OFFICIAL TRANSLATION OF

Studienordnung für den strukturierten Promotionsstudiengang Research in Business Administration der Fakultät für Betriebswirtschaft

Vom 10. Juli 2024

THIS TRANSLATION IS FOR INFORMATION ONLY – ONLY THE GERMAN VERSION SHALL BE LEGALLY VALID AND ENFORCEABLE!

**Academic Regulations
for the Structured Doctoral Degree Program in Research in Business Administration of the University of Hamburg Business School**

dated 10 July 2024

On 10 July 2024, the University of Hamburg Business School at the University of Hamburg ratified these Academic Regulations in accordance with Section 91 subsection 2 number 1 HmbHG dated 18 July 2001 (HmbGVBl p. 171) as amended on 11 July 2023 (HmbGVBl. p. 250, 254).

Preamble

These Academic Regulations supplement the provisions of the Doctoral Degree Regulations from the University of Hamburg Business School dated 10 July 2024 and describe the objectives, content, and structure of the Doctoral Degree Program in Research in Business Administration. Admission requires eligibility for doctoral studies in accordance with the current doctoral degree regulations at the University of Hamburg Business School. Participation in the study program is optional for doctoral candidates. The completion of the doctorate is not dependent on certification for the study program. The University of Hamburg Business School is responsible for the organization and design of the doctoral program, which is also supported by the Hamburg Research Academy (HRA).

Section 1
Study objective

(1) The aim of the doctoral degree program is to qualify students for independent academic research in the field of business administration, by acquiring advanced theoretical, methodological, and interdisciplinary qualifications in a structured manner. The aim is also to improve doctoral candidates' self-organization and promote their networking with other people working in science.

(2) The Certificate of Research in Business Administration awarded on the basis of successfully completed coursework in the doctoral program is intended to facilitate access for doctoral graduates to research institutions and those institutions that require business-oriented research activities.

Section 2
Standard period of study/enrollment and membership in the program

(1) Pursuant to these academic regulations, the regular period of study for the doctoral degree program is six semesters or three years.

(2) Enrollment in the program occurs on admission to the doctoral degree.

(3) Program membership ends without notification on successful completion of the program or the doctorate or on discontinuation/termination of doctoral studies.

Section 3
Scope of the study program/credit points

Work completed (attendance, independent study, coursework) for the individual courses in the program is recorded in ECTS credits. As a general rule, 1 ECTS credit corresponds to 30 hours of work. As a rule, a course totaling 1 credit hour per week corresponds to 2.5 ECTS credits. The doctoral degree coursework component encompasses 32 ECTS credits.

Section 4
Coursework

(1) The doctoral degree program is divided into three areas. (a) methodology area worth 10 credit points, (b) specialization worth at least 10 credit points and (c) supplementary worth at least 12 credit points. The degree program is based on the following structure:

a) Basic modules (10 ECTS)

Course name	Course type	Credit hours per week	Required Elective
Econometrics	Seminar	5 ECTS credits / 2 credit hours per week	
Survey Research	Seminar	5 ECTS credits / 2 credit hours per week	
Advanced Modeling and Optimization	Seminar	5 ECTS credits / 2 credit hours per week	at least 2 out of 5 courses
Matheuristics	Seminar	5 ECTS credits / 2 credit hours per week	
Other Advanced Research Methods	Seminar	5 ECTS credits / 2 credit hours per week	

b) Area of specialization (at least 10 LP)

Course name	Course type	Credit hours per week	Required Elective
Seminars/workshops on content, methods, software, theories (general or focus-specific)	Seminar/workshop	10 ECTS credits / 4 credit hours per week	Elective module

c) Supplementary area (at least 12 ECTS credits)

Course name	Course type	ECTS credits	Required Elective
Seminars/workshops from the University of Hamburg doctoral qualification program (e.g. academic writing, project management)	Seminar/workshop	2 ECTS credits LP 1 credit hours per week	Elective module
Doctoral colloquium Doctoral workshop Conference	Lecture at doctoral colloquium, doctoral workshop or conference presentation	4 ECTS credits per presentation at a conference (at least 1 x)	Required Elective

(2) Services can be provided through courses offered by the University of Hamburg/HRA as well as external courses of equivalent quality.

(3) An overview of the study program in the methodology area is attached to these study regulations as an appendix.

(4) The Graduate School of the Faculty of Business, Economics and Social Sciences must publish procedures for course registration and a detailed description of available courses in an appropriate manner.

(5) Lecturers named in the announcement of courses by the Graduate School of Business Administration are appointed as examiners.

Section 5
Course types

Courses consist of, in particular:

Course type and didactic concept	Teaching load ECTS credits	Teaching load Credit hours per week	Group size
Workshops require active participation from doctoral candidates, and provide participants with the opportunity for reflective and goal-oriented academic work under the guidance of a person with specialist expertise.	Usually: 5	Usually: 2	Usually: 10
Seminars are designed to address and examine scholarly problems using academic theories and methodologies. Seminars are largely shaped by active student participation.	Usually: 5	Usually: 2	Usually: 10
Presentations at colloquia and **conferences** provide academic exchange for qualification purposes.	Usually: 2 or 4		

Section 6
Completed coursework

(1) The successful completion of each course is contingent upon regular attendance by the doctoral researcher and the completion of coursework. A "pass" or "fail" will be awarded. A certificate of attendance is sufficient for seminars/workshops in the supplementary area. Lectures are deemed to have been delivered when the lecture is held.

(2) Coursework that must be completed in order to successfully complete a course is announced before or at the start of a course. The type and scope of coursework to be completed will correspond to the estimated amount of work reflected in the ECTS credits.

(3) If a doctoral researcher has a valid reason for not attending a class or a course, he or she must explain this to the responsible lecturer.

Section 7
Recognition of other work for credit

The doctoral candidate may apply to the Graduate School of Business Administration for the recognition of credits earned elsewhere in terms of achieving the study objective in accordance with Section 1.

Section 8
Transcript of records

(1) The successful completion of the degree program will be documented in a transcript of records recording academic performance and completed coursework. The transcript of records is issued after completion of the study program.

(2) A certificate, signed by the Chairperson of the Graduate School of Business Administration, will be issued on successful completion of the study program.

Section 9
Effective date

These academic regulations become effective on 10 July 2024. Doctoral researchers in the faculty already enrolled at this time can register for the doctoral degree program. They will be sent a request to do so by a specific date.

Hamburg, 10 July 2024
University of Hamburg
University of Hamburg Business School

Appendix to the Study Regulations for the Doctoral Program Research in Business Administration of the University of Hamburg Business School

Module description of the courses in the methodology area

1) Econometrics
Course value: 2 credit hours per week / 5 ECTS credits

Objectives:

The main goal of this course is to give an introduction to advanced topics in Econometrics with a focus on causal inference. Economics and Business Administration has a strong focus on identification and estimation of causal effects (program evaluation) which has been an active field of research in the last decade in statistics, economics and many other fields. Doctoral students should be prepared to conduct empirical studies on a research level, understand potential problems and pitfalls in empirical studies, and able to find potential solutions.

Topics:
- Introduction to Causal Inference/Basic Framework
- Methods for Causal Inference (Diff-in-Diff, IV, Propensity Score Matching, Randomized Control Trials, ...)
- Recent developments

Student evaluation:

Either an oral presentation of a recent paper, written summary of a recent research paper, or own research proposal.

Teaching language: English, if not announced in a different language

2) Survey Research

Course value: 2 credit hours per week / 5 ECTS credits

Objectives:
This course is designed to lay the foundations for survey-based research in different areas of business administration. It covers a range of topics, for example, preference measurement, measurement models for complex constructs, structural equation models, moderation and mediation, multi-collinearity, heterogeneity, endogeneity, and common method bias. Rather than studying these methods in depth, students learn about the basic principles behind the different methods, their strengths and weaknesses, and best opportunities for application. Students thus get an overview of what is in the toolbox, so that they can pick the appropriate methods for their research.

Prerequisites: Students should have a solid foundation in statistics and be familiar with the basics of multivariate data analysis.

Student evaluation:
Students will be evaluated based on one or more of the following (details will be provided at the beginning of the course):
- Presentation
- Participation in class discussions
- Exercises
- There are no written exams.

Teaching language: English, if not announced in a different language

3) Advanced Modelling and Optimization

Course value: 2 credit hours per week / 5 ECTS credits

Objectives:
This course introduces students to the fundamentals of linear and combinatorial optimization and equips them with a set of advanced modeling tools. Students learn to formulate optimization models as mixed-integer linear programs, how to solve them with standard software and how to construct heuristic solution algorithms. Successful participants will be able to deal with the complexity of real-world decision problems via aggregation, relaxation, and decomposition techniques.
This course is aimed at doctoral students in information systems, business administration, and computer science. It provides an advanced understanding of linear and mixed-integer optimization models and solution methods.

The course is taught in part in a seminar-style format. Topics will be allocated to students in class.

Student evaluation:
- Successful completion of work assignments
- A successful presentation

Teaching language: English, if not announced in a different language

4) Matheuristics

<u>Course value:</u> 2 credit hours per week / 5 ECTS credits

<u>Objectives:</u>
Matheuristics are optimization algorithms based on the interoperation of metaheuristics and mathematical programming techniques. Metaheuristics and matheuristics support managers in decision making with tools providing high quality solutions to important problems in business, engineering, economics and science in reasonable time horizons. While finding exact solutions in these applications still poses a real challenge despite the impact of recent advances in computer technology and the significant interactions between computer science, management science / operations research and mathematics, (meta-) heuristics still seem to be the methods of choice in many (not to say most) applications.
In this course we provide insight into the state of the art of matheuristics. This focuses on the significant progress regarding the methods themselves as well as the advances regarding their interplay and hybridization with exact methods. This course introduces students to the fundamentals of matheuristics and equips them with related solution methods and tools. The course is aimed at doctoral students in information systems, business administration, computer science, and related fields. Students learn to develop methods for solving related optimization problems using metaheuristics and mathematical programming. Successful applications are developed and discussed.

<u>Student evaluation:</u>
- Successful completion of work assignments

<u>Teaching language:</u> English, if not announced in a different language

5) Advanced Research Methods

Course value: 2 credit hours per week / 5 ECTS credits

Objectives:
In this course students will receive training in advanced research methods not related to modules 1)-5) (Econometrics, Experiments, Survey Research, Advanced Modelling and Optimization and Matheuristics) which do not qualify to be a further specialization. Thus, the content of this course has to be applicable for research in business administration and/or economics, for example qualitative methods.

Student evaluation:
Students will be evaluated based on one or more of the following (details will be provided at the beginning of the course):
- Presentation
- Participation in class discussions
- Exercises
- There are no written exams.
- Successful completion of work assignments

Teaching language: English, if not announced in a different language