



**Freie Universität Bozen**  
**Libera Università di Bolzano**  
**Università Lìedia de Bulsan**

## **Faculty of Economics and Management**

### **PhD Program in Economics and Finance**

**Website:** <https://www.unibz.it/en/faculties/economics-management/phd-economics-finance/>

**Duration:** 4 years full-time

**Academic year:** 2022/2023

**Start date:** 01/11/2022

**Official language:** English

#### **Program content:**

The PhD program and the final doctoral thesis require four years of full-time study and research. The doctoral thesis consists of a comprehensive introduction appropriate to the requirements of the research field, a number of scientific research papers (at least three independent articles) at different stages of publication in recognized, preferably peer-reviewed scientific journals, proceedings or editor's volume, and a concluding summary that acknowledges the own scientific contribution, identifies limitations and outlines future fields of research.

In order to ensure the quality of the program and to evaluate the performance of the doctoral students, there are regular reviews of each student's progress in terms of their knowledge and research. These are mandatory for admission to the next year of the program.

#### **Program structure:**

The PhD program requires the acquisition of a total of **180 credit points (CP)**, as follows:

##### **Frontal teaching at UNIBZ (mandatory) 40 CP**

Career orientation and scholarly ethics (1)

Philosophy of Science (3)

Basic Statistical and Econometrics Methods (6)

Basic Economic and Management Theories (4)

Advanced Quantitative Methods (6)

Advanced Theories: Finance, Macroeconomics and Microeconomics (9)

Applied Microeconomics, Finance and Accounting (9)

Writing and Reviewing Academic Articles (2)



### **Specialized PhD Education (mand.) 30 CP**

At least five 'modules' of instruction from summer courses, classes at other institutions or similar courses, depending on special research focus and individual needs.

PhD supervisors assist students in defining and selecting these type of activities with reference to the particular research objectives and questions, and evaluate their success.

### **Conferences / Research Seminars (2nd, 3rd and 4th year) 40 CP**

Papers accepted for peer-reviewed international conference (10 CPs each, mandatory)

Papers accepted for peer-reviewed national conference (5 CPs each, free choice)

Participation in other seminars (2 CPs each, free choice)

The PHD supervisor and the PhD program committee will help the student to find these type of activities, as well as support and access their participation.

### **Research Presentations (mand.) 50 CP**

Research Proposal (end of 1st year) (10 CP)

Progress Report and Working Paper (end of 2nd year) (20 CP)

Progress Report and Working Paper (end of 3rd year) (20 CP)

PhD supervisors will assist students in preparing for the annual review and submit an evaluation proposal to the PhD program committee (Collegio). The Collegio decides on the continuation of the research and the scholarship.

### **Study abroad (mand.) (2nd and 3rd year) 20 CP**

Completion of at least four months abroad.

The Phd supervisor and the PhD program committee will help students to set up their study abroad, as well as support and access their participation.

Further extracurricular activities may be attended, as an enrichment of the program, at any other university with which Unibz has entered into special agreements.

### **Program timeline:**

#### **1<sup>st</sup> year**

The PhD student must propose a first and a second supervisor who will be officially assigned by the PhD program committee. One of the two supervisors must be a member of the PhD program committee. This assignment should be done as soon as possible.

The first year primarily serves to impart knowledge within the framework of general and specialized courses. Each doctoral student has a personal budget to attend for example specialized courses at other institutions. Depending on the area of specialization, doctoral students will be introduced to the writing of scientific articles (e.g. literature review) already in the first year.

Admission to the second year is decided by the PhD program committee. In addition to a minimum number of credit points to be achieved in the basic courses (at least 24 out of 34 CPs), a complete research proposal with research objective and questions; theoretical and empirical approach; project plan including scientific output needs to be submitted. The research proposal will be evaluated by the

first and second supervisor and presented to the PhD program committee. PhD students may be required to revise their proposal within a reasonable period of time ('accepted with revisions'). In the worst case, the proposal is rejected and the student will not be passed to the next year.

## **2<sup>nd</sup> year**

The second year of study serves to deepen one's knowledge about the relevant methods and theories that are necessary for understanding and researching the selected economic issues and phenomena. This is done in close coordination with a student's supervisor and is typically accomplished with the attendance of specialized seminars, summer schools or courses at international research institutes and universities.

Since a successful academic career increasingly needs skills of appropriate communication of research content and teaching, specialized courses and voluntary supplementary tutorials, for example within the framework of Studium Generale, are part of the structured doctoral training.

In addition, doctoral students will be enabled and supported to write scientific papers in cooperation with other researchers and to succeed in competitions (especially international, peer-reviewed conferences and journals).

During the last months of the second year, PhD students must draft and submit a complete working paper as well as an updated report on the progress of the research activities ("progress report"). The latter will state the activities carried out in the current year and describes the research and publication plan for the next 2 years. The progress report will be presented to the PhD program committee and other interested members of the faculty.

The amount and content of the compulsory study abroad, the attendance of complementary courses or courses that are still missing along with working paper and the progress report will be evaluated by the PhD program committee. A positive evaluation is a prerequisite for admission to the third year of study.

## **3<sup>rd</sup> year**

In the third year of their studies, doctoral students should concentrate on carrying out, continuing and communicating their research, both at the Free University of Bozen/Bolzano and in the context of visits to international research institutes and universities.

With the support of the supervisors, particular focus will be on the successful submission of research papers to academic journals, conferences or working paper series of the sector.

As in previous years, candidates must submit a report on the results achieved. Again, submitted articles and/or working papers and an updated progress report must be submitted in the last months of the PhD year. These will be presented to the PhD program committee and other interested members of the faculty.

The completion of all outstanding mandatory components of the PhD program except for those scheduled for the final year and the positive evaluation of the achieved research outputs and activities (e.g. accepted conference paper) by the PhD program committee are again prerequisites for admission to the final year of study.

## **4<sup>th</sup> year**

In the last year of the PhD program, the scientific articles must be revised ('rewrite and resubmit'), more must be written if necessary and the cumulative dissertation outlined above must be written. In order to avoid misunderstandings, it is explicitly pointed out that the preparation of at least three

research papers is expected, i.e. independent and distinguishable research papers that have either been successfully submitted to journals in the field or are at least in the supervisors' opinion worthy of publication. Candidates will receive clear instructions regarding the publication strategy from their supervisors and from the PhD program committee.

In the case of multiple authorships, the doctoral candidate must ensure that the personal contribution recognized by the other authors exceeds 1.5 for three contributions (= > 50%).

Ideally at least one article will have been published or accepted for publication in a "ANVUR A journal" ([www.anvur.it](http://www.anvur.it)) by the time the dissertation is submitted.

PhD students will also be encouraged and supported to prepare for the job market. It should be stressed that the academic job market is highly competitive.

### **PhD Teaching activities:**

In the following paragraphs an overview is provided regarding the mandatory courses of the PhD program (for details refer to syllabi).

#### *Career orientation and scholarly ethics (1 CP)*

On the one hand, the introductory lecture presents especially scholarly career options and paths and criteria which will be applied by employers. Due to the increasing competition among scholars, but also due to the increased transparency, several cases of unethical behavior, also by social scientists, have been highlighted recently. The introductory course sheds light on the problem and offers orientation with regard to different forms of possibly unethical behavior of scientists and researchers.

#### *Philosophy of Science (3 CP)*

Following a consideration on the incentives to do "bad science" in the system of academic publishing, the module introduces to a fundamental reflection on scientific explanatory models and, more generally, on hypothetical thinking. Based on a discussion of the main positions of contemporary theory of science, the following questions will be asked with respect to economic theory: What is a hypothesis or basic assumption? What is an operative concept? What is the scope and what are the implications of a scientific definition? To what kind of hazard is model building exposed? The discussion of these questions aims, not least, at raising the awareness of the scientist's responsibility in society.

#### *Basic Statistical and Econometrics Methods (6 CP)*

The course starts with a focus on concepts and methods of data collection and management. Building on this, the main part of the course is devoted on data analysis. In this context, an overview of relevant methods, especially linear regression and panel data models applying important software programs (e.g. STATA and R) is given. The course emphasizes an application orientation by using examples from economics and management.

#### *Basic Economic and Management Theories (4 CP)*

In many economics journals, successful applications require applying theories to describe the object of research and to derive propositions and hypotheses, as well as developing or at least testing these theories in one's own studies. General economic theories such as agency theory, transaction cost theory or property rights theory are also frequently applied in the field of management, as are more behavior-based theories such as the theory of planned behavior or theories of behavioral decision-making in economics. Therefore an overview is offered for both doctoral programs.

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#### *Advanced Quantitative Methods (6 CP)*

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This course divided in modules reviews advanced quantitative methods and procedures (including related software) for economics and finance, such as time series modelling, pricing, optimization, uncertainty. Part of the teaching will also be devoted to the topics of big data and machine learning.

*Advanced Theories: Finance, Macroeconomics and Microeconomics (9 CP)*

The course introduces the latest economic and financial theories. The course in the three modules advances master level knowledge by presenting new theoretical developments in finance, macroeconomics and microeconomics.

*Applied Microeconomics, Finance and Accounting (9 CP)*

This course will focus on empirical analysis. The modules of the course will cover behavioral and experimental economics; empirical finance; risk evaluation and ambiguity; and corporate disclosure.

*Writing and reviewing academic articles (2 CP)*

In this seminar-based course, doctoral students will learn about the particularities of academic writing and the publication and review process. The aim of the course is to develop the skills (structure, technique and process) of scientific writing in English by analyzing concrete cases. The learning of scientific writing, especially in English, is mainly promoted by the PhD student's supervisor for the specific fields.

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**Research Seminars:**

Active attendance at the research seminars offered each academic year (guest lectures by leading scientists in the faculty's research areas) is highly recommended. The supervisor of each doctoral student may decide to make attendance mandatory and he or she may propose the awarding of credits.

**Special research areas of the PhD program:**

*Economic Policy Analysis*

This research area analyses, from an economic perspective, current phenomena and issues with high relevance for political decisions at regional, national and international level. Relevant topics include immigration, the economics of altruism, racial discrimination, health economics and policy, climate policy, the impact of policy on economic choice and development, economic literacy, agricultural policy and environmental regulation. Quantitative and qualitative methods are used to achieve valid results and provide concrete policy recommendations.

*Financial Markets and Regulation*

On the basis of theoretical, quantitative and empirical work, financial and information management processes and institutions that influence decision-making are analyzed. The research focuses on the role of institutions such as financial analysts, auditors, rating agencies and financial markets in corporate decision-making.

*Quantitative Methods and Analysis of Big Data*

The use of big data to answer economic/financial questions is the subject of research. Both the methodological part with the study of new econometric/mathematical/statistical methods to process large databases and the empirical part where these methodologies are applied are developed. Attention is also paid to the development of software packages.

### Energy Economics

Energy markets have experienced exceptional changes in the last decade and the revolution is supposed to continue in the future. The research focuses on market formation, modelling and predicting energy commodity prices and quantities, understanding energy financial markets.

#### **Research orientation at the Faculty of Economics and Management:**

The Faculty of Economics and Management has an international orientation and offers a wide range of research opportunities in relevant economics and finance fields within the framework of the three special research areas mentioned above and the faculty's research clusters. Exemplary research topics are regularly updated and published. Collaboration on internal and external research projects is encouraged. It should be noted that topics outside of these subject areas can only be supervised in exceptional circumstances.

Research at the Faculty of Economics and Management can be characterized as international, interdisciplinary, and with methodological rigor.

Faculty members have strong networks in their specific research area of the scientific community, which allows for engaging PhD students in multiple ways with the academic community.

Additionally, the PhD program committee includes four external members from international institutions, who have numerous publications in renowned scientific journals, an extensive scientific network and experience, from which doctoral students can benefit on request.

Interdisciplinary research is encouraged in various ways. We expect PhD candidates to be open-minded. The Free University of Bozen-Bolzano, located in the Euroregion Tyrol-South Tyrol-Trentino, offers specific opportunities for interdisciplinary research.

The foundation of producing relevant research is competence and rigor with regard to theoretical and methodological approaches and techniques. PhD students are educated in advanced quantitative and qualitative research methods. In addition, they will be learn the main economic and management theories, which will be further developed and applied by Phd-students independently during their research activity.

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#### **Benefits of the PhD program for external stakeholders:**

The PhD course has the potential to attract high quality lecturers and researchers to South Tyrol and Italy, which gives the program added value. Thanks to the involvement of doctoral students in the Faculty's research macro-areas, concrete results are expected that can be transferred to the regional level, the public administration and the South Tyrolean economy.

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#### **Admission procedure and requirements:**

Candidates who are about to complete their studies but do not yet hold a Master's degree (120 ECTS credits) or an equivalent foreign title can be provisionally admitted to the selection process. However, they must match the formal admission requirements by means of a current and certified grade sheet of their university and obtain the required titles (including the required grade point average) within the

31st October of the year in which the admission process takes place. If this is clearly impossible, the candidate will be excluded from the admission process.

The selection committee may establish evaluation sub-criteria until the expiry date of the call. However, these sub-criteria must be submitted before the central PhD Office provides the selection committee with the list of candidates admitted to the selection procedure.

The selection relies on the evaluation of qualifications and exams.

The selection committee can assign up to a maximum of 100 points.

The selection is open to candidates who meet the following requirements:

- a) Master's degree in the indicated degree classes (LM-16, LM-18, LM-40, LM-56, LM-62, LM-63, LM-76, LM-77, LM-82, LM-83, LM-31) or equivalent qualification with a final mark of at least **100/110** in the Italian grading system. For the conversion of foreign grades the selection committee will adopt the following formula:

$$\text{Voto} = \frac{V - V_{\min}}{V_{\max} - V_{\min}} * (I_{\max} - I_{\min}) + I_{\min}$$

V= grade to be converted (voto da convertire)

Vmin= minimum passing grade at the foreign university (voto minimo per la sufficienza dell'Università di provenienza)

Vmax= highest final grade at the foreign university (voto massimo dell'Università di provenienza)

Imin= minimum passing grade at italian universities (voto minimo per la sufficienza delle Università italiane): 66/110

Imax= highest final grade at italian universities (voto massimo delle Università italiane): 110/110

In the case of candidates not yet in possession of the master's degree a grade point average of at least **27/30** on the Italian scale is required for the examinations taken as part of the master's degree or equivalent qualification.

- b) adequate language skills:

Applicants whose mother tongue is not English must document their language skills by presenting a language certificate (**minimum level C1**), such as TOEFL, IELTS or the First Certificate in English (grade "A") - recognized by the Language Centre of the Free University of Bozen/Bolzano (<https://www.unibz.it/assets/Documents/Languages/unibz-recognised-language-certificates-2019-2020.pdf>). Knowledge of English may also be demonstrated by qualifications (secondary school/bachelor/master) related to a program held entirely in English. In this case, Italian and EU candidates must declare this on the pre-enrolment portal. Non-EU citizens must upload a copy of their diploma and any additional documentation indicating the language of instruction related to the foreign qualification.

Language skills are demonstrated on the pre-registration portal (in the "upload language certificates" and/or "register for language examinations" sections) after completing the pre-registration form in the "create/manage applications" section.

**If the language skills are demonstrated by a high school diploma/diploma or master's degree or respective self-declaration, the document must also be uploaded a second time in the above section.**

Applicants must enclose the following documents with their application, otherwise they will be excluded from the evaluation and selection process:

- a) **Master degree certificate/exam transcript** with grade point average: in the case of a master's degree awarded at an Italian university, certificates **need to** be replaced by a self-declaration or diploma supplement.
- b) **Language certificate** for English: if certificates were issued by Italian public institutions, a self-declaration must be uploaded in the portal. If certificates were issued by foreign public institutions, a scanned copy of the original certificate must be uploaded in the portal.
- c) **Curriculum vitae**
- d) A **research statement in English** (pdf-format, max. **1,200 words** plus bibliography, tables, graphs, if applicable), which is scientifically rigorous and highlights the applicant's particular research interest and possible research questions as well as conceptual and methodological approaches. The research interests expressed in the research exposé must be related to the research priorities of the faculty and take into account the availability of supervisors in the proposed research area.
- e) payment of the **registration fee for the selection procedure**.

All documents must be submitted in English (including copies of official certificates if they are in languages other than English, German or Italian), otherwise the applicant will be excluded from the evaluation and selection process without further consultation.

Two recent **letters of reference** from current or former professors, supervisors of theses or employers, which have been specifically prepared for the application to this PhD-program, are strongly recommended.

#### **Other documents/qualifications (recommended, if applicable)**

Publication list if relevant; preferably with respective links to the full-text. Certificates of special courses or awards and special achievements of relevance with regard to the PhD program.

### **SELECTION PROCEDURE**

The selection procedure takes place in two stages:

#### **Stage 1: Evaluation of the candidates' scientific qualification and suitability on the basis of written documents (qualifications) (max. 70 points).**

The selection committee examines and evaluates the following elements:

- a) The **Master's final grade** or the grade point average of examinations taken in the Master program (in the case of candidates not yet in possession of the master's degree) (total max. 5 points).
- b) **Closeness of previous education** and qualifications to the subject content of the PhD-program in Economics and Finance, i.e. scientific proximity (max. 25 points).
- c) **Quantity and quality of scientific publications and/or research-related work experience** (only those that match the subject content of the PhD-program in Economics and Finance will be considered), if this represents added value for the PhD program and the targeted research area (total max. 5 points).
- d) **Comprehensive evaluation of the curriculum vitae and letters of recommendation.** If the candidate has a very good GMAT or GRE test (not older than five years), it will be credited here. (total max. 20 points).



Candidates who do not reach a threshold of **35 points** (out of 55 points) in the evaluation of criteria a) to d) are **declared ineligible** at this stage and their research statement is not evaluated.

- e) **Evaluation of the research statement** by designated or potential supervisors and/or other experts in the research field (max. 15 points)

Candidates who reach **at least 45 out of max. 70 points** in the assessment of criteria a) to e), including **at least 10 points for the assessment of the research statement** under e), will be admitted and invited to the personal interview.

### **Stage 2: Personal interview (max 30 points)**

The further assessment of applicants' qualifications and their suitability for research is based on an interview (oral examination) (max 30 points).

During the interview, the selection committee will assess the following elements in particular:

- The applicant's preparation, education and specific suitability for academic research in the field of Economics at the Faculty of Economics and Management.
- The ability of the candidate to present his/her research interest and ambition and corresponding competencies and skills in a convincing manner in English.

### **Results**

Applicants are considered suitable if they score at least 20 out of max. 30 points for the interview (oral examination) and a total of 65 out of max.100 points.

Based on the evaluation procedure described above, the selection committee will rank candidates eligible for admission to the PhD program and the scholarships according to the number of points they have achieved.

In the case of equal ranking, the younger candidate (age) has priority.

The ranking of the winners will be published on the digital notice board and on the website of the Free University of Bozen-Bolzano **within 28.09.2022**.

### **Selection committee**

The selection committee consists of the following members:

Prof. Giacomo De Luca (Head), Prof. Francesco Ravazzolo, Prof. Federico Boffa, Prof. Claudia Curi.

Substitute member: Prof. Linus Siming, Prof. Steven Stillman

Additional member with consultative vote for the received applications, which explicitly refer to the scholarship financed by the Alperia Trading GmbH: Dr. Diego Ganz or a substitute member appointed by his institution.

### **Examination/interview dates:**

<b>Description</b>	<b>Date</b>	<b>Place (if personally, otherwise online)</b>
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Online Interviews with short-listed, qualified candidates	19th September 2022 (no exceptions)	Via TEAMS or Zoom
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**Intake and grants:**

Intake with grants from the University:	<b>2</b>
Intake with other grants	<b>1</b>
Intake with no grant:	<b>1</b>
Maximum intake overall for the a.y. 2022/23	<b>4</b>

* Scholarship with fixed topic: 1		
Topic		External Funding institution
"Mercati finanziari derivati sull'energia e come gli sviluppi macroeconomici nazionali e globali influenzano le loro dinamiche"	1	Alperia Group

**EXTERNALLY FUNDED SCHOLARSHIPS \***

In case of applying for this externally funded scholarship, the candidate needs to explicitly express his/her interest and needs to submit a topic-specific research statement (see above). It should be noted that conducting this research requires language proficiency in **English and German or Italian**. A separate ranking will be established for this scholarship. However, only candidates who meet the general admission criteria for the PhD Program in Economics and Finance in the selection process can be ranked.