

Subject-Specific Regulations for the Master's Degree in Quantitative Economics from 15 February 2013, modified on 1 July 2015

- Non-official translation -

On the basis of § 2 Sect. 4 and § 64 Sect. 1 of the Higher Education Act of the state of North-Rhine Westphalia from October 31, 2006 (GV.NRW.S.474), last amended by law on Dec.18, 2012 (GV.NRW. S. 672), the Faculty of Business Administration and Economics in conformity with the Examination and Study Regulations for Master's Studies (MPO Fw-Studienmodell 2011) at Bielefeld University from August 1, 2012 (Verköndungsblatt der Universität Bielefeld – Amtliche Bekanntmachungen – Jg. 41 Nr. 14 S. 325) officially announces these subject-specific regulations (Appendix to § 1 Abs.1 MPO fw.):

1. Master's Degree (§ 3 MPO fw.)

The Faculty of Business Administration and Economics offers a master's degree program in Quantitative Economics culminating in the degree of "Master of Science" (M.Sc.).

2. Further Admissions Requirements (§ 4 Abs. 1 - 3 MPO fw.)

- (1) The first requirement for acceptance to this program is participation in an admissions procedure in which the application documents are evaluated to determine who may be admitted.
- (2) The application documents must be submitted by the deadline to the Student Office at Bielefeld University. The application documents consist of:
 - a) The diploma certificate for a previous university degree and any additional documentation (transcript, transcript of records, diploma supplement or the equivalent) that gives evidence about the individual study program, the completed modules, the graded tasks completed within the course of studies and the marks achieved and about the individual specialization profile within the course of studies. If the university or professional academy where the applicant received his/her previous degree does not provide such documents, equivalent informative materials must be submitted (e.g. individual course assessments).
 - b) If the diploma certificate for the previous degree has not yet been awarded, a preliminary degree document with a preliminary degree mark and/or a current transcript of records or equivalent informative documentation in accordance with Sect. 2a) must be submitted.
 - c) In addition, the applicant may optionally submit an explanation of not more than 500 words, in which his/her qualifications through a previous degree and additional knowledge and qualifications for the master's degree program are set forth.
- (3) The application documents will be checked to determine whether the previous degree (usually the bachelor's degree) is qualified for admission. Degrees from accredited bachelor's degree programs) at professional academies are considered equivalent to university bachelor's degrees. A qualifying degree will be based on at least six semesters of full-time study and will include 30 CP in the subjects microeconomics, macroeconomics, analysis and linear algebra. The prerequisites in (4) and (7) must also be fulfilled.
- (4) The study content of the previous degree, the individual course marks, as well as the final degree mark (grade point average) will be evaluated with points according to the following criteria. Any additional acquired knowledge and qualifications can only be taken into consideration for the awarding of points if they can compensate for missing content or marks in accordance with the following criteria:

Criteria	Points
Microeconomics depending on number of hours/credits and mark achieved:	0-10
Macroeconomics depending on number of hours/credits and mark achieved:	0-10
Analysis depending on number of hours/credits and mark achieved:	0-10
Linear Algebra depending on number of hours/credits and mark achieved:	0-8
Stochastics depending on number of hours/credits and mark achieved:	0-4
Econometrics depending on number of hours/credits and mark achieved:	0-4
Operations Research depending on number of hours/credits and mark achieved:	0-4
Final mark (grade point average) of the qualifying degree [3,4 – 4,0]:	5
Final mark (grade point average) of the qualifying degree [2,4 – 3,3]:	9
Final mark (grade point average) of the qualifying degree [1,4 – 2,3]:	12
Final mark (grade point average) of the qualifying degree [1,0 – 1,3]:	15
Total Points	0-65

If the final mark (grade point average) is not yet available, a preliminary mark can be accepted. The decision about this acceptance is made by the relevant authority according to § 22 MPO fw. and is also regulated by further procedures.

- (5) A further prerequisite is proof of adequate language proficiency in English because the master's program is conducted in English. This proof is recognized for students educated abroad if their qualifying degree was obtained from an English-speaking institution. Otherwise, English language proficiency must be demonstrated by a language test (TOEFL (iBT) with a minimum of 87 points or telc English with a minimum of Level B2) or by an equivalent language qualification.
- (6) For each criterion the evaluation is carried out by two examination-qualified persons. If their evaluations are not identical the arithmetic mean of the points awarded by each is entered for the criterion in question.
- (7) Applicants are granted admission if they present a qualifying degree and receive at least 40 points in accordance with the criteria in (4) and demonstrate language proficiency in accordance with (5). Applicants will not be admitted if they do not have a qualifying degree and/or according to the criteria in (4) receive less than 40 points and/or cannot demonstrate language proficiency according to (5).
- (8) Applicants will be informed about the result of the admissions procedure by an electronic decision message.
- (9) The relevant authority according to § 22 MPO fw. takes the final decisions about the fulfillment of the admissions prerequisites; it also regulates the further details of the procedure and appoints the examination-qualified persons. This authority also sets the application deadlines and makes all decisions in connection with the admissions procedures.

3. Admissions Procedure (§ 4 Abs. 4 MPO fw.)

- (1) After the determination that the admissions requirements have been fulfilled, it must be determined in a master's program with a limited number of places, whether the number of applicants who have been granted admission in accordance with subparagraph 2 is greater than the number of available places. If this is not the case, all these applicants are admitted.
- (2) If the number of applicants who have been granted admission in accordance with subparagraph 2 exceeds the number of available places, the awarding of study places will be granted to applicants in accordance with the order of the points assigned to them according to subparagraph 4 (2) . If two applicants have the same number of points, the final mark (grade point average) of the qualifying degree will be determinative. If no distinction can be made on this basis, the decision will be made by lottery.
- (3) Admission is granted on the basis of ranking according to (2) by the Student Office. For any other later admission if places become available, (2) and (3) govern the procedure.
- (4) Applicants will be informed about the result of the admissions procedure by an electronic decision message from the Student Office.

4. Beginning of Studies before the Fulfilment of the Admissions Prerequisites (§ 4 Abs. 1 MPO fw.)

Not applicable.

5. Beginning of Studies (§ 5 Abs. 1 MPO fw.)

The course of studies can only be begun in the Winter Semester.

6. Curriculum (§ 7 MPO fw.)

Students can choose the profile “International Track”. If the profile “International Track” is not selected, the following curriculum is valid:

The modules are generally taught in English.

Abbreviation	Module Title	Recommended Semester, Start	CP
24-M-Opt	Optimization for Quantitative Economics	1	7
24-M-Prob1	Probability Theory for Quantitative Economics	1	7
31-M-Macro1	Macroeconomics 1	1	7
31-M-Micro1	Microeconomics 1	1	7
24-M-OuD	Optimization and Dynamics for Quantitative Economics	2	7
31-M-Ectr1	Econometrics 1	2	7
31-M-Macro2	Macroeconomics 2	2	7
31-M-Micro2	Microeconomics 2	2	7
31-M-EI1	Elective Courses 1	3	12
31-M-EI2	Elective Courses 2	3	8
31-M-EI3	Elective Courses 3	3	8
31-M-Master	Master Thesis	4	28
Individual subsidiary subjects (§ 7 S. 3, § 12 MPO fw.)		1	8
Total number of credit points			120

Further information about the modules can be seen in the Overview of the Module Structure in 7. as well as in the Module Handbook.

Profile “International Track”

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24-M-Opt	Optimization for Quantitative Economics	1	7
24-M-Prob1	Probability Theory for Quantitative Economics	1	7
31-M-Macro1	Macroeconomics 1	1	7
31-M-Micro1	Microeconomics 1	1	7
24-M-OuD	Optimization and Dynamics for Quantitative Economics	2	7
31-M-Ectr1	Econometrics 1	2	7
31-M-Macro2	Macroeconomics 2	2	7
31-M-Micro2	Microeconomics 2	2	7
31-M-EI1	Elective Courses 1	3	12
31-M-EI2	Elective Courses 2	3	8
31-M-EI3	Elective Courses 3	3	8
31-M-Master-IT	Master Thesis – International Track	4	28
Individual subsidiary subjects (§ 7 S. 3, § 12 MPO fw.)		1	8
Total number of credit points			120

Further information about the modules can be seen in the Overview of the Module Structure in 7. as well as in the Module Handbook.

7. Overview of the Module Structure

Abbreviation	Title	CP	Necessary requirements	Pieces of non-graded work	Number of graded module (partial) examinations	Weighting of module partial examinations	Number of non-graded module (partial) examinations
24-M-Opt	Optimization for Quantitative Economics	7		1	1		
24-M-OuD	Optimization and Dynamics for Quantitative Economics	7		1	1		
24-M-Prob1	Probability Theory for Quantitative Economics	7		1	1		
31-M-Ectr1	Econometrics 1	7			1		
31-M-EI1	Elective Courses 1	12		0-2	1		
31-M-EI2	Elective Courses 2	8		0-1	1		
31-M-EI3	Elective Courses 3	8		0-1	1		
31-M-Macro1	Macroeconomics 1	7			1		
31-M-Macro2	Macroeconomics 2	7			1		
31-M-Micro1	Microeconomics 1	7			1		
31-M-Micro2	Microeconomics 2	7			1		
31-M-Master	Master Thesis	28		1	1		
31-M-Master-IT	Master Thesis – International Track	28		1	1		

8. Further regulations of Module Examinations, Module Partial Examinations and of Non-graded Work, as well as the Master's Thesis (§§ 10, 11, 13 MPO fw.)

(1) Module examinations or module partial examinations may be of the following forms:

- Written examination of 90-180 minutes or oral examination of 15-30 minutes.
- Portfolio consisting of a midterm (7th/8th semester-week) and a final (in each case a 90-minute written examination or 20-minute oral examination), where the course teacher will assign a final mark for the whole course.
- Elective courses: In accordance with the specifications for the courses chosen from the module handbook, the module examination consists of a portfolio of examination tasks. Various task forms are possible (e.g. seminar presentations, written examinations). The examiners are the teachers of the courses that comprise the content of the module examination. If there is more than one examiner, the final mark is calculated by taking the arithmetic mean of the marks awarded.

Additional task forms, especially for the demonstration of interdisciplinary competences, including media competence, are possible. In this case, as in other cases of deviation from the generally accepted type and duration of the examination, the amount of work required and the qualifications demanded must be comparable. Further specific specifications may be found in the module handbook.

(2) Non-graded work in the course of studies for Quantitative Economics is intended to ensure the acquisition of competences and knowledge in the individual modules. Possible study tasks may be of the following forms:

- The regular completion of practice exercises with demonstrated and recognizable solution procedures. Participation in exercise groups (on two occasions, on demand, class demonstration of the exercise task). The course teacher can replace a part of the assigned practice exercises with exercises to be done in class.
- Presentation of the master's thesis.

Other task forms are possible. If other task forms are assigned, the purpose of the study task and the prescribed length of the task must be taken into account. Further specific specifications may be found in the module handbook.

(3) The master's thesis is a written research paper, which is evaluated by two examination-qualified persons. If the profile "International Track" is studied, the second examination-qualified person must be member of staff at the partner university. The second examiner in this case will be declared examination-qualified by the responsible authority of the Faculty of Business Administration and Economics according to § 22 MPO fw. The master's thesis should generally not exceed 60 pages in length. The allowed working period for the master's thesis is 6 months. The official beginning of the working period is to be documented on file. The thesis is to be submitted in three copies to the examination office of the Faculty of Business Administration and Economics by the specified deadline.

9. Effective Date and Applicability

These subject-specific regulations go into effect on the day following their publication in the official announcement bulletin of Bielefeld University (*Verkündungsblatt der Universität Bielefeld – Amtliche Bekanntmachungen*). The regulations for entrance and admissions procedures (2) and (3) are applicable for the application procedures starting in the winter semester 2012/13.

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