



UNIVERSITÄT BIELEFELD

Faculty of Business
Administration and Economics



Quantitative Economics

Master of Science

Studying in Bielefeld

As a university internationally regarded for its top-level research and innovative teaching concepts, Bielefeld University makes a significant contribution to a progressive and participatory knowledge society. It is an attractive, family-friendly place to work and study and is characterized by an open communication culture, lived interdisciplinarity, diversity and freedom for personal development.

Around 25,000 young people study at the 13 faculties of Bielefeld University, which cover a wide range of subjects in the humanities, natural sciences, social sciences and technology. In addition, a medical faculty is in the process of being established. A degree at Bielefeld University opens doors for young people to national and international job markets. With a variety of subject combinations in the Bachelor's programme, a broadly-based catalogue of elective courses and an interdisciplinary Master's programme students can look beyond the bounds of their subject. Through their academic studies, they not only acquire specific specialist knowledge, but also the ability to think critically and analytically, to reflect upon and to solve problems. These skills are particularly important in preparing them for the challenges arising from an ever more rapidly changing job market. With this in mind, Bielefeld University attaches great importance to the teaching of civil courage, respect, willingness to take responsibility and the ability to work together constructively.

Living in the loveable city of Bielefeld

With more than 335,000 inhabitants, Bielefeld is one of the 20 largest cities in Germany. Bielefeld is greener than almost any other major city - thanks to its location in the Teutoburg Forest and its numerous parks and green corridors, which wind through the city with long hiking routes. If it is the buzz of urban life you seek, there are plenty of bars, clubs and cultural activities at Siegfried Platz - affectionately known by the locals as 'Siggi' - in the west of Bielefeld, at Kesselbrink and on the Boulevard. The mixture of urban flair and almost village-like harmony that makes Bielefeld what it is: an especially loveable city to live in.



Studying Quantitative Economics in Bielefeld

The (Research) Master's degree programme in Quantitative Economics (QE) is organized by the Faculty of Business Administration and Economics and in particular the Center for Mathematical Economics (IMW). Its quantitative analytical approach to economics provides the relevant skills to model and solve economic problems on an abstract level and to transfer the analytic solutions to real world applications. This encourages a flexible and creative approach to complex economic issues like those found typically in the real world.

All courses in the programme are taught entirely in English. Consequently, proof of German language proficiency is not required for admission. Furthermore, graduating with this Research Master's in Quantitative Economics delivers the necessary qualifications for admission to the Faculty's Bielefeld Graduate School of Economics and Management (BIGSEM).

Alongside our strong research orientation, we cultivate close ties to industry in Eastern Westphalia in order to provide our students with not only scientific but also applied training at the highest level.

As a result, those studying for our Master's in Quantitative Economics have the best possible preparation for not only a subsequent scientific career but also for the challenges of the private sector.

Student counselling service

Academic student counselling service

Dr. Lasha Chochua
0521 106-6883, Room V8-110
qe@uni-bielefeld.de

Peer-led student counselling service

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stbwiwi@wiwi.uni-bielefeld.de

Central Student Counselling Service (ZSB) of Bielefeld University

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Further Information

www.uni-bielefeld.de
www.uni-bielefeld.de/studium

Publisher

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Design: communication design | graphic design

Photos: Bielefeld University

Status as of June 2019

Responsible according to the press law: Faculty of Business Administration and Economics
Bielefeld University
www.uni-bielefeld.de

Options

The Master's degree (120 credit points) deepens the competences and knowledge acquired in the Bachelor's degree and develops the thematic focus. The Master's programme Quantitative Economics leads to the Master of Science (M.Sc.)

The Master's degree programme (taught completely in English) in Quantitative Economics teaches students quantitative mathematical methods in economics and prepares them to carry out their own independent work at the cutting edge of research. In their first year, students attend obligatory courses delivering the main scientific and technological skills to conduct their own research. The University offers courses in economics that focus on different methods. Students will undertake research in their own specific field.

- Microeconomics
- Macroeconomics
- Probability Theory and Statistics

In their second year, students specialize in their chosen research field by attending in-depth lectures and seminars that will familiarize them with scientific issues and enable them to develop their own ideas on what to specialize in for the research project that will form their Master's thesis in the fourth semester.

In each semester, students also attend supplementary courses. Here, they are free to choose any courses. However, we recommend attending language courses and courses on intercultural competence when planning an exchange visit abroad. For incoming students, taking German language courses is crucial for being more integrated.

Students are offered various opportunities to gain international experience and intercultural competence. The Erasmus+ Programme enables them to study at universities throughout Europe. Bielefeld University also maintains international cooperation and partnerships with universities on all continents. The International Office advises on all questions concerning the choice of study location, scholarships abroad and applications.

Requirements and application procedure

In order to be admitted to the study programme, students must successfully participate in the application procedure. This procedure establishes suitability for the course and which candidates gain admission. As part of the application process, it is checked whether the applicant has obtained the first university degree that qualifies them for admission. The student must prove this by submitting the degree certificate and any associated documents (Transcript of Records, Diploma supplement or similar). For further information on the admission requirements or the submission of additional documents (language requirements, statements on qualification, exposé, project drafts, etc.), please refer to the current subject-specific regulations of the course programme to be studied on the website of Bielefeld University. This website also specifies regulations on how the individual criteria are evaluated and weighted.

The standard duration of studies is four semesters. The course programme may only be started in the winter semester. This course has restricted admission (local-NC). For the allocation of study places (admission procedure), the overall result of the above-mentioned admission procedure is usually applied and a corresponding ranking is established. In exceptional cases, further criteria will be considered. Information on the structure of the admission procedure can also be found in the subject-specific regulations.

The application procedure is carried out via the online application portal of Bielefeld University.

Information on the application deadline: www.uni-bielefeld.de/bewerbung
Further information can be found in the flyer *Studieren an der Uni Bielefeld*.

Doctoral Studies

Doctoral studies are particularly relevant for students who are aiming for an academic career after graduating with a Master's degree. This serves the further development of innovative research and consists of an independent scientific research project (dissertation) and an oral examination (disputation). In order to provide the best possible support for doctoral studies, Bielefeld University is continuously expanding and strategically developing its dense network of international and national graduate colleges and structured doctoral programmes.

The Faculty of Business Administration and Economics offers optimal conditions for this. There are two types of doctorate:

- as part of the structured doctoral program of BiGSEM
- doctorate with individual profile

Both forms focus on their own research activities. They are completed with a doctorate in economics (Dr. rer. pol.). Doctoral students can be employed at a chair or do their doctorate externally, the doctorate can also be carried out in cooperation with non-university institutions. The Bielefeld Graduate School of Economics and Management (BiGSEM) offers a structured, internationally oriented doctoral program. Within the framework of international cooperation programmes, joint degrees with various leading European universities will also be awarded under the umbrella of the BiGSEM.

The BiGSEM offers its own financial support as well as changing project-specific offers as financing options for doctoral studies. PhD students of BiGSEM can choose between the profiles Economics, Finance or Management and, in addition to their own research, also complete a structured study programme with strong research orientation.

Further information

www.uni-bielefeld.de/nachwuchs/promovieren
www.bigsem.de

Career prospects

Graduates in Quantitative Economics possess excellent training in quantitative economics and business administration methods with a strong international and research-oriented focus. This qualifies them for careers in the public sector such as management consulting, insurance, and banking. The focus on an international training with European diplomas makes the programme increasingly attractive for an internationally oriented labour market.

Moreover, the Research Master in Quantitative Economics provides an excellent preparation for a subsequent doctorate. This is not just due to the knowledge that graduates have acquired in the different modules but also the familiarity with research-related topics gained throughout the entire study programme.

Research at the Faculty of Economics

An analytical-quantitative approach characterises the current research at the faculty.

Among the established focuses of research is Computational Economics – a field in which the faculty is a top player in the international research landscape thanks to its highly visible profile and its success in raising third-party funding. Robust decision making under uncertainty is another established focus mainly carried by the Centre for Mathematical Economics (IMW). The research on Distribution, inequality and heterogeneity that is oriented to both social theory and economic policy is a Faculty tradition. Both decision-making theory and heterogeneity are at the centre of research in economics in general. Thus Bielefeld's engagement with these issues is certainly not unique.

However, the Faculty has been exceptionally successful and innovative in these areas, which is reflected in its publication output and successful bids for third-party funding (including DFG, EU, ZIF) and makes them important research focuses of the Faculty. All three research areas boast an impressive network with national or international research partners.

The more recently established subject area Economic implications of smart products and smart systems is co-ordinated by the Institute for Technological Innovation, Market Development and Entrepreneurship (iTIME).