the module.
- Students who fail the exam may repeat it at the beginning of the following semester.

## 9. Module duration

The module can be completed in **one** semester.

## 10. Number of participants

Law I: Maximum number of participants: 90
Law II: Maximum number of participants: 30

## 11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

## 12. Reading list and lecture notes

Lecture notes available in hard copy: No
Lecture notes available in electronic format: Yes
If yes, provide link: On the Moodle platform for the program: https://www.isis.tu-berlin.de/2.0/
The reading list is provided in the e-learning course on Moodle.
### Module description

#### 1. Module aims

Students are able to independently identify, analyze and design strategic approaches taking into account the consequences of environmental changes for planning, management and controlling. They do this by incorporating interdependent technological, economic, business and legal processes in companies and organizations and taking into account social responsibility and sustainable development.

Students will be able to define the main features of energy management, apply problem-solving skills to case studies using different fields of knowledge, and present options for optimizing the energy sector.

The module primarily develops the following competencies (in %):
- Subject-specific competence [20]
- Methodological competence [20]
- Systems competence [30]
- Social competence [30]

#### 2. Content

Business models & plans, small group communication, leadership, environmental communication, corporate social responsibility (CSR), conflict management, change management, risk management; operational excellence, system services and energy services, Germany's energy transformation, management of reactive power, energy storage and transformation, links to the energy sector and energy management.

#### 3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits</th>
<th>Compulsory (C) / Elective (E) Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management I</td>
<td>IV</td>
<td>2.15</td>
<td></td>
<td>C</td>
<td>Summer semester</td>
</tr>
<tr>
<td>Management II</td>
<td>IV</td>
<td>2.15</td>
<td></td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Business Communication</td>
<td>IV &amp; Tut</td>
<td>2.1</td>
<td>12</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Case studies and accompanying</td>
<td>IV</td>
<td>2</td>
<td></td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 4. Description of course types

Integrated courses (IV) in the form of seminar-style lectures, e-learning course, and tutorial

#### 5. Participation requirements

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin (2nd-course semester)

#### 6. Module can be taken in following programs

Continuing education master's in Energy Management (MBA) at TU Berlin.
### 7. Workload and credits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3 hours per week of seminar-style lectures (in person)</td>
<td>64 h</td>
</tr>
<tr>
<td>2.1 hours per week of tutorials (in person)</td>
<td>32 h</td>
</tr>
<tr>
<td>2 hours per week of case studies and accompanying program</td>
<td>30 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>164 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>70 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **360 hours** per semester, which is equivalent to **12 credits**.

### 8. Module completion

**Graded**

Type of assessment: Portfolio

Students who do not pass may repeat at the beginning of the following semester by taking a graded written exam (duration: 120 minutes).

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Output evaluation) Business plan (term paper)</td>
<td>40</td>
</tr>
<tr>
<td>(Learning process evaluation) Oral presentation</td>
<td>20</td>
</tr>
<tr>
<td>(Output evaluation) Written test</td>
<td>40</td>
</tr>
</tbody>
</table>

### 9. Module duration

The module can be completed in **one** semester.

### 10. Number of participants

Management I: Maximum number of participants: 90  
Management II: Maximum number of participants: 30

### 11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

### 12. Reading list and lecture notes

Lecture notes available in hard copy: No  
Lecture notes available in electronic format: Yes  
If yes, provide link: On the Moodle platform for the program:  
https://www.isis.tu-berlin.de/2.0/  
The reading list is provided in the e-learning course on Moodle.
Module description

1. Module aims

This module looks at aspects of investment decisions in the context of long-term energy infrastructure (networks, storage facilities, and power plants) from a decision-maker's perspective. Students will be proficient in the basic methods of investment calculations and common financial instruments and forms of financing. They will apply problem-solving skills in a critical and reflective manner to investment decisions and identify strategic approaches to solving complex problems. The knowledge they acquire will enable them to assess the pros and cons of various financial instruments in the context of investment projects and to use these to their advantage in making decisions. They will also be able to plan infrastructure projects and analyze risks.

The module primarily develops the following competencies (in %):

2. Content

Investments in energy infrastructure (networks, storage facilities and power plants); determining capital costs, capital structure decisions, investment calculations, risk assessment and management; behavioral economics, financial instruments and forms of financing; and principles of safeguarding liquidity, cost of capital rate, capital structure decisions, special purpose vehicles, portfolio management, asset management

3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits</th>
<th>Compulsory (C) / Elective (E) Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments I</td>
<td>IV</td>
<td>2.1</td>
<td>6</td>
<td>C</td>
<td>Summer semester</td>
</tr>
<tr>
<td>EM – Investments</td>
<td>Tut</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Description of course types

Integrated courses (IV) often in the form of seminar-style lectures, e-learning course, and tutorial.

5. Participation requirements

Enrolled in the continuing education master's in Energy Management at TU Berlin (2nd-course semester)

6. Module can be taken in following programs

Continuing education master's in Energy Management (MBA) at TU Berlin.
7. Workload and credits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 hours per week of seminar-style lectures (in person)</td>
<td>32h</td>
</tr>
<tr>
<td>1.1 hours per week of tutorials (in person)</td>
<td>16h</td>
</tr>
<tr>
<td>1 hour per week of case studies and accompanying program</td>
<td>15h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>87h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>30h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **180 hours** per semester, which is equivalent to **6 credits**

8. Module completion

Graded
Type of assessment: written exam
- There is one examination (written, duration: 90 minutes) at the end of the module.
- Students who fail the exam may repeat it at the beginning of the following semester.

9. Module duration

The module can be completed in **one** semester. It comprises approx. 5 weeks.

10. Number of participants

Maximum number of participants: **30**

11. Registration formalities

Students can register for the eLearning course, the tutorial and the examination via TUBS.

12. Reading list and lecture notes

Lecture notes available in hard copy: No
Lecture notes available in electronic format: Yes
If yes, provide link: On the Moodle platform for the program: https://www.isis.tu-berlin.de/2.0/
The reading list is provided in the e-learning course on Moodle.
Module title: Energy Grids
Credit Points (ECTS): 6
Short title: Energy Grids (EM)

Module supervisor: Prof. Dr. Kai Strunz
Office: Sandra Lubahn
Email: Sandra.lubahn@campus.tu-berlin.de

Module description

1. Module aims

This module deals with the technical and organizational challenges of network management in the context of environmental changes. It looks at transformation processes between different forms and sources of energy and considers novel technological developments.

Students will be able to identify highly specialized knowledge about energy networks, partly based on the latest technical developments and findings. They will also be able to critically evaluate fundamental problems of network management and to present options for the optimization of network management.

The module primarily develops the following competencies (in %):

2. Content

Network management, liquid fuels and pipelines vs. power transmission, convergence, substitution and interoperability, redundancy principle, power-to-gas, power-to-heat, mobility-to-grid, combined heat and power (CHP), virtual power plants, demand response, smart meters, contracts, RES integration; network management technologies, prosumers, IT and network conversion, next-generation networks and micro smart grids.

3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits</th>
<th>Compulsory (C) / Elective (E) Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Grids I</td>
<td>IV</td>
<td>2.1</td>
<td>6</td>
<td>C</td>
<td>Summer semester</td>
</tr>
<tr>
<td>EM – Energy Grids</td>
<td>Tut</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Description of course types

Integrated courses (IV) often in the form of seminar-style lectures, e-learning course, and tutorial.

5. Participation requirements

Enrolled in the continuing education master's in Energy Management at TU Berlin (2nd-course semester)

6. Module can be taken in following programs

Continuing education master's in Energy Management at TU-Campus EUREF (TU Berlin)
### 7. Workload and credits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 hours per week of seminar-style lectures (in person)</td>
<td>32 h</td>
</tr>
<tr>
<td>1.1 hours per week of tutorials (in person)</td>
<td>16 h</td>
</tr>
<tr>
<td>1 hour per week of case studies and accompanying program</td>
<td>15 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>87 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>30 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **180 hours** per semester, which is equivalent to **6 credits**.

### 8. Module completion

Graded

Type of assessment: written exam
- There is one graded examination (written, duration: 2 h) at the end of the module.
- Students who fail the exam may repeat it at the beginning of the following semester.

### 9. Module duration

The module can be completed in **one** semester. It comprises approx. 5 weeks.

### 10. Number of participants

Maximum number of participants: 30

### 11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

### 12. Reading list and lecture notes

Lecture notes available in hard copy: No
Lecture notes available in electronic format: Yes
If yes, provide link: On the Moodle platform for the program: [https://www.isis.tu-berlin.de/2.0/](https://www.isis.tu-berlin.de/2.0/)
The reading list is provided in the e-learning course on Moodle.
<table>
<thead>
<tr>
<th>Module title:</th>
<th>Credit Points (ECTS):</th>
<th>Short title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory elective: Efficiency Management A</td>
<td>6</td>
<td>Efficiency A (EM)</td>
</tr>
</tbody>
</table>

**Module supervisor:**
Prof. Dr.-Ing. Joachim Müller-Kirchenbauer

**Office:** Sandra Lubahn

**Email:** Sandra.lubahn@campus.tu-berlin.de

**Module description**

1. **Module aims**

The students will be able to define, evaluate and analyze technical projects and structures such as buildings, factories, and urban districts. They do this by integrating the technological, economic, business and legal operations in companies and organizations and by taking social responsibility and sustainable development into account.

The module primarily develops the following competencies (in %):

2. **Content**

Buildings and energy efficiency; greenhouse gas emissions, demand-side management, combined heat and power generation, process chain management, energy efficiency technologies, amortization processes, local heating, and cooling networks, project management, ISO standards and, depending on the focus of studies, links to the energy, building or transport sector.

3. **Module components**

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits</th>
<th>Compulsory (C) / Elective (E) Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency Management A</td>
<td>IV</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EM – Efficiency Management A</td>
<td>e-learning</td>
<td>1</td>
<td>6</td>
<td>CE</td>
<td>Summer semester</td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **Description of course types**

Integrated courses (IV) in the form of seminar-style lectures, e-learning course, and tutorial

5. **Participation requirements**

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin (2nd-course semester)

6. **Module can be taken in following programs**

Continuing education master's in Energy Management (MBA) at TU Berlin.
7. Workload and credits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 hours per week of seminar-style lectures (in person)</td>
<td>32 h</td>
</tr>
<tr>
<td>1 hour per week of e-learning</td>
<td>16 h</td>
</tr>
<tr>
<td>1 hour per week of case studies and accompanying program</td>
<td>15 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>99.5 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>17.5 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **180 hours** per semester, which is equivalent to **6 credits**.

8. Module completion

Graded: no  
Type of assessment: Portfolio  
Students who do not pass may repeat at the end of the current semester by taking a graded written exam (2 h).

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Evaluation of learning process) Project - Contribution to discussion</td>
<td>25</td>
</tr>
<tr>
<td>(Evaluation of output) Oral presentation</td>
<td>50</td>
</tr>
<tr>
<td>(Evaluation of output) Presentation materials / written composition</td>
<td>25</td>
</tr>
</tbody>
</table>

9. Module duration

The module can be completed in **one** semester.

10. Number of participants

Maximum number of participants: 40

11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

12. Reading list and lecture notes

Lecture notes available in hard copy: No  
Lecture notes available in electronic format: Yes  
If yes, provide link: On the Moodle platform for the program: https://www.isis.tu-berlin.de/2.0/  
The reading list is provided in the e-learning course on Moodle.
Module title: Regulation
Credit Points (ECTS): 6
Short title: Regulation (EM)

Module supervisor: Prof. Dr.-Ing. Joachim Müller-Kirchenbauer
Office: Sandra Lubahn
Email: Sandra.lubahn@campus.tu-berlin.de

Module description

1. Module aims

Students will be able to critically reflect on the current theory and practice of regulation in Germany and Europe in both the electricity and gas sectors, to assess the significance and effects of regulation on the energy system on the one hand and on companies on the other, and to present options for optimizing regulation management.

The module primarily develops the following competencies:
- Subject-specific competence [40]
- Methodological competence [20]
- Systems competence [20]
- Social competence [20]

2. Content

Regulation and how it is formed, impact of electricity and gas regulations on energy and natural resource companies, unbundling, network access, tariff regulation, capacity markets, and energy markets

3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits</th>
<th>Compulsory (C) / Elective (E) Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation Management I</td>
<td>IV*</td>
<td>2.1</td>
<td>6</td>
<td>C</td>
<td>Winter semester</td>
</tr>
<tr>
<td>EM – Regulation</td>
<td>Tut</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Description of course types

IV* = Integrated course
Lectures and exercises on individual topics will be grouped in blocks so that there will be plenty of opportunities for in-depth study.
Overall, the first phase will serve to build up the theoretical basis before it is applied to practice.

5. Participation requirements

Enrolled in the continuing education master's in Energy Management at TU Berlin (2nd-course semester)

6. Module can be taken in following programs

Continuing education master's in Energy Management at TU-Campus EUREF (TU Berlin)
7. Workload and credits

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 hours per week of seminar-style lectures (in person)</td>
<td>32 h</td>
</tr>
<tr>
<td>1.1 hours per week of tutorials (in person)</td>
<td>16 h</td>
</tr>
<tr>
<td>1 hour per week of case studies and accompanying program</td>
<td>15 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>87 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>30 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **180 hours** per semester, which is equivalent to **6 credits**.

8. Module completion

Type of assessment: Graded, portfolio

Students who do not pass may repeat at the end of the current semester by taking a graded written exam (2 h).

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Learning process evaluation) Oral discussion</td>
<td>20</td>
</tr>
<tr>
<td>(Output evaluation) Oral presentation</td>
<td>60</td>
</tr>
<tr>
<td>(Output evaluation) Presentation materials / written composition (term paper)</td>
<td>20</td>
</tr>
</tbody>
</table>

9. Module duration

This module takes place during the second and third semesters.

10. Number of participants

Maximum number of participants: 30

11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

12. Reading list and lecture notes

Lecture notes available in hard copy: No
Lecture notes available in electronic format: Yes
If yes, provide link: On the Moodle platform for the program: https://www.isis.tu-berlin.de/2.0/
The reading list is provided in the e-learning course on Moodle.
Module title: Compulsory elective: Innovation Management A
Credit Points (ECTS): 6
Short title: Innovation Management A (EM)

Module supervisor:
Dr. Maren Borkert
Office: Sandra Lubahn
Email: Sandra.lubahn@campus.tu-berlin.de

Module description

1. Module aims

The students will be able to define, evaluate and analyze innovations, team building and management processes, and administrative, financial and theoretical topics with special practical relevance. They will develop innovative business models in the energy sector. These models will incorporate interdependent technological, economic, business and legal processes in companies and organizations and will take into account social responsibility and sustainable development.

The module primarily develops the following competencies:

2. Content

Innovation management, technologically, economically and socially sustainable implementation of innovations, team building, and team management, innovation evaluation, systematic modeling; agile methods, software, synergy, innovation paths, venture teams, temporary task forces, restrictive vs. enabling monitoring; inter-organizational teams.

3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits</th>
<th>Compulsory (C) / Elective (E)</th>
<th>Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation Management A</td>
<td>IV</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EM – Innovation Management A</td>
<td>e-learning</td>
<td>1</td>
<td>6</td>
<td>CE</td>
<td></td>
<td>Summer semester</td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Description of course types

Integrated course (IV) with e-learning components

5. Participation requirements

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin (2nd-course semester)

6. Module can be taken in following programs

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin
### 7. Workload and credits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 hours per week of seminar-style lectures (in person)</td>
<td>32 h</td>
</tr>
<tr>
<td>1 hour per week of e-learning</td>
<td>16 h</td>
</tr>
<tr>
<td>1 hour per week of case studies and accompanying program</td>
<td>15 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>99.5 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>17.5 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **180 hours** per semester, which is equivalent to **6 credits**.

### 8. Module completion

Graded: no  
Type of assessment: Portfolio  
Students who do not pass may repeat at the end of the current semester by taking a graded written exam (2 h).

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Evaluation of learning process) Project - Contribution to discussion</td>
<td>25</td>
</tr>
<tr>
<td>(Evaluation of output) Oral presentation</td>
<td>50</td>
</tr>
<tr>
<td>(Evaluation of output) Presentation materials / written composition (term paper)</td>
<td>25</td>
</tr>
</tbody>
</table>

### 9. Module duration

This module takes place during the second and third semesters.

### 10. Number of participants

Maximum number of participants: 40

### 11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

### 12. Reading list and lecture notes

Lecture notes available in hard copy: No  
Lecture notes available in electronic format: Yes  
If yes, provide link: On the Moodle platform for the program: https://www.isis.tu-berlin.de/2.0/  
The reading list is provided in the e-learning course on Moodle.
### Module title:
Compulsory elective: Efficiency Management B

### Credit Points (ECTS):
6

### Short title:
Efficiency Management B (EM)

### Module supervisor:
Prof. Dr.-Ing. Joachim Müller-Kirchenbauer

### Office:
Sandra Lubahn

### Email:
Sandra.lubahn@campus.tu-berlin.de

### Module description

#### 1. Module aims

The students will be able to define, evaluate and analyze technical projects and structures such as buildings, factories, and urban districts. They do this by integrating the technological, economic, business and legal operations in companies and organizations and by taking social responsibility and sustainable development into account.

The module primarily develops the following competencies (in %):
- Subject-specific competence [20]
- Methodological competence [20]
- Systems competence [30]
- Social competence [30]

#### 2. Content

Buildings and energy efficiency; greenhouse gas emissions, demand-side management, combined heat and power generation, process chain management, energy efficiency technologies, amortization processes, local heating, and cooling networks, project management, ISO standards and, depending on the focus of studies, links to the energy, building or transport sector.

#### 3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits</th>
<th>Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency Management B</td>
<td>IV</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EM – Efficiency Management B</td>
<td>e-learning</td>
<td>1</td>
<td>6</td>
<td>CE</td>
<td>Winter semester</td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 4. Description of course types

Integrated courses (IV) in the form of seminar-style lectures, e-learning course, and tutorial

#### 5. Participation requirements

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin (3rd-course semester)

#### 6. Module can be taken in following programs

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin
7. Workload and credits

<table>
<thead>
<tr>
<th>Task</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 hours per week of seminar-style lectures (in person)</td>
<td>32 h</td>
</tr>
<tr>
<td>1 hour per week of e-learning</td>
<td>16 h</td>
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<tr>
<td>1 hour per week of case studies and accompanying program</td>
<td>15 h</td>
</tr>
<tr>
<td>Preparation and follow-up incl. e-learning</td>
<td>99.5 h</td>
</tr>
<tr>
<td>Examination and exam preparation</td>
<td>17.5 h</td>
</tr>
</tbody>
</table>

This amounts to a workload of **180 hours** per semester, which is equivalent to **6 credits**.

8. Module completion

Graded: no
Type of assessment: Portfolio
Students who do not pass may repeat at the end of the current semester by taking a graded written exam (2 h).

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Learning process evaluation) Project - Contribution to discussion</td>
<td>25</td>
</tr>
<tr>
<td>(Output evaluation) Oral presentation</td>
<td>50</td>
</tr>
<tr>
<td>(Output evaluation) Presentation materials / written composition (term paper)</td>
<td>25</td>
</tr>
</tbody>
</table>

9. Module duration

The module can be completed in **one** semester.

10. Number of participants

Maximum number of participants: 40

11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

12. Reading list and lecture notes

Lecture notes available in hard copy: No
Lecture notes available in electronic format: Yes
If yes, provide link: On the Moodle platform for the program: [https://www.isis.tu-berlin.de/2.0/](https://www.isis.tu-berlin.de/2.0/)
The reading list is provided in the e-learning course on Moodle.
Module title: Compulsory elective: Innovation Management B
Credit Points (ECTS): 6
Short title: Innovation Management B (EM)

Module supervisor: Dr. Maren Borkert
Office: Sandra Lubahn
Email: Sandra.lubahn@campus.tu-berlin.de

Module description

1. Module aims

The students will be able to define, evaluate and analyze innovations, team building and management processes, and administrative, financial and theoretical topics with special practical relevance. They will develop innovative business models in the energy sector. These models will incorporate interdependent technological, economic, business and legal processes in companies and organizations and will take into account social responsibility and sustainable development.

The module primarily develops the following competencies:

2. Content

Innovation management, technologically, economically and socially sustainable implementation of innovations, team building, and team management, innovation evaluation, systematic modeling; agile methods, software, synergy, innovation paths, venture teams, temporary task forces, restrictive vs. enabling monitoring; inter-organizational teams.

3. Module components

<table>
<thead>
<tr>
<th>Course title</th>
<th>Course type</th>
<th>Course hours per week</th>
<th>ECTS credits</th>
<th>Compulsory elective (CE)</th>
<th>Semester (WS/SS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation Management B</td>
<td>IV</td>
<td>2</td>
<td></td>
<td></td>
<td>Winter semester</td>
</tr>
<tr>
<td>EM – Innovation Management B</td>
<td>e-learning</td>
<td>1</td>
<td></td>
<td>CE</td>
<td></td>
</tr>
<tr>
<td>Case studies and accompanying program</td>
<td>IV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Description of course types

Integrated courses (IV) with e-learning components

5. Participation requirements

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin (2nd and 3rd-course semester)

6. Module can be taken in following programs

Enrolled in the continuing education master's in Energy Management (MBA) at TU Berlin
7. Workload and credits

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<tr>
<th>Activity</th>
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This amounts to a workload of **180 hours** per semester, which is equivalent to **6 credits**.

8. Module completion

Graded: no  
Type of assessment: Portfolio  
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<tr>
<th>Task</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>(Learning process evaluation) Project - Contribution to discussion</td>
<td>25</td>
</tr>
<tr>
<td>(Output evaluation) Oral presentation</td>
<td>50</td>
</tr>
<tr>
<td>(Output evaluation) Presentation materials / written composition (term paper)</td>
<td>25</td>
</tr>
</tbody>
</table>

9. Module duration

This module takes place during the second and third semesters.

10. Number of participants

Maximum number of participants: 40

11. Registration formalities

Students can register for the e-learning course, the tutorial and the examination via TUBS.

12. Reading list and lecture notes

Lecture notes available in hard copy: No  
Lecture notes available in electronic format: Yes  
If yes, provide link: On the Moodle platform for the program: https://www.isis.tu-berlin.de/2.0/  
The reading list is provided in the e-learning course on Moodle.
Application and Admission Regulations for the International Continuing Education Master's Program in Energy Management (MBA) at TU-Campus EUREF of Technische Universität Berlin

of 23 October 2018

On 23 October 2018, the Joint Decision-Making Committee of TU-Campus EUREF of Technische Universität Berlin adopted the following Application and Admission Regulations for the continuing education master's program in Energy Management (MBA) in accordance with Section 43 (3) no. 3 of the Constitution of Technische Universität Berlin and Section 10 (5) of the Berlin State Higher Education Act (Berliner Hochschulgesetz – BerlHG) in the version of 26 July 2011 (Berlin Gazette of Laws and Ordinances [GVBl.], p. 378), last amended by Article 6 of the same Act of 2 February 2018 (Berlin Gazette of Laws and Ordinances, p. 160), in conjunction with Section 10 of the Act on the Admission to Higher Education Institutions in the State of Berlin to Degree Programs with Restricted Admission (Berliner Hochschulzulassungsgesetz – BerlHZG) in the version of 18 June 2005 (Berlin Gazette of Laws and Ordinances, p. 393), last amended by Article 1 of the same Act of 26 June 2013 (Berlin Gazette of Laws and Ordinances, p. 198).

Overview of Content

I. General regulations

Section 1 – Scope of application
Section 2 – Entry into force/expiration

II. Application

Section 3 – Application requirements
Section 4 – Procedure

III. Admission

Section 5 – Restriction of the number of eligible candidates
Section 6 – Ranking criteria
Section 7 – Procedure
Section 8 – Capacity and application deadline

I. General regulations

Section 1 – Scope of application

These Application and Admission Regulations – in conjunction with the Regulations Governing General Study and Examination Procedures (AllgStuPO) and the Statutes of Technische Universität Berlin Governing University Selection Procedures (AuswahlSa), as amended from time to time – govern the application, admission and selection modalities for the consecutive master’s program in Energy Management (MBA). The provisions of the AllgStuPO and AuswahlSa shall take precedence over the provisions of these Application and Admission Regulation, unless exceptions are expressly permitted therein.

Section 2 – Entry into force/expiration

(1) These application and admission regulations shall enter into force on the day after their publication official in the Official Gazette of Technische Universität Berlin. They shall be applied for the first time to the procedures of the 2019/2020 winter semester.

(2) The application and admission regulations of January 23, 2015 (AMBl. 15/2015, p. 117) in the amended version of October 31, 2016 (AMBl. 12/2017, p. 211) will no longer apply once the present regulations take effect.

II. Application

Section 3 – Application requirements

The entry requirements are

1. a bachelor’s or equivalent university degree and
2. suitable practical professional experience of generally no less than one year following the degree

Section 4 – Procedure

The fulfillment of the admission requirements must be proven during the enrollment procedure in accordance with Sections 16ff. of the Regulations Governing General Study and Examination Procedures (AllgStuPO), in cases outlined in Section 15 of the AllgStuPO as part of the application for admission. Supporting documents must be submitted in the original or in an officially certified form.

III. Admission

Section 5 – Restriction of the number of eligible candidates

The number of eligible candidates for the selection process can be restricted. It must be at least double the designated number of admissions. The selection criterion for participation in the selection process is the applicants’ qualification level. The selection committee decides on any restriction, the number of eligible candidates, and their selection at the beginning of the selection process.

Section 6 – Ranking criteria

(1) A ranking of applicants shall be prepared according to the following selection criteria:

1. overall grade in the study program in accordance with Section 3 no.1
2. Test result of the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE) or assessment according to Section 6 (3), sentence 7f
3. Subject-specific eligibility based on the previous degree:
4. For each practical professional experience (for which evidence has been provided) lasting at least six months and following on from a bachelor's or equivalent university degree:
5. Level of English language proficiency for which evidence has been provided
6. Motivation and reasons for applying for the master's program and overall impression of the application documents submitted

* approved by the Executive Board of TU Berlin on February 10, 2019 and by the Senate Administration for Education, Youth and Science on April 4, 2019
(2) For the criterion according to Subsection 1, no. 1, up to 100 points shall be awarded according to the following table:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>100</td>
<td>2.6</td>
<td>52</td>
</tr>
<tr>
<td>1.1</td>
<td>97</td>
<td>2.7</td>
<td>49</td>
</tr>
<tr>
<td>1.2</td>
<td>94</td>
<td>2.8</td>
<td>46</td>
</tr>
<tr>
<td>1.3</td>
<td>91</td>
<td>2.9</td>
<td>43</td>
</tr>
<tr>
<td>1.4</td>
<td>88</td>
<td>3.0</td>
<td>40</td>
</tr>
<tr>
<td>1.5</td>
<td>85</td>
<td>3.1</td>
<td>37</td>
</tr>
<tr>
<td>1.6</td>
<td>82</td>
<td>3.2</td>
<td>34</td>
</tr>
<tr>
<td>1.7</td>
<td>79</td>
<td>3.3</td>
<td>31</td>
</tr>
<tr>
<td>1.8</td>
<td>76</td>
<td>3.4</td>
<td>28</td>
</tr>
<tr>
<td>1.9</td>
<td>73</td>
<td>3.5</td>
<td>25</td>
</tr>
<tr>
<td>2.0</td>
<td>70</td>
<td>3.6</td>
<td>22</td>
</tr>
<tr>
<td>2.1</td>
<td>67</td>
<td>3.7</td>
<td>19</td>
</tr>
<tr>
<td>2.2</td>
<td>64</td>
<td>3.8</td>
<td>16</td>
</tr>
<tr>
<td>2.3</td>
<td>61</td>
<td>3.9</td>
<td>13</td>
</tr>
<tr>
<td>2.4</td>
<td>58</td>
<td>4.0</td>
<td>10</td>
</tr>
<tr>
<td>2.5</td>
<td>55</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If it is not possible to determine equivalent grades for foreign university qualifications even after consulting the decisions on grade equivalence of the Central Office for Foreign Education at the Standing Conference of the Ministers of Education and Cultural Affairs, points will be awarded according to the following table:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 to under 1.5</td>
<td>100</td>
</tr>
<tr>
<td>1.6 to under 2.5</td>
<td>70</td>
</tr>
<tr>
<td>2.6 to under 3.5</td>
<td>40</td>
</tr>
<tr>
<td>3.6 to under 4.0</td>
<td>10</td>
</tr>
</tbody>
</table>

(3) For the criterion outlined in Subsection 1, no. 2, up to 100 points will also be awarded in accordance with the regulation in Section 6 (2).

The GMAT Total Score (GMATS) is converted into a grade according to the following formula:

\[ \text{Grade} = (4 \times \text{GMATS} - 400)/400 \]

For the calculated grade (rounded to the nearest tenth) points are awarded according to the table in Subsection 2. If the GMAT Total Score is below 400, the sub-grade is 4.0.

If a GRE test result is given, it will be converted into a GMAT Total Score. The conversion is carried out using the official conversion tool, the GRE® Comparison Tool for Business Schools.

If no test result is submitted, the selection committee will award a grade based on the scope and quality of previous academic achievements in the methodological subjects for which evidence is provided (mathematics, statistics, econometrics, microeconomics). This is based on the ECTS-weighted average grade of the methodological subjects.

(4) For the criterion outlined in Subsection 1, no. 3, points shall be awarded in accordance with the following arrangement:

1. up to 200 points for business studies or economics
2. up to 200 points for an engineering degree program
3. up to 150 points for degree programs in law or natural sciences
4. up to 100 points for degree programs where the curriculum included modules related to economics, engineering, law or environmental studies.

5. 50 points for all other subjects

(5) For the criterion outlined in Subsection 1, no. 4, points shall be awarded in accordance with the following arrangement:

1. up to 40 points (for every 6 months) for each qualified professional activity in energy technologies and/or the energy industry
2. up to 30 points (for every 6 months) for each qualified professional activity in the electricity and gas networks and energy industry
3. up to 10 points (for every 6 months) for each qualified professional activity in other technical, legal and/or business areas
4. 0 points for all other professional experience.

(6) For the criterion outlined in Subsection 1, no. 5, points shall be awarded in accordance with the following arrangement:

<table>
<thead>
<tr>
<th>Level according to the Common European Framework of Reference for Languages</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2 and higher</td>
<td>80</td>
</tr>
<tr>
<td>C1</td>
<td>60</td>
</tr>
<tr>
<td>B2</td>
<td>40</td>
</tr>
<tr>
<td>B1</td>
<td>10</td>
</tr>
<tr>
<td>A2 or lower</td>
<td>0</td>
</tr>
</tbody>
</table>

(7) For the criterion outlined in Subsection 1, no. 6, up to 100 points shall be awarded. The following aspects will be taken into account when awarding these points:

1. Motivation or reasons for the application to the program in the form of a max. two-page letter of motivation. Up to 50 points can be awarded for this.
2. Information on the focus of previous studies, the professional experience already gained in the energy sector and the academic and/or professional plans for the future. Up to 30 points can be awarded for this.
3. Overall impression of the application documents submitted, in particular with regard to the information provided in the curriculum vitae and other documents (letters of recommendation, etc.). Up to 20 points can be awarded for this.

**Section 7 – Procedure**

(1) Proof of fulfillment of the selection criteria must be provided when submitting the application for admission. To this purpose, applicants must include the following documents:

1. The documents requested in the application form.
2. Evidence that the admission requirements in accordance with Section 3 are met.
3. Evidence of the areas of focus of the course of studies (where these are not stated in the certificate), generally in the form of a diploma supplement, transcript or module description.
4. Relevant evidence of the selection criteria outlined in Section 6 (in particular the letter of motivation, CV, level of English).

(2) For each selection criterion, the selection committee shall award points in accordance with Section 6 (2) to (7).

(3) The selection committee shall rank the applicants in order of preference. The list documents the following for each participant in the selection process:

1. Number of points achieved for each criterion.
2. Total number of points.
3. Decision on selection (admission or rejection)

(4) Selected applicants receive prompt notification along with a deadline for providing written acceptance of the place in the program and for enrollment. If the applicant does not accept the place within the deadline, it is offered to the next candidate on the list.

(5) Applicants who are not admitted to the program receive notification of rejection, with reasons.

Section 8 – Capacity and application deadline

(1) The number of program places available is limited to 30 per year unless Technische Universität Berlin publishes other decisions on capacity in the Official Gazette of Technische Universität Berlin.

(2) The application deadline is April 30 of each year, unless Technische Universität Berlin publishes other deadlines in the Official Bulletin of Technische Universität Berlin.