

Beschluss der FIBAA-Akkreditierungskommission für Programme

89. Sitzung am 28./29. November 2013

Projektnummer: 12/114

Hochschule: Beuth Hochschule für Technik Berlin

Studiengang: MBA Renewables (MBA)

Die FIBAA-Akkreditierungskommission für Programme beschließt im Auftrag der Stiftung zur Akkreditierung von Studiengängen in Deutschland wie folgt:

The accreditation of the programme is according to chapter 3.1.1 and 3.2.4 of the “Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung” as amended on 23 February, 2012 under five conditions and is valid for five years.

Duration of accreditation: 29 November, 2013 until end of winter semester 2018/19

Conditions:

1. The HEI must ensure that the level of English competence must at least correspond with B 2. (s. chapter 2.4)

Legal source: 2.4 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung” as amended on 23 February, 2012)

**Die Auflage ist vorbehaltlich der Genehmigung durch den Berliner Senat erfüllt.
Die FIBAA-Akkreditierungskommission für Programme am 21. November 2014**

2. The HEI must provide disadvantage compensation in the relevant and binding documents, such as RSPO. (s. chapter 2.1)

Legal source: chapter 2.3 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung” as amended on 23 February, 2012

**Die Auflage ist vorbehaltlich der Genehmigung durch den Berliner Senat erfüllt.
Die FIBAA-Akkreditierungskommission für Programme am 21. November 2014**

3. The HEI has to revise the module descriptions so as the categories “Workload and its composition”, “Applicability of module for other modules and study programmes” and “Duration of the module” are included. (s. chapter 3.1)

Legal source: chapter A.7 of the “Ländergemeinsame Strukturvorgaben für die Akkreditierung von Bachelor- und Masterstudiengängen (decision of the Kultusministerkonferenz as amended on 4 February, 2010)“.

**Die Auflage ist vorbehaltlich der Genehmigung durch den Berliner Senat erfüllt.
Die FIBAA-Akkreditierungskommission für Programme am 19. Juni 2015**

4. The HEI has to revise the examination regulations as follows:
 - a) The possible forms of examinations must be listed transparently.
 - b) The editing time of the Master's thesis have to be reconciled with the ECTS credits assigned to the Master's thesis, taking into consideration the students' professional life.
(s. chapter 3.1)

Legal source: chapter 2.4 and 2.8 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

**Die Auflage ist vorbehaltlich der Genehmigung durch den Berliner Senat erfüllt.
Die FIBAA-Akkreditierungskommission für Programme am 21. November 2014**

5. The HEI has to ensure that all students have comprehensive access to literature, including databases and journals. (s. chapter 4.4)

Legal source: chapter 2.7 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

**Die Auflage ist vorbehaltlich der Genehmigung durch den Berliner Senat erfüllt.
Die FIBAA-Akkreditierungskommission für Programme am 21. November 2014**

Das Siegel des Akkreditierungsrates wird vergeben.

**FOUNDATION FOR INTERNATIONAL
BUSINESS ADMINISTRATION ACCREDITATION**

FIBAA – BERLINER FREIHEIT 20-24 – D-53111 BONN

Assessment Report

Higher Education Institution (HEI):

Beuth Hochschule für Technik

Master programme (distance learning):

MBA Renewables

Qualification awarded on completion:

Master of Business Administration (MBA)

Brief description of the study programme:

The MBA Renewables has been developed to build up competencies in management, leadership, accounting, finance, marketing and entrepreneurship as well as legal frameworks. It has a special focus on renewable energy (RE) and energy efficiency (EE). The online Master's degree programme aims at developing the necessary skills and knowledge to successfully manage RE and EE projects and/or enterprises at an international level.

Date of opening of the procedure:

16 January, 2013

Date of filing the self-documentation:

23 July, 2013

Date of the site visit:

16/17 October 2013

Type of accreditation:

Accreditation

Type of programme:

further education

Intended length of programme:

30 months

Mode of study:

part-time

Profil of programme (only for Master programmes in Germany):

Application-related

Initial Start of the programme:

October 2011

Student intake:

40-50

Programme cycle starts in:

Winter semester

Speed (planned number of parallel years):

1

Number of ECTS point assigned to programme:

90

Hours (workload) per ECTS point:

30

Date of the Meeting of FIBAA-Accreditation Commission:

28-29 November, 2013

Resolution:

Recommendation of the panel members: The accreditation of the programme is according to chapter 3.1.1 and 3.2.4 of the "Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012 under five conditions and is valid for five years.

Duration of Accreditation:

29 November, 2013 until end of winter semester 2018/19

Conditions:

1. The HEI must ensure that the level of English competence must at least correspond with B 2. (s. chapter 2.4)

Legal source: 2.4 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012)

2. The HEI must provide disadvantage compensation in the relevant and binding documents, such as RSPO. (s. chapter 2.1)

Legal source: chapter 2.3 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

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Legal source: chapter A.7 of the "Ländergemeinsame Strukturvorgaben für die Akkreditierung von Bachelor- und Masterstudiengängen (decision of the Kultusministerkonferenz as amended on 4 February, 2010)".

4. The HEI has to revise the examination regulations as follows:

a) The possible forms of examinations must be listed transparently.

b) The editing time of the Master's thesis have to be reconciled with the ECTS credits assigned to the Master's thesis, taking into consideration the students' professional life.

(s. chapter 3.1)

Legal source: chapter 2.4 and 2.8 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

5. The HEI has to ensure that all students have comprehensive access to literature, including databases and journals. (s. chapter 4.4)

Legal source: chapter 2.7 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

Proof of meeting these requirements is to be supplied by 29 August, 2014.

Project Manager:

Nina Hürter M.A.

Panel members:**Prof. Dr. Peter-J. Jost**

WHU - Otto Beisheim School of Management
(organizational theory, business administration)

em. Prof. Dr. Egon Haar

FH Kufstein

(business administration, energy, quality management)

Prof. Dr. Ronald Deckert

Europäische Fernhochschule Hamburg (Euro-FH)

(business administration, organization, human resources)

Alexander Kramer

redstone Consulting GmbH

(consulting, controlling, business administration)

Rebecca Lauther

RWTH Aachen

Student of business administration (M.Sc.)

Summary

The panels' assessment takes into account the self-assessment and the results of the on-site visit and the statement of the HEI to the assessment report dated 12 November 2013.

It should be noted that procedurally, with an initial accreditation of a study programme that has not yet been fully completed, that programme must be assessed as one which is already fully operational.

The MBA programme Renewables of the Beuth Hochschule für Technik fulfils with few exceptions the quality requirements of the Akkreditierungsrat as well as the Strukturvorgaben of the Kultusministerkonferenz. It is in accordance with the National Qualifications Framework in their applicable version valid at the time of opening of the procedure. It has a modular structure, has been assigned ECTS points and leads to the academic degree of 'Master of Business Administration'. The degree is awarded by the higher education institution.

The panel members identify need for action regarding the selection process, the workload in the fifth semesters, the examination regulation and the access to literature. The panel members are convinced that these aspects can be remedied within nine months. Therefore they recommend the accreditation on condition of meeting the following requirements:

1. The HEI must ensure that the level of English competence must at least correspond with B 2. (s. chapter 2.4)

Legal source: 2.4 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012)

2. The HEI must provide disadvantage compensation in the relevant and binding documents, such as RSPO. (s. chapter 2.1)

Legal source: chapter 2.3 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

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Legal source: chapter A.7 of the "Ländergemeinsame Strukturvorgaben für die Akkreditierung von Bachelor- und Masterstudiengängen (decision of the Kultusministerkonferenz as amended on 4 February, 2010)".

4. The HEI has to revise the examination regulations as follows:

a) The possible forms of examinations must be listed transparently.

b) The editing time of the Master's thesis have to be reconciled with the ECTS credits assigned to the Master's thesis, taking into consideration the students' professional life.

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Legal source: chapter 2.4 and 2.8 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

5. The HEI has to ensure that all students have comprehensive access to literature, including databases and journals. (s. chapter 4.4)

Legal source: chapter 2.7 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

Proof of meeting these requirements is to be supplied by 29 August, 2014.

For the overall assessment please refer to the quality profile at the end of this report.

Institutions Details

Beuth Hochschule für Technik Berlin was the name given on 1 April 2009 to the Technische Fachhochschule Berlin (TFH), the historic University of Applied Sciences situated in the heart of the German capital. Beuth University exemplifies practical hands-on teaching and applied research. Beuth University offers the widest range of courses in applied engineering, applied sciences and applied economics in the whole region. There are over 70 accredited and innovative Bachelor's and Master's courses at Beuth University, some of which are available online or as dual courses.

The Distance Learning Institute (FSI) is a central facility of the Beuth University of Applied Sciences and offers a wide range of vocational and academic education, with which it has positioned itself strategically in the higher education landscape of the region. The future potential for distance learning is high, and the clusters have a particularly high relevance for the capital region: the green technology sector in the region is seeing continuous growth and, in the future, Berlin would be likely to become the capital of sustainable urban development, including the Green Economy as one vital aspect. The Beuth University of Applied Sciences itself works under the global motto of study for the "City of the Future", highlighting the focus on sustainable future technologies.

Description and appraisal in Detail

1. Strategy and Objectives

1.1 Logic and transparency of programme objectives (Asterisk Criterion)

The MBA Renewables has been developed to build up competencies in management, leadership, accounting, finance, marketing and entrepreneurship as well as legal frameworks. It has a special focus on renewable energy (RE) and energy efficiency (EE). The online Master's degree programme aims at developing the necessary skills and knowledge to successfully manage RE and EE projects and/or enterprises at an international level.

Graduates of this programme are able to apply methods and tools to the management of renewable energy and energy efficiency projects. On successful completion of the programme students are able to:

- Successfully solve interdisciplinary tasks in an integrated approach within the sphere of the management of companies in the field of renewable energy and energy efficiency.
- Classify, assess, analyse, interpret, evaluate and choose methods and procedures concerning the management of renewable types of energy and energy efficiency projects.
- Apply economic and legal instruments to projects in the field of renewables and energy efficiency applications.
- Work under their own responsibility and/or in leading positions of industry, commerce, consultancy, economy, associations and governmental as well as non-governmental organisations.
- Work economically, in a market- and problem-oriented way, especially in the management of internationally focused companies.
- Continue their further qualification alongside their work.

The distance learning Master's programme "MBA Renewables" imparts advanced interdisciplinary knowledge on project and quality management in an intercultural context to graduates with a Natural Sciences or Economics background. The students get to know the interrelations of all complex processes in national and international projects and their respective departments.

The profile of the MBA Renewables course is characterized by the exchange of methods and skills for the systematic solution of managerial responsibilities. Consequently, the modules take an applied approach. Students have to show evidence of their ability to work independently and deliver scientific work.

Appraisal:

The objectives of the programme are explained in an intelligible manner and set out consistently in relation to the vocational field of renewable energies and energy efficiency. They are based on subject-specific and generic learning outcomes which are in line with the academic state of the art and the level of the qualification to be awarded on completion. Nonetheless, the panel refers to chapter 3.2 concerning the scientific competence. The objectives consider specialist discipline and practice both socially and politically as well as a personal development. Especially the last aspect was made clear during the talk with current students who mentioned a personal development in their job. In a study programme being a distance learning programme, the students are required to dispose of a great amount of self-discipline and self-motivation. It was made clear that this programme enhances these capabilities.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
1.	STRATEGY AND OBJECTIVES			
1.1*	Logic and Transparency of Programme Objectives	X		

1.2 Programme Profile

As the MBA Renewables is a programme jointly offered by the Beuth University of Applied Sciences in Berlin and the private Renewables Academy (RENAC), an academy that is closely tied to the German renewable energy and energy efficiency industry, practical experience is a strong focus of the MBA Renewables programme. The MBA Renewables also aims to enhance student competencies in management and leadership. The graduates will be enabled to take over responsibility with regard to human resource development, as well as for the society as a whole, by caring for environmental and climate change aspects within their scientific and professional work.

Appraisal:

Next to existing scientific aspects, the study programme is clearly application-oriented. Especially together with its cooperation partner, RENAC, the HEI combines practical exercises and hands-on training alongside theoretical lectures to make the training comprehensive. In order to further deepen student's knowledge on practical application, the Beuth University of Applied Sciences and RENAC organise field visits during the on-campus time during the second or fourth semester.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
1.	STRATEGY AND OBJECTIVES			
1.2	Programme Profile	X		

1.3 Gender equality and equality of opportunity

Beuth University of Applied Sciences aims to bring gender equality into action and to raise the proportion of women amongst lecturers and students. Implementing and embedding gender relevant measurements and approaches at all levels is an important concern of the HEI's administration. This is reflected in the HEI's study order and mission statement. Currently, and for the first time in the HEI's history, the position of President is held by a woman.

In relation to other universities of applied sciences, Beuth University belongs to the most successful ones in increasing the proportion of women – currently to 20.6% amongst lecturers and 29% amongst students. Numerous initiatives on the augmentation of opportunities for women at Beuth University have already been applied (for more detailed information see: <http://www.beuth-hochschule.de/frauen/>). The nationwide challenge "Family at University" in 2008 rewarded Beuth University as a family friendly university. Prior to that, Beuth University had won the Total Equality Award due to its exceptional women and family friendly profile. Beuth University has its own centre for gender and technology.

In general, the pace of study can always be adapted to each individual's circumstances. Students cannot only study the programme alongside their job but also in a phase of family care or during a parental leave – the age of the students also plays a less important role.

Online study programmes are particularly suitable for disabled persons. The learning material is available online and people with limited mobility for example do not have to come personally to the HEI. Instead they can organize their study based on their own requirements regarding time and location. They may also attend virtual class rooms and participate orally or via the chat function (writing questions, remarks). It is of advantage for disabled people that the learning material is available in written form and accessible via the internet. Modern software tools can even read the content. The FSI headquarters also has good accessibility – the entrance has no staircases or barriers and the main office is accessible from the car park. There is a parking place in front of the institute reserved for the FSI which can be used by disabled persons (the parking place is less than 10 metres away from the entrance). In any particular case regarding the formal requirements of, for example, examination or the time frame for the study programme, the study co-ordination group will assist the disabled persons and cater to their individual needs.

Appraisal:

The panel members came to the conclusion that gender equality and the implementation of general bans on discrimination are promoted by the HEI. The requirements of gender equality are based on national standards. During the studies, a process for the compensation of disadvantages is ensured. Concerning a compensation of disadvantages during the selection process, please see chapter 2.

The study coordinators of the programme made clear that students in particular life situations, for example such as single parents, foreign students, students with a migration background and/or from so-called non-academic backgrounds are taken care of.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
1.3	Gender equality and equality of opportunity	X		

2. ADMISSION (ADMISSION PROCESS AND PROCEDURE)

For the admission to the MBA Renewables programme the students have to have

- a very good command of English,
- at least 210 credits from a Bachelor's degree (For applicants with less than 210 credits, additional modules will be determined by the dean. They are taken, for example, from the catalogue of electives. These modules have to be successfully completed by the student before they will be admitted to the final examination. This is communicated transparently to the students, including the remark that this might lead to a prolonging of the studies),
- at least one year of practical professional experience in a relevant field,
- a successful completion of a competence based interview focusing on motivation and ability to study an online degree programme, as well as the language skills. This interview is structured by an interview guideline. It contains questions concerning the applicant's motivation, support by their employer, goals, experience with distance learning etc.

The student's command should be shown either by the successfully completed "internet based Test of English as a Foreign Language" iBT - TOEFL® (61 points) or the "Paper Based - TOEFL® -Test" PBT (500 points) or the "Computer Based TOEFL® - Test" CBT (200 points) which expired in September 2006. Comparable qualifications based on the "Common European Framework of Reference for Languages" (Independent User B 2) – for instance the "International English Language Testing System" IELTS vol. 5.0 or newer – or native language or official language of the home country is also accepted. A German language university entrance exam for foreign students is not required.

The final decision about enrolment is taken by the programme director. Before being enrolled in the programme the programme director gets all application documents and is approving the enrolment by his signature.

Disadvantage compensation at Beuth University is anchored in the RSPO under § 26. Disabled persons will receive intensive support during their studies with the adaptation of the processes of studying and examining. Upon request in writing with stated reasons, students who – due to a proven disability or a chronic illness – are disadvantaged compared to other students are granted appropriate compensation measures regarding their studies and examinations. The compensation measures should overcome as much as possible the disadvantages brought about by the disability without hereby bringing about a reduction of the performance requirements. The chairperson of the Examination Board in charge decides on this matter in consultation with the instructors concerned. The Registrar's Office notifies the student of this decision, which can be appealed.

Information for students and prospective students covers organizational information like the programme's structure and contents, or the blended learning approach, as well as questions concerning career prospects. To a certain extent, the HEI is also able to make personal contact between potential applicants and students already enrolled on the programme, on the condition of the student's consent. Advice is given in a standardized process via email, telephone, or personally – if desired by the applicant. This advice assures that interested persons are informed on the special demands of the part-time course in the early stages so that they are able to gauge whether the programme is likely to meet their expectations before entering the course.

After the initial stages of advice, potential candidates are asked to forward their records, i.e. application form and information about English language skills, which are then checked in a

documented, multi-step process (pre-check). These are especially examined for possible factors that might prevent or jeopardize success in the studies, for instance, insufficient language skills. Previous knowledge and professional experience are particularly important and are scrutinised in detail. Also, the applicant's personal statement and employer reference play a role in the application process. If during this check, weak points emerge, the study coordinator will conduct a personal counseling interview with the interested person in order to clarify the applicant's expertise, motivation, perseverance, and range of interests. The intention is to provide the right advice or necessary additional support for the applicant. From previous experience, these counseling interviews are very well received.

The admission decision is based on certain criteria which need to be fulfilled plus the competence based telephone interview which mainly deals with the applicant's motivation. The final decision about the admission to the programme is communicated by email. In cases where an applicant is not admitted to the programme, the email includes some short feedback on why they have not been successful in meeting the admission criteria (for example, insufficient command of English). This email also includes further information on the enrolment process and on the beginning of the programme.

Appraisal:

The admission requirements are defined and transparent. The HEI has formulated clear regulations for the access to the study programme.

The necessary foreign language competence (here: English) is ensured via common and standardized English tests. The actual competence is tested in the obligatory interview. The HEI has defined several standards as for TOEFL and IELTS. But there are some contradictions in the requirements: On the one hand, the HEI demands a TOEFL test result of 61 points which is the minimum to pass the test. This corresponds to level B 1.1 of the Common European Framework of Reference for Languages. On the other hand, the HEI mentions the level B 2 as requirement. The panel therefore states that the HEI must ensure that the level of English competence must at least correspond with B 2 for the students to be able to successfully complete this MBA programme. In its response to this report, the HEI underlines that the students are transparently informed about the required level of English. The fact sheet provided for future students names only level B 2, not a specific TOEFL result. Nevertheless, the respective paragraph in the study regulations still contains the specific TOEFL results as named above.

A disadvantage compensation is provided for all examinations etc. during the study programme. Currently, there is no such provision for the selection process. This would be necessary as the potential students may have disabilities which compromise their ability to pass the selection interview.

The panel therefore recommends the following **conditions**:

1. The HEI must ensure that the level of English competence must at least correspond with B 2. (s. chapter 2.4)
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2. The HEI must provide disadvantage compensation in the relevant and binding documents, such as RSPO. (s. chapter 2.1)
Legal source: chapter 2.3 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

The HEI demands at least one year of relevant professional experience for the admission to the study programme which is in accordance to the national regulations.

The admission decision is based on objectifiable criteria and is communicated in writing.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
2.	ADMISSION (REQUIREMENTS AND PROCEDURE) AND OBJECTIVES			
2.1*	Admission Requirements		condition	
2.2	Selection Process	X		
2.3	Professional Experience (* for Master Programmes of the "further Education" Type)	X		
2.4*	Ensuring Foreign Language Competence		condition	
2.5*	Transparency of Admission Decision	X		

3. Implementation

3.1 Structure

MBA Renewables is designed for 2.5 years of part-time study, including the Master's thesis. 12 out of 16 modules on offer are mandatory. In the 2nd and 4th semesters, students choose one out of four elective modules.

	Module	C/E	Cr	Examinations
	1st Semester			
M01	RE and EE Systems and Concepts	C	5	Project Thesis (2/3) Online examination (1/3)
M02	Energy Policy and Economic Framework	C	5	Written assignment (1/3) Invigilated written examination (2/3)
M03	Accounting	C	5	Written assignment (1/3) Online group presentation (2/3)
	Total		15	
	2nd Semester			
M04a	Advanced Practical RE and EE Implementation	E	5	Invigilated written examination (1/3) Project Thesis (2/3)
M04b	Quality and Supply Chain Management	E	5	Written assignment (1/3) Invigilated written examination (2/3)
M05	International Business Law	C	5	Written assignment (1/3) Online examination (2/3)
M06	Investment and Financing	C	5	Written assignment (1/3) Online group presentation (2/3)
	Total		15	
	3rd Semester			
M07	Project Management	C	5	Written assignment (1/3) Online group presentation (2/3)
M08	Marketing Analysis and Instruments	C	5	Written assignment (1/3) Invigilated written examination (2/3)
M09	HR and People Management	C	5	Peer review assignment (1/3) Online examination (2/3)
	Total		15	
	4th Semester			
M10	International Management	C	5	Written assignment (1/3) Invigilated written examination (2/3)
M11a	Advanced Renewable Energy Technologies	E	5	Written assignment (1/3) Online examination (2/3)
M11b	Energy Management and Energy Efficiency	E	5	Written assignment (1/3) Online examination (2/3)
M12	Integrated Business Plan Development	C	5	Written assignment (1/3) Online group presentation (2/3)
	Total		15	
	5th Semester			
M13	Master's Thesis	C	25	
M14	Oral Master's Examination	C	5	
	Total		90	

The elective module Advanced Practical RE and EE Implementation is the only module which partly takes place in presence in Berlin. This module consists of two weeks of practical training in the RENAC training centre, theory lessons, field trips, a written exam and a project thesis. In this way, the students have the chance to deepen their knowledge gained in the module Renewable Energy and Energy Efficiency Systems and Concepts by hands-on training. Besides the training aspect, the on-campus module allows students to get to know fellow students, lecturers and the organising team from Beuth University and RENAC personally, as well as to network.

MBA Renewables is designed with a total workload of 90 credits as a five semester distance learning programme. The work and study load is four semesters of 15 credits each and 30 credits in the Master's semester. 1 credit corresponds to a workload of 30 hours, which amounts to 150 hours per module. The number of working hours per semester is taken from existing full-time degrees and from the distance learning degrees offered at the Institute. As such, the programme has been developed with half of the workload of a full-time degree. The feasibility of this workload has already been proven through evaluation of the four distance learning Master's programmes at FSI.

The design of individual modules is based on the requirements for part-time study. The respective workload of each module takes into account the extent of learning material and the task to be completed, such as associated exams, homework assignments or presentations. The study modules are assigned to the curriculum semesters and are listed with their associated credits (ECTS). The diploma supplement contains the relative ECTS grade.

Each module consists of one midterm assignment which as a rule amounts to 1/3 of the module grade. The students have to hand in the written assignment by the middle of the respective semester. Usually the midterm assignment is based on real life case studies and aims at preparing students for the final exams. At the end of the semester one written, oral or group examination per module takes place. The final examinations correspond to the entire module content including online lectures. The successful completion of the midterm assignment is a precondition to being admitted to the final examination. One written examination per semester needs to be done under supervision in the student's home country. The grade of one module results from the weighted grades of both the assignment and exam.

The study and examination regulations were approved by the AS of the University. The Berlin Senate for Education, Science and Research has approved the organisation of the Master's Distance Learning Programme in MBA Renewables and the study and examination regulations.

There are two main types of examinations: midterm assignments and final examinations. Midterm assignments are subdivided into:

- Written assignments (20 hours workload, 5-15 pages)
- Project thesis (group work, 15 pages)
- Invigilated written examination (only in M04a Advanced Practical RE and EE Implementation, 60 minutes)
- Peer review assignment (M09 HR and People Management, solution to a case study (max. 5 pages))

Final examinations are subdivided into:

- Online examination (90 minutes)
- Invigilated written examination (90 minutes).
- Online group presentation (about 10 slides, 20-30 minutes)
- Project thesis (15 pages)

The study of the MBA Renewables programme is designed in order to ensure compatibility between study and work. A particular advantage of higher education through part-time distance learning is the flexibility it gives the students. The pace of study can always be adapted to each individual's circumstances. Should events such as pressure in the workplace, medical care (also, disability), family care or parental leave interfere with the student's study of the programme, the student may make the decision to extend their period of study. This disadvantage compensation is anchored in the RSPO under § 26.

Beuth University of Applied Sciences strongly supports mobility and recognition of credits. For the recognition of credits earned in another study programme, each department has one

recognition representative. The student can apply for the recognition of his/her credits by handing in the respective module description and the certificate including the grade and the amount of credits. The recognition decision is communicated to the student in written form. Rules for the recognition are also anchored in the RSPO § 39, § 40. The RSPO makes sure that studies from abroad are compatible with study programmes of the Beuth University of Applied Sciences. This implies that the Beuth University of Applied Sciences has determined its rules and regulations complying with the Lisbon Convention.

The feasibility of the programme's workload has already been proven through evaluation of the four distance learning Master's programmes at FSI. The feasibility of the workload has also been proven in the previous 4 semesters. The students were able to hand in their assignments on time and the average grade of 2.05 shows the good quality of the examinations on the whole. The respective workload of each module takes into account the extent of learning material and the tasks to be completed, such as associated exams, homework assignments or presentations. The structure of examinations in each semester is quite flexible. At the beginning of each semester, the due dates for the midterm assignments and the dates for the final exams are communicated. Only these examination dates are fixed. In individual cases an extension of the due date for the midterm assignments can be granted upon a written request by the student.

For each semester there is an online forum for organisational issues. Questions stated in these forums will be answered by the programme coordinator or the office within no more than 72 hours. For each module there is a technical online forum. All forum posts are forwarded to the respective lecturer and will be answered within no more than 72 hours as well. In addition, there is a Questions and Answer (Q&A) session for each module which takes place approximately one month before the due date of the assignments. The Q&A sessions are not a lecture, but a chance for the students to check whether they are on the right track in terms of the midterm assignment.

Appraisal:

The ratio of core subjects and electives is weighted in a balanced manner. The structure therefore helps to set the objectives of the student workload and the students to acquire the skills related to the objective. As this study programme is an MBA programme which is meant to broaden the knowledge and should not offer specialisations in a more concrete way than done as it is, offering only four electives is a logical and correct choice. The panel recommends even though that one of the electives, the elective module Advanced Practical RE and EE taking place in Berlin and not via distance learning, might be changed into a compulsory one. It is important for the students to have hands-on experience and, even more important, to meet with the fellow students and lecturers. The students talked to during the site-visit stressed this fact in mentioning how important this module was for them and their studies. They even asked for a second module like this. The panel supports this suggestion.

A set of study and examination regulations exists and has been verified by legal experts. The structural requirements for the programme have been implemented. The option of spending periods of time at other HEIs and in practice without any loss of time is envisaged in relation to the mode of study. The recognition of qualifications gained at other HEIs, as laid down in the Lisbon Convention, is ensured.

For each module the most suitable type of examination in terms of the module content and the module objectives has been chosen.

The amount of credit points per semester is evenly spread throughout the study programme with the exception of the fifth semester. Here the workload is twice as high as in the previous semesters. This is due to the 25 credits assigned to the Master's thesis which has to be completed within five months, and additionally to the 5 ECTS credits assigned to the Mas-

ter's examination and colloquium. This implies a twofold problem: First, the students have to face workload of 900 hours for the MBA instead of 450 hours in the semesters before. Second, taken the average workload of 20 hours in a part-time study programme, the students would need about nine months for the completion of the Master's Thesis instead of five. The panel had the chance to talk to students who are now about to start the Master's thesis. Many of them do not have the chance to write their thesis during working hours, therefore they will have to double the workload during their spare time. This leads to two possible outcomes: Either they will need more time for the thesis or the quality of the thesis will suffer.

In its response to the report, the HEI argues that there are six other Master programmes with a distance learning approach which are identically structured, i.e. which have a workload of 30 ECTS credits in the last semester. The HEI states furthermore that more than 280 students already have successfully completed the study programme. Even though, the HEI does not require the students to have a company leave or long vacation for the time of the Master's thesis. This is an unequal treatment of the students as some may be able to use working time for the thesis, others not.

Credit points and workload specifications have been implemented. Also, the concept of modularisation has been introduced to the programme. The ECTS grade is included in the diploma supplement.

The module descriptions contain in particular a detailed description of the learning outcomes and acquisition of skills. Clear and reliable information about all assignments is being assured via the module descriptions. For each module the HEI requires an examination which consists of two assignments. The HEI states that this is due to the continuous learning of the students which is especially important in a distance learning programme. The students support this position. According to their statements, they do not suffer from too much work for the assignments as the first one helps them to prepare for the second one. Taking this into consideration, the panel does accept the factual two examinations in one module as appropriate. Problematic is, nonetheless, that the variety of possible examination forms are not included in the examination regulations. For each module they are defined in the module description, but they are not listed as a complete overview in the examination regulations. In its response to the report, the HEI argues that the students are able to find the individual form of examination of each module in the module description. In the sense of transparency, nonetheless, these forms should be listed in the examination regulations in total as well.

Furthermore, the module descriptions do not contain information about the workload of the module, neither the duration of the module. This counts as well for the applicability of module for other modules and study programmes. All these categories are made mandatory by the ECTS User's Guide and the German Kultusministerkonferenz. The HEI states in its response to the report that the workload can be derived from the number of ECTS credits for the respective module. The panel notes that the working hours per ECTS credit are not named in the module description as well. Therefore, to derive the workload from the number of ECTS credits does require further information from another document. Additionally, the principle of transparency requires the explicit information about the workload in the module description.

The panel therefore recommends the following **conditions**:

1. The HEI has to revise the module descriptions so as the categories "Workload and its composition", "Applicability of module for other modules and study programmes" and "Duration of the module" are included.

Legal source: chapter A.7 of the "Ländergemeinsame Strukturvorgaben für die Akkreditierung von Bachelor- und Masterstudiengängen (decision of the Kultusministerkonferenz as amended on 4 February, 2010)".

2. The HEI has to revise the examination regulations as follows:

- a) The possible forms of examinations must be listed transparently.
- b) The editing time of the Master's thesis have to be reconciled with the ECTS credits assigned to the Master's thesis, taking into consideration the students' professional life.

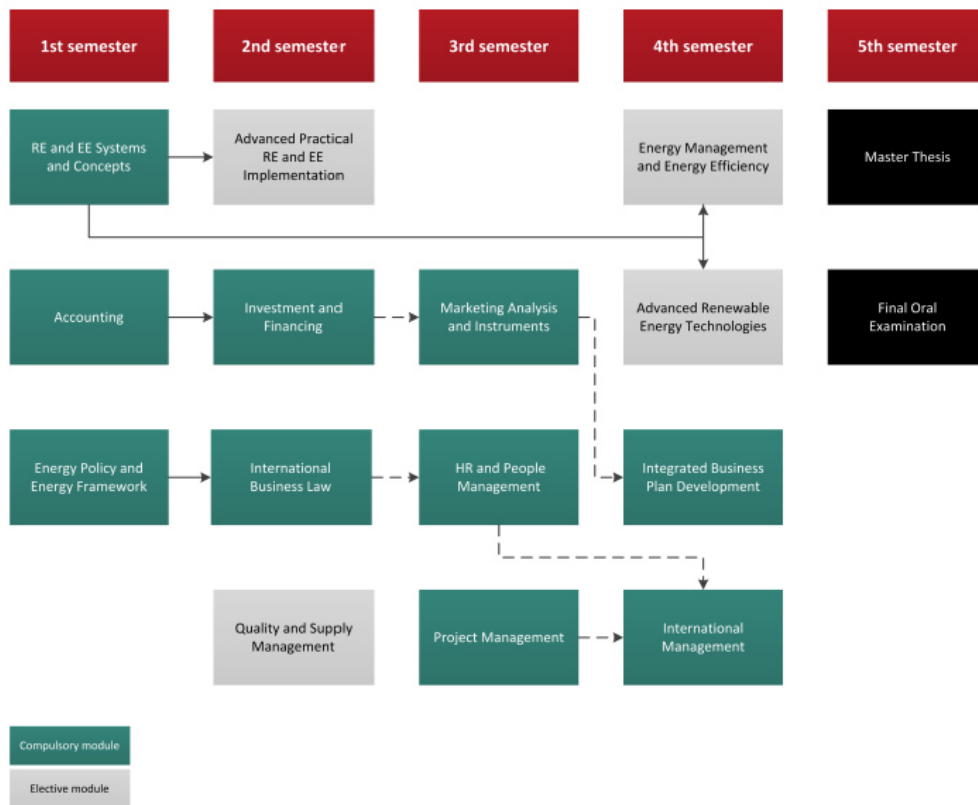
Legal source: chapter 2.4 and 2.8 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung" as amended on 23 February, 2012

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
3.	PROGRAMME DESIGN			
3.1	Structure			
3.1.1	Structure of the Programme (Core Subjects / or Specialisations (Compulsory Electives) / optional Electives/ practical Components)	X		
3.1.2*	Application of the "European Credit Transfer and Accumulation System (ECTS)" and the Modularisation		Condition	
3.1.3*	Study and Examination Regulations		Condition	
3.1.4*	Student workload	X		

3.2 Content

The order of the modules was chosen carefully. In the first semester students are introduced to renewable energy and energy efficiency technologies. To ensure a comparative equivalence between technicians and non-technicians students start this module with a group work assignment in which each group comprises at least one engineer and at least one student with a business background. This diverse composition of the groups leads to an exchange of strengths and a compensation of weaknesses. The students can learn from each other.

The following figure shows the curriculum, including the connections between modules.



The MBA Renewables programme includes economic, leadership and organisational knowledge as well as legal, political and technical knowledge tailored to the specific needs of the emerging renewable energy and energy efficiency markets. The programme is designed to equip future leaders with modern and advanced interdisciplinary management skills necessary for executive positions in the highly globalised market of RE and EE technologies.

This overview makes it clear that the amount of compulsory modules covering the required content meets the desired qualification and skills goals.

RE and EE Systems and Concepts	Energy Policy and Energy Framework	Advanced Practical RE and EE Implementation	Advanced Renewable Energy Technologies	Energy Management and Energy Efficiency	International Business Law	Integrated Business Plan Development	HR and People Management	International Management	Project Management	Marketing Analysis and Instruments	Quality and Supply Chain Management	Investment and Financing	Accounting
Students learn to successfully solve interdisciplinary tasks in an integrated approach within the environment of company management in the field of Renewable Energy and Energy Efficiency.													
Students learn to classify, assess, analyse, interpret, evaluate and choose methods and procedures concerning the management of renewable types of energy and energy efficiency projects.													
					Students learn to apply economic and legal instruments to projects in the field of renewables and energy efficiency applications.								
							Students are enabled to work on their own responsibility and/or in leading positions of industry, commerce, consultancy, economy, associations and governmental as well as non-governmental organisations.				Students are enabled to work economically, in a market- and problem-oriented way, especially in the management of internationally-focused companies.		
Students are able to continue their further qualification alongside their work.													

The Master of Business Administration (MBA) is a postgraduate generalist management degree, which should cover all essential management types. This description fits the MBA Renewables programme and, therefore, the title “Master of Business Administration (MBA)” was selected as the final name for the programme. The “MBA Renewables” programme is a part-time, post-graduate management degree with an additional focus on “Renewable Energy”. Thus, the description of the degree indicates both the orientation of the studies as well as the specific, technical focus of the programme to managers.

The module examinations do differ in correspondence to the different competences in the modules. For an overview of the examinations, see chapter 3.1. The completion of the Master’s thesis requires a high degree of independent scientific work. The thesis is usually done about a question or issue which is relevant for the student’s company. The topic must be practical and meet a high standard of scientific rigour. The programme director will aid the student in finding suitable supervisors and will judge the scientific quality of the proposed work (details to be worked out with supervisors). The thesis corresponds to the requirements for the scope and depth of a Master’s programme.

Appraisal:

The curriculum corresponds with the programme objectives to a sufficient level. The modules are logically structured and aligned to one another as well as with the qualification and competence goals. The electives included in the programme enable the students to acquire the additional skills in accordance with their own preferences and within the framework of the knowledge broadening MBA.

The reasons for the qualification title are given. The title is in line with the focus of the programme content and the national requirements. Also, the programme description corresponds to the content of the curriculum.

One of the programme’s objectives is to enhance the students’ competence in the field of scientific methods. This is guaranteed by continuous guidelines for every written assignment as well as in the preparation of the Master’s Thesis. However, the panel was not able to see samples of Master’s thesis as they do not exist yet. Nevertheless, it received samples of the exposés with which the students start their work on the thesis. Having read these, the panel sees potential for further improvement concerning the scientific competences. They are still achieved, but may be developed more coherently. Scientific methods do appear in several of the written assignments, but not in all and not continuously. Therefore, the panel recommends strongly reviewing the students’ competence to apply scientific methods during the study programme. This recommendation corresponds with chapter 4.4.2.

The general level of performance in examinations and the thesis are aligned with the learning outcomes of the module in terms of form and content. The requirements are in line with the level necessary to attain the qualification in question.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
3.	PROGRAMME DESIGN			
3.2	Content			
3.2.1*	Logic and conceptual Coherence of Programme / Curriculum	X		
3.2.2*	Rationale for the Qualification Title	X		
3.2.3*	Reasons given for programme description	X		
3.2.4*	Performance in Examinations and Thesis	X		

3.3 Additional acquisition of knowledge and skills

Renewable energy is a very new and innovative area. The learning units, case studies and lectures deal with current applications. The most up-to-date research and practical examples are presented so that students learn to manage and transform study contexts that are complex and unpredictable and which require new strategic approaches.

Due to the international orientation of the programme, students also learn how it is necessary to assess a situation based on a particular country or region and what technologies and approaches are appropriate based on location. In addition, students learn the basic science of Business Administration as well as the practice in a hands-on approach through case studies and examples. Each module focusses on the competence to choose a particular technique with regard to the respective situation, given (regional) facts and objectives. In the projects and group work, students acquire the skills to take responsibility for their own personal contribution to professional knowledge and practice.

The MBA Renewables enhances its students' competencies in management and leadership, not forgetting ethical aspects and social responsibility. They are made aware of the environmental and climate change dimensions of their scientific and professional work. Through their exposure to intercultural working groups, discussions forums and project teams they gain important cross-competencies. They are trained to apply negotiation, conflict management and mediation techniques to lead intercultural teams as well as to acknowledge their responsibility to society as a whole with respect to the mitigation of climate change and its positive impact on the adaptation process.

Distance learning is based on self-study and requires a significant amount of self-discipline. The MBA Renewables with its mixture of self-study, online lectures and tutorials, virtual interactions, group work and international networking, also strengthens the students' capability in terms of methodological and social competence as well as self-competence.

By encouraging the students to work together the MBA Renewables fosters social competence, i.e. the ability to communicate, co-operate, empathize and solve conflicts. Students benefit from their fellow students from all over the world: in virtual working groups, through interdisciplinary teams exchanging know-how and experience using a learning management system, web conference system and course forums as well as course chat rooms.

International management in a globalised world requires capabilities to use modern information and communication technologies (ICT) for communication. This important cross-competence is acquired by the MBA students over the study period. They use web confer-

encing systems, the learning platform moodle, skype and modern web 2.0 tools to interact within their learning groups. Rhetorically they are challenged in their oral online presentations and examinations and within their learning groups they often have to solve conflicts regarding the orientation of the group work and the distribution of tasks. Communication and conflict solving is taking place on an international level and requires as additional challenge intercultural competencies which are trained as well.

Knowledge about rhetoric and communication as well as co-operation and conflict resolution is gained mainly in Module 09 HR and People Management. In this module, there is an entire unit focused on learning about communication, including communication models, feedback rules, conflicts as well as conducting successful negotiations. Negotiations and mediation are also taught online through lectures and practice. The application of this knowledge is assessed through a peer review assignment. Peer reviewing means that people of similar competences review the work of their colleagues. It thus encourages response rather than criticism, so that peers are learning from one another. Being a peer reviewer means not only detecting mistakes, but including positive comments, personal responses and suggestions for improvement.

Appraisal:

As the panel states, the development of generic skills such as ethical aspects, managerial skills and management concepts as well as an educational component, which is not specifically related to the final qualification, is provided on the programme on a consistent basis. By using case studies, the programme ensures that students are prepared to application-oriented tasks.

Competences such as social behaviour, conflict-handling and ethical aspects are given regard in the programme. In a number of modules, students are required to present the results of the studies and practice teamwork, whereby the ability to publicly communicate is convincingly fostered. Equally, leadership concepts are taken into account in the programme. The HEI mentioned that there are plans to integrate more topics like environmental ethics, CSR etc., which are relevant to the MBA's focus. This is highly welcomed by the panel.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
3.	PROGRAMME DESIGN			
3.3	Additional Acquisition of Knowledge and Skills	X		

3.4 Teaching Methodology

The didactical design of the MBA Renewables programme is based on the constructivist approach. In constructivism, teaching and learning is seen as embedded in the social context. Actions depend on the situation and the environment. Consequently, the teaching material should show complex, social reality instead of abstract content. The focus should be on authentic activities of the learners instead of the activity of the teachers. In addition multiple perspectives to problems should be given instead of giving simple perspectives. Media shall be used as tools to construct new knowledge. Distance learning teaching consists of various didactic components. In addition to the teaching didactics of the University, didactics of adult education also play a big role. The didactics of adult education focus on learner-centered and self-directed learning.

The curriculum is taught using a blended learning approach based on self-study materials (online) for approximately 1800 hours of independent study combined with the following components:

- Support for guided self-study from the Distance Learning Institute (Learning objectives, exercises)
- Midterm assignments for each module with a set due date (correction by lecturers will contain comments)
- Learning Management System - a virtual classroom which can be used as a platform for all activities (online modules, chats, forums, group work)
- Web conference system (online lectures, Q&A sessions)
- A non-mandatory attendance period at RENAC

The goal of the MBA Renewables is that the graduates of this programme are able to apply methods and tools as to the international management of RE and EE projects. With the didactical concept orientated towards applied sciences involving practical case studies the goal of preparing the students for international management positions in the field of RE and EE is met. By including case studies and examples, the teaching material shows complex, social reality. The focus is on implementing theories to authentic activities and multiple perspectives to problems are taught by the assignments that need to be solved.

Appraisal:

The logic of the teaching methodology is adequate to lead students to the final qualifications; it is described and explained in a logical and transparent manner. A diverse range of methods is used on the programme and tailored to the specific modules. What is more, case studies are used as part of the curriculum and are aimed at developing the students' skills.

The quantity and quality of the course material is sufficient to engage the students in further independent study. This has been confirmed by the students of the programme in the talks with students during the on-site visit. One exception must be made concerning further literature, as argued in chapter 4.4.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
3.	PROGRAMME DESIGN			
3.4	Teaching Methodology			
3.4.1*	Logic and Transparency of Teaching and Learning Methodology	X		
3.4.2	Accompanying course materials	X		

3.5 Skills for employment / Employability (Asterisk Criterion)

Within the MBA Renewables study programme a transfer of competencies in the fields of leadership, finance and investment, project management, operations, entrepreneurship and framework conditions in the fields of renewable energy and energy efficiency takes place. This comprehensive training enables students to establish and/or implement renewable energy and energy efficiency enterprises or projects on regional, national or international levels. The study programme aims at imparting highly specialized knowledge, critical awareness of issues within a particular field and at the interface between different fields, plus specialised problem-solving skills in order to prepare students for a management position on the international job market within the field of renewable energies.

The study programme was designed based on comprehensive market research carried out prior to the set-up of the MBA curriculum. The survey was answered by 393 professionals working in private, non-governmental and governmental organisations.

The market study results were used in the planning of the curriculum of the MBA Renewables in order to select the right modules to qualify the MBA students for the international job market. Within the market study, interviews were held with potential employers in order to analyse the demand side of the renewables market. Job announcements were also analysed as these provided important information regarding specific job profiles. The study also analysed which organisational departments require graduated MBA students on their staff.

Appraisal:

The curriculum is aligned to the skills objective and a qualification awarded on completion for a profession which has a clear profile in terms of content. The panel is convinced that the content of the programme and the reachable learning outcomes are such that the students achieve employability above average. This employability was observed on hand during the site visit and the talks with students. Several of them mentioned to have changed their position or even employer during the course of the studies due to their new competences and knowledge. Obviously, the programme provides the opportunity to use the skills acquired actively in new areas of work and develop them further. The programme is also systematically aligned to the anticipated requirements of the job market.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
3.	PROGRAMME DESIGN			
3.6*	Skills for Employment / Employability	X		

4. Academic Environment and framework conditions

4.1 Teaching staff

23 lecturers are responsible for teaching, 19 of which are also responsible for grading the assignments and exams. As the MBA Renewables programme is a distance learning programme run by the FSI – a central facility of the Beuth University of Applied Sciences – the lecturers are contracted by the FSI by contracts for work and labour. Five of the lecturers are professors at the Beuth University of Applied Sciences, four are professors or lecturers at different universities in Germany and/or abroad, and 14 are experts from industry, consultancy or the legal field.

All lecturers get detailed information and instructions about the Moodle learning management system, the Adobe Connect web conference system, plus the processing of one semester in general. They are also invited to take part in the internal Beuth University further education seminars dealing with Moodle, Adobe Connect, etc. All our lecturers can participate in these seminars for free and they are also informed about all seminars that might be important for their teaching.

Prior to accepting their position to teach at the Distance Learning Institute, all lecturers have been informed about the didactics of an online degree in a one-on-one interview. In addition, they have received written documentation explaining the teaching of online learning materials and are offered trainings with the Berliner Zentrum für Hochschullehre as well as by the FSI

itself. A Writer's Guide provides detailed information on designing, teaching, setting learning objectives as well as on exercises for self-testing.

A special feature of the MBA Renewables programme is that there is a full-time study co-ordinator as well as a full-time administrator. The study co-ordinator and the administrator are the first point of contact for students. The study co-ordinator takes care of individual advice for learners and also assists lecturers in didactical questions about modules. The administrator takes care of all organisational issues for students, especially in terms of the registration and repetition of modules, certificates, leaves of absence, etc. The study co-ordinator and the administrative staff can directly be contacted via the online learning platform (Moodle) via the forums, via Skype as well as via a help-desk mobile telephone in case of urgent matters. For the online lectures several teletutors are available coordinated by the study co-ordinator. The study co-ordinator and the administrative staff will always have a substitute in case of holidays or sickness. The same counts for questions related the content of the learning material.

The lecturers are contracted by contracts for work and labour. These contracts not only include the delivery of the examinations and the grading but also the tutoring of the students in the forum of our learning management system. The HEI's policy requires the lecturers as well as the MBA Renewables team to answer a forum post within 72 hours on week days. The tutoring also includes the Q&A sessions which take place approximately one month before the due date of the midterm assignments. In addition to this, about 30 minutes of the second online lecture of each module is reserved for questions about the final examination. The professors and lecturers are all trained in the professional usage of the learning platform and the web-conference system. In the online lectures the students can directly interact with the professors and lecturers and ask questions or discuss certain issues. These sessions usually take place every two weeks.

Appraisal:

The structure and number of teaching staff correspond with the programme requirements. Appointment procedures are implemented taking account of the strategic and professional requirements of the HEI. According to the CVs the practical experience of the teaching staff is in line with the requirements of the programme for teaching. Besides, a number of lecturers have long-year experience in teaching. In addition, the staff's pedagogical/didactical qualifications are in line with their tasks and have been verified. As the panel has come to know, lecturers are regularly offered to take part in further educational and pedagogical trainings.

As affirmed by students during the site visit, the counselling of students by teaching staff is intensive. Student support and coaching are an integral part of the services provided by the teaching staff and are offered on a regular basis. E-mails are answered fairly quickly. Where necessary, the students are given support with academic and related issues. Altogether the students have no complaints at all. Moreover, the panel likes to stress the importance of the study-coordinator. With this position, the HEI is able to offer comprehensive counselling in every phase of the study programme.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
4.	ACADEMIC ENVIRONMENT AND FRAMEWORK CONDITIONS			
4.1	Teaching Staff			
4.1.1*	Structure and Number of Teaching Staff in Relation to Curricular Requirements	X		
4.1.6*	Provision of Student Support / Coaching by Teaching Staff	X		

4.2 Programme Management

The organisation of the MBA Renewables programme is coordinated through a co-operation between the Distance Learning Institute and Department I (Business Administration and Social Sciences) at Beuth University. The director of the programme is responsible for the overall further development of the MBA Renewables programme, including complex enquiries with regards to content and decisions about enrolment of applicants. He also ensures the scientific rigor and the proper level of Master's examinations. Additionally, he is a member of the examination board which was established in the department specifically for the MBA Renewables programme.

The actual management of the programme is done by the study programme co-ordinator at the FSI. The programme co-ordinator acts as the interface between Beuth University, the lecturers and the students. Their responsibilities include the planning of the schedule for each semester, the commissioning of the contracts for work and labour, the introduction of the modules for each semester in co-operation with the lecturers, communication of all important dates and information via the learning management system, evaluation of the semesters, plus planning of the further development of the programme with regard to the results of the evaluation. Individual tutoring for specific questions by the students is also carried by the study programme co-ordinator.

The study co-ordinator guides the students through the whole Master's programme. The students will be getting first hand administrative support as well by the administrative staff dedicated to the MBA Renewables. The contact to the distance learning students is realized mostly via internet, but in individual cases face to face meeting (with students coming to Berlin) are also organized on request by the students. The internet based communication can be online (web conference, Skype, chat, e-mail) or offline (telephone calls, mail).

Even within the university, the institute is responsible for further education. This includes the training programme for employees in particular for the administrative personnel, for example trainings on moodle and Adobe Connect.

Appraisal:

The workflow management, decision-making process responsibilities are set down in the self-evaluation report and are described in an understandable and transparent manner. Also, lecturers and students are involved in the decision-making progress. The programme director and the study programme co-ordinator are responsible for the co-ordination and administration of all aspects of the academic study programme. They ensure that the programme runs smoothly and that it evolves in a way which includes the relevant groups.

The administration acts as a service provider for students and teaching staff. With regard to who is responsible for which tasks, transparency is given. Further education courses for the administration staff are offered.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
4.	ACADEMIC ENVIRONMENT AND FRAMEWORK CONDITIONS			
4.2	Programme Management			
4.2.1	Programme Directors	X		
4.2.2	Process Organisation and administrative Support for Students and Teaching Staff	X		
4.2.3	Advisory Body (Advisory Board) and its Structure and Responsibilities	X		

4.3 Cooperation and partnerships

The Beuth University of Applied Sciences holds a German Academic Exchange DAAD/GATE membership in order to network with universities worldwide. The team of the Distance Learning Institute (FSI) takes an active part in DAAD meetings and conferences regarding the internationalization of study programmes. The continuous exchange with DAAD helps the FSI to improve the international MBA Renewables programme in terms of its organisation, structure and international content. In this way the MBA students directly benefit from the experiences gained from within the DAAD network. Furthermore, the FSI is establishing an international network of universities, DAAD representations and German Cultural institutes (often called Goethe Institutes) in order to ensure the invigilation of written exams by official representatives and/or faculty members of the respective University.

Beuth University of Applied Sciences runs about 130 university partnerships worldwide, half of them focusing on European co-operation (65 in EU countries and associated European countries). Among the remaining partnerships, which are generally well balanced regionally, Beuth University is strongly represented in Eastern Europe, Central/East Asia, and in the Americas in particular. A powerful transatlantic university network with the US (GE4-network) includes 30 American universities alone.

The FSI of the Beuth University of Applied Sciences also co-operates with the University for Sustainability (HNE) in Eberswalde, Germany in order to organise a yearly Master Class Course Conference on Renewable Energies, which takes place in December. The MBA Renewables benefits from this event due to the fact that new research results, economic or technological aspects are acknowledged by the FSI and fed into the training modules.

The Distance Learning Institute (FSI) is currently working together with Global Campus 21 and the Leadership Academy of the German Agency for International Co-operation (GIZ) based in Bonn. This close co-operation with GIZ is of vital importance for the MBA Renewable students as the students benefit from close contact to the international experts of the GIZ network. Some GIZ experts are also involved in the MBA Renewables as authors and/or faculty, and so share their international experiences with the students.

The study co-ordinators and the director of the FSI are also involved in the activities of the International Society for Engineering Education (IGIP) and have published papers and delivered speeches at various conferences (Master Class Course Conference on Renewable En-

ergies, Eberswalde; DAAD,GIZ, Bonn; IGIP, “Arbeitsgemeinschaft Fernstudien” AGF, Berlin), all within the context of engineering education, distance education and/or renewable energies.

The FSI also co-operates with RENAC AG to deliver the Master’s programme. RENAC is a private company with a board of partners and supporters from the fields of renewable energy and energy efficiency. The staff at RENAC has long-standing experience in training, know-how transfer, quality assurance and international dissemination of expertise. RENAC specializes in the conveyance of experience and knowledge on the production, planning and engineering of renewable energy technologies, their financing, marketing and sales, and the opening up of international markets for renewable energy and energy efficiency technologies. RENAC has a “Training Center” for practical exercises and an energy reference library.

The on-campus element of the MBA Renewables takes place at RENAC in Berlin. The RENAC training centre provides training space for solar thermal, photovoltaic, wind energy, hydro power, biogas, geothermal and energy efficiency in both industry and commerce, and buildings. At the centre the MBA Students combine theory with practical exercises – practical exercises and hands-on training alongside theoretical lectures are brought together to make the training comprehensive. In order to further deepen student’s knowledge on practical application, the Beuth University of Applied Sciences and RENAC organise field visits. The training and the field visits to wind parks, photovoltaic plants, solar thermal systems, biogas plants and energy efficient production units are also attended by representatives of the Beuth University and the quality of the training as a whole is evaluated after each practical training session with a written examination invigilated by Beuth University.

Appraisal:

The HEI cooperates with other academic institutions / network with effect on the programme. Especially the cooperation with the DAAD is of advantage for the international profile of the MBA programme.

A strong focus concerning cooperation is, of course, on the cooperation with RENAC. This cooperation served to create the study programme. The tasks of each cooperation partner are defined in the cooperation contract which could be reviewed in full at the site-visit. Via RENAC the study programme is in contact with representatives from the industry which enhances the employability of the students.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
4.	ACADEMIC ENVIRONMENT AND FRAMEWORK CONDITIONS			
4.3	Cooperation and Partnerships			
4.3.1*	Cooperation with HEIs and other academic institutions or networks (Asterisk-Criterion for cooperation programmes)	X		
4.3.2*	Cooperation with enterprises and other organisation (Asterisk-Criterion for educational and vocational programmes, franchise programmes)	X		

4.4 Facilities

As the MBA Renewables is a distance learning programme, the whole programme can be studied online. Only the oral Master's examination has to be taken in Berlin, face-to-face with the board of examiners. In the second or in the fourth semester students are offered the opportunity to attend classes on-campus at RENAC in Berlin to deepen technological know-how with the module Renewable Energy and Energy Efficiency Systems and Concepts, which involves hands-on training in the RENAC Training Centre that is equipped with all necessary devices.

The programme follows a blended learning approach, allowing students to decide when, where and how they learn: materials for self-study, online lectures, video podcasts and exercises for monitoring the learning process are part of the educational services offered. This secures maximum flexibility and enables study at the individual's pace for the whole course. As such, the programme is also available to disabled students without any additional need for specific building equipment, the IT infrastructure is more relevant to the training.

The FSI uses the web based Learning Management System (LMS) Moodle (version 2.3.x) as its central online learning platform. Moodle is one of the oldest Open Source LMS (GPL) systems. It is well documented and has an extensive amount of modules. The Moodle user interface is based on HTML5 standards. It has a variety of simplified navigations to access courses, learning material and communication channels. As an extensive and open system, it is capable of mobile use, which at this time is being developed by the FSI for the future. Self-testing at the end of each learning unit is available through the use of interactive Adobe Flash based quizzes. The MBA Renewables learning environment in Moodle has communicational functions like feedback and forums as well as a calendar and events planner. For online lectures and video podcasts the FSI uses Adobe Connect (™) as a professional and accessible web conferencing platform.

User support has three different levels. For questions regarding Moodle courses and organisational subjects there is a helpdesk via phone, chat, e-mail and Skype available from 8am – 5pm local time. This contact information is documented within the learning platform or sent to the students in advance. Urgent questions outside of these office hours may be answered via a mobile number, e.g. especially when the invigilated written exam takes place. In case of any technical problems that are not solvable by the helpdesk, there is a clear documented process for internal support by the technical staff of the FSI. Any questions regarding Moodle or Adobe Connect are supported by the host department's Online Learning Lab (Labor Online Learning LOL) and the University computer centre (Hochschulrechenzentrum HRZ) at Beuth University. In all cases, a short response time is expected.

In general, access to all relevant study materials for a module is done online through the learning management system Moodle. It is important that when writing the modules and in the development of the examinations the lecturers ensure the examinations can be answered with the provided materials.

Wherever it is possible, lecturers refer to sources and texts available on the internet, or other available online literature are referenced. Before the start of their studies, each student is aware of the advantage of using their local (university) libraries as the students come from all over the world and may only be present in Berlin once during their time of study. The campus library of the Beuth University in Berlin is a modern service where a variety of databases, journals in print and electronic form, e-books, multimedia desks, reading desks and research desks are available alongside books and other print literature. Guides and expert advice are available in German and English. During the two week on-campus time, the students can take advantage of the library just like any other student of the university.

The HEI is currently working with the campus library and the University Computing Centre to ensure that the international students can access e-books and electronic papers from abroad as well. The implementation of this concept is planned for the fall semester of 2013.

Appraisal:

The “virtual rooms” which are needed for this MBA programme are provided via Moodle. The panel had the opportunity to access this platform during the site-visit. The panel members are convinced that this platform serves well for this distance learning study programme. Furthermore, Adobe Connect offers all necessary tools for online presentation, lectures etc. During the site visit, the panel visited RENAC’s facilities as well which are used to the practical module in the second or fourth semester. Their equipment is adequate to the needs of this module. The relevant facilities for the programme are barrier free.

Via Moodle, the HEI provides the students with relevant literature as far as data protection laws allow. The HEI states that they are currently developing a way how foreign students can access the library’s online databases. This is, so far, only possible, for students living in Germany. This, however, is discriminating foreign students and creating a disadvantage for them. All student should have the same comprehensive access to literature, databases etc. Even though the students are generally able to use their local libraries or those of HEIs who have a co-operation with Beuth University, there is no guarantee. Taking into consideration the remarks on the level of scientific work (see chapter 3.2), this is an important aspect. The HEI argues in its response to the report that it is currently working on a solution to this problem. Until this solution is implemented, the students can make use of the libraries of partner universities and institutions abroad. The panel welcomes this possibility but underlines the fact that not all universities and institutions have the same facilities with the same quality. In order to avoid discrimination of students, the HEI must offer the same facilities to all students in this programme.

The panel recommend the accreditation with the following **condition**:

The HEI has to ensure that all students have comprehensive access to literature, including databases and journals.

Legal source: chapter 2.7 of the Regeln des Akkreditierungsrates für die Akkreditierung von Studiengängen und für die Systemakkreditierung” as amended on 23 February, 2012

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
4.	ACADEMIC ENVIRONMENT AND FRAMEWORK CONDITIONS			
4.4	Facilities			
4.4.1*	Quantity, Quality and Media and IT Facilities of Teaching Rooms	X		
4.4.2*	Library Resources		condition	

4.5 Financial planning and financing of programme (Asterisk Criterion)

The Beuth University of Applied Sciences is a public university and is financed through the annual budget of the state of Berlin. With more than 11,200 students it is ranked among the two biggest universities of applied sciences in the state and among the top ten nationwide. The FSI is financed by the university’s annual budget – the projected budget of the FSI is included within the annual budget plan. Through this annual budget allocation the university

guarantees to cover all costs occurring at the institute. Due to this budget allocation the institute is financially backed up by the University.

Since 2009 the FSI reached full cost coverage and is now re-financing itself. The complete annual budget granted by the university is paid back with the help of generated tuition fees. As such it can be stated that the budget plan of the Master's programme does not incorporate any third party, governmental funding or subsidies. The professors, assistant professors and external lecturers are also not paid via their governmental salaries, but by individual contracts issued by the FSI. The contractual procedures of the FSI are agreed upon with the bookkeeping department of the University. All costs of the FSI, such as personnel, the mentioned contracts including online lectures, tutoring and correction work, material costs as well as overhead costs are guaranteed by the annual budget allocated by the university at the beginning of each financial year and are re-financed by the generation of tuition fees. With students' enrolment the University guarantees the right to finish the desired study programme. Even in the worst case scenario in which no student would enroll for the MBA Renewables, the university would back-up the running costs of the higher semesters of the Master's programme. Through this policy the university guarantees the students to finish the MBA programme. This longterm commitment is also agreed upon within the co-operation contract with the FSI's private partner, RENAC AG.

Appraisal:

The HEI has described a short and medium-term financing strategy, which includes a reasonable degree of detail and is transparent. In addition there are agreements concerning the basic funding. A general budget exists. Within the limits of a review process and with regard to financial stability of the HEI in recent years, the panel concludes that financial stability is ensured for the current programme cycle and the entire accreditation period.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
4.	ACADEMIC ENVIRONMENT AND FRAMEWORK CONDITIONS			
4.6*	Financial Planning and Financing of Programme	X		

5. QUALITY ASSURANCE

Quality Management at Beuth University (QMB) is developed, designed and practiced in all areas of activity. It is supported by the central staff unit, Quality Assurance (QA), with a staff of three (soon four) plus student workers who all work closely with the four members of the executive board and the deans of the eight departments as well as student representatives (AStA) and the staff council.

The evaluation which takes place every semester is done by Department 1, the FSI and RENAC AG. In this quality control group all the evaluation charts (provided by the questionnaires filled in by students) are reviewed with respect to the content of the online modules, teaching and coaching processes as well as the workload. In reviews it is discussed whether all the educational objectives (goals) established in the module description of the module handbook are reached (results of the teaching and training). Following this, measures are discussed, actions planned and implemented to further improve the quality of the MBA programme.

RENAC is specifically responsible for the quality of the practical training in the second semester. The evaluation of the practical training is done by the FSI and Department 1 of the University following the same procedures established for online education.

The quality assurance department of the University supports the FSI in their online evaluation with the evasys – evaluation software. Via this channel the evaluations of questionnaires are also accessible to the top management of the University, ensuring full transparency of the evaluation process.

As a continuous measure of quality assurance in the MBA Renewables programme, both the study materials and examinations are evaluated according to the standardized method of the Distance Learning Institute. The evaluation takes place each semester for each module. The evaluation of the FSI (support and organisation of its operation) is also evaluated. If a professor or lecturer is not willing or able to change the teaching process after a bad evaluation, the FSI would not renew the contract and search for a qualified alternative faculty member (external or internal).

The form is evaluated in the Department for Quality Assurance (QA) of the university and the results are then made available to the FSI. The FSI forwards the module result to the respective lecturers. Should the result differ from “very good” or “good” the study co-ordinator discusses the results with the lecturer and if necessary with the students. The procedure is adapted to each individual case by detailed personal interviews, which clarify appropriate actions. The study co-ordinator responds to the criticisms in consultation with the programme director. The revision of the course material and the mentioned discussions with lecturers are part of the continuous improvement process of the MBA Renewables. Further revisions completed by the lecturers can be made by the lecturers in order to incorporate the latest developments in their field of teaching. At the beginning of each semester an introduction to the modules of the semester takes place. In this context selected results of the evaluation are communicated.

So far there are no alumni available from the MBA Renewables. In the fall semester 2013, the first students will start their Master’s thesis. After they have finished their MBA an alumni association will be created to monitor where the graduates are working after their graduation. A monitoring report will be prepared by the head of the alumni club and made available to the quality circle and the advisory board meetings. It is planned for the external evaluation to be done by the advisory board. For this external evaluation the quality circle will provide an annual report about the results of their work. The advisory board will receive and review this report twice a year and will discuss the necessary recommendations for the MBA Renewables. The quality circle and the alumni report will be given to the advisory board. The advisory board issues recommendations every six months and this information will be fed back into the quality management process through the quality circle that issues the list of corrective actions from each semester.

All the necessary information about the MBA programme is published either via the MBA website or by the official announcements. Essential documents which are in German are translated if they are relevant for foreign students, for example study and examination regulations, module descriptions etc.

Online documentation and publication of all activities is realised continuously throughout the study programme making all important information accessible in an easy way for the distance learning students. Furthermore, there is an annual report by the Beuth University which includes information about the FSI and, hence, the MBA programme at hand.

Appraisal:

Evaluation by the students is carried out on a regular basis and in accordance with a described procedure. The HEI handed out a questionnaire which is used for evaluation of the courses and checks among others if the estimated workload corresponds to the actual workload of the students. Currently, there is no evaluation by the teachers yet. This seems to be functioning in an informal way. The panel, nevertheless, recommends including the teachers in the evaluation as well.

As there are no alumni yet, they are not yet included in the quality circle as well. The panel recommends doing so in the future. Employers have been questioned during the creation of the study programme. The panel members strongly recommend continuing this action for the development of the study programme.

Alumni, employers and organisations are involved in the quality circle as well. The panel recommends communicating the results of evaluation to all relevant parties more systematically.

As for the description of the programme content, the panel states that the programme is described in detail and the description is constantly updated. The documentation is available to interested parties and it ensures a high level of transparency. Also, the activities which take place during the academic year are continuously documented and published in annual reports.

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
5.	QUALITY ASSURANCE			
5.1*	Quality Assurance and Development	X		
5.2	Programme Transparency and Documentation	X		

Quality Profile

Institution: Beuth University of Applied Science

Master Programme: MBA Renewables

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
1.	STRATEGY AND OBJECTIVES			
1.1*	Logic and Transparency of Programme Objectives	X		
1.2	Programme Profile	X		
1.3	Gender equality and equality of opportunity	X		
2.	ADMISSION (REQUIREMENTS AND PROCEDURE)			
2.1*	Admission Requirements		condition	
2.2	Selection Process	X		
2.3	Professional Experience (* for Master Programmes of the "further Education" Type)	X		
2.4*	Ensuring Foreign Language Competence		condition	
2.5*	Transparency of Admission Procedure	X		
2.6*	Transparency of Admission Decision	X		

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
3.	PROGRAMME DESIGN			
3.1	Structure			
3.1.1	Structure of the Programme (Core Subjects / or Specialisations (Compulsory Electives) / optional Electives/ practical Components)	X		
3.1.2*	Application of the "European Credit Transfer and Accumulation System (ECTS)" and the Modularisation		condition	
3.1.3*	Study and Examination Regulations		condition	
3.1.4*	Student workload	X		
3.2	Content			
3.2.1*	Logic and conceptual Coherence of Programme / Curriculum	X		
3.2.2*	Rationale for the Qualification Title	X		
3.2.3*	Reasons given for programme description	X		
3.2.4*	Performance in Examinations and Thesis	X		
3.3	Additional Acquisition of Knowledge and Skills	X		
3.4	Teaching Methodology			
3.5.1*	Logic and Transparency of Teaching and Learning Methodology	X		
3.5.3	Accompanying course materials	X		
3.6*	Skills for Employment / Employability	X		
4.	ACADEMIC ENVIRONMENT AND FRAMEWORK CONDITIONS			
4.1	Teaching Staff			
4.1.1*	Structure and Number of Teaching Staff in Relation to Curricular Requirements	X		
4.1.6*	Provision of Student Support / Coaching by Teaching Staff	X		
4.2	Programme Management			
4.2.1	Programme Directors	X		
4.2.2	Process Organisation and administrative Support for Students and Teaching Staff	X		

Quality Ratings		Meets quality requirements	Does not meet quality requirements	not relevant
4.3	Cooperation and Partnerships			
4.3.1*	Cooperation with HEIs and other academic institutions or networks (Asterisk-Criterion for cooperation programmes)	X		
4.3.2*	Cooperation with enterprises and other organisation (Asterisk-Criterion for educational and vocational programmes, franchise programmes)	X		
4.4	Facilities			
4.4.1*	Quantity, Quality and Media and IT Facilities of Teaching Rooms	X		
4.4.2*	Library Resources		condition	
4.5	Additional Services			
4.5.1	Careers Advice and Placement Service	X		
4.5.2	Alumni Activities	X		
4.5.3	Individual Counselling and Welfare Services for students	X		
4.6*	Financial Planning and Financing of Programme	X		
5.	QUALITY ASSURANCE			
5.2*	Quality Assurance and Development	X		
5.3	Programme Transparency and Documentation	X		