The English version of the curriculum for the "PhD Program in Economics" is not legally binding and is for informational purposes only. The legal basis is regulated in the curriculum published in the University of Innsbruck Bulletin on 22 October 2008, issue 5, No. 41.

Decision of the Curriculum Committee of the Faculty of Economics and Statistics on 10.03.2008, approved by Decree of the Senate of the University of Innsbruck on 26.06.2008 and decision of the Curriculum Committee "Doctoral Program in the Social and Economic Sciences" at the Faculty of Social Sciences, Economics and Business of the Johannes Kepler University of Linz on 13.06.2008, approved by Decree of the Senate of the Johannes Kepler University of Linz on 14.10.2008:

Curriculum for the joint **PhD Program in Economics**

at the Faculty of Economics and Statistics of the University of Innsbruck and

the Faculty of Social Sciences, Economics and Business of the Johannes Kepler University of Linz

§ 1 Qualification Profile

- (1) The joint PhD Program in Economics of the Faculty of Economics and Statistics of the University of Innsbruck and the Faculty of Social Sciences, Economics and Business of the Johannes Kepler University Linz belongs to the group of studies in the social and economic sciences as defined by § 54 para. 1, Universities Act 2002.
- (2) Graduates of the PhD Program in Economics will mostly:
 - 1. conduct theoretical and empirical research in economics and publish on an international level,
 - 2. teach in the economic sciences,
 - 3. apply theoretical and empirical research methods to solve economic questions and develop these methods to make them applicable to new questions.
- (3) Graduates of the PhD Program in Economics find career opportunities, among others:
 - 1. at universities
 - 2. in research institutions and other post-secondary educational institutions
 - 3. in research departments of the European Central Bank, the Austrian National Bank, of commercial banks, rating agencies, regional development organizations, market research institutions, and in other enterprises and commercial organizations
 - 4. in research departments of international organizations, for example the OECD (Organisation for Economic Co-operation and Development), EU (European Union), IMF (International Monetary Fund) or the World Bank
 - 5. in research departments of public institutions, interest groups, and NGOs (non-governmental organizations)

- 6. in politics and the media industry
- (4) Educational objectives: Graduates of the PhD Program in Economics acquire the competences
 - to write scientific publications according to the international standards of reviewed publications;
 - 2. to integrate into international research network;
 - 3. to develop independent research programs with scientific integrity, to successfully submit them to national and international research funding organization, and to carry them out;
 - 4. to communicate about their special field in their scientific environment, with the scientific community, and with society in general.

In the course of the program, these competences are trained by:

- 1 teaching pertinent research methods on the highest level;
- 2 the critical introduction to international scientific discourse;
- 3 teaching and training additional qualifications (e.g. project management, theory of science, communication skills);
- 4 applying new media in scientific communication, knowledge transfer, and academic teaching;
- 5 writing publications, especially in small research groups.

§ 2 Length and scope

The PhD Program in Economics takes three years (six semesters), which equals 180 ECTS credits. The program comprises 36 semester hours.

§ 3 Admission

- (1) Valid proof of the necessary academic level for admission to the Doctoral Program must be provided. This includes proof of completion of relevant diploma or master programs, of completion of relevant diploma or Magister programs at a university of applied science or completion of other equivalent studies at an accredited Austrian or non-Austrian post-secondary educational institution. If equivalency is given in principle, and only a few elements are missing for full equivalency, the rector's office is entitled to combine the determination of equivalency with the obligation to pass certain examinations in the course of the Doctoral Program.
- (2) Relevant studies are in any case
 - 1: the Diploma Program Economics completed at the University of Innsbruck,
 - 2: the Diploma Program Economics completed at the Johannes Kepler University of Linz,
 - 3: the Diploma Program Economic Sciences completed at the Johannes Kepler University of Linz,
 - 4: the Master Program Applied Economics completed at the University of Innsbruck.
- (3) Students apply for admission and report continuation at one of the two universities and are automatically admitted at the other university (as "co-registered student").

§ 4 Place of study

The program is organized at both universities of this joint Doctoral Program. The location where individual modules are held follows the recommended course of studies (see appendix). For organizational reasons, it is possible that modules are offered at a location different from the one recommended.

§ 5 Modules

A module constitutes a thematic unit. With the exception of the Mandatory Module "Doctoral Thesis Defense", all modules consist of a course with continuous performance assessment. The curriculum comprises mandatory and elective modules.

§ 6 Types of courses and maximum number of students per course

(1) Courses with continuous performance assessment are:

VU: Lectures with integrated practical and discussion parts. This includes work on and the presentations of topics.

SE: Dissertation seminars serve to present, discuss, and reflect on the dissertation topic and are important milestones of the dissertation project. Seminars also train and expand the competence to clearly communicate scientific questions and results to experts and the general public, but also in the context of academic teaching.

(2) All courses of the PhD Program in Economics have a maximum number of 20 students.

§ 7 Procedures for the allotment of places in courses with a limited number of participants

- (1) At the University of Innsbruck, course places in courses with a limited number of participants are allotted as follows:
 - 1: Students whose study time will be prolonged if they are not admitted are to be given priority.
 - 2. If the criterion as defined in (1) does not suffice to regulate admission to a course, students for whom the module is mandatory are to be given priority, followed by students for whom the module is an elective module.
 - 3. If the criteria as defined in (1) and (2) do not suffice to regulate admission to a course, students for available course places are drawn randomly.
- (2) At the Johannes Kepler University of Linz, admission to courses with a limited number of students is regulated by the procedure of "Admission by Preferential Ranking" according to the admission regulations of the Vice Rectorate for Teaching and Students.

§ 8 Mandatory and elective modules

(1) The following modules - equal to 42 ECTS credits – are mandatory:

	Mandatory Module	Sem.	ECTS
		hours	credits
1	Mathematics	3	6
2	Statistics	3	6
3	Econometrics	3	6
4	Microeconomics	3	6
5	Macroeconomics	3	6
6	Game Theory	3	6
7	Dissertation Seminar 1	2	2
8	Dissertation Seminar 2	2	2
9	Dissertation Seminar 3	2	2
	Total	24	42

(2) Five elective modules from focus areas (field courses) equal to 20 ECTS credits and one elective module "additional qualifications" equal to 4 ECTS credits have to be completed. Examples of focus areas include industrial economics, labor economics, foreign trade theory, regional economics, macroeconomics, theory of the public sector, new political economy (public choice), behavioral economics and experimental economics, advanced econometrics, and gender economics. The range of elective modules is determined by the responsible body for study law, depending on available resources. Examples of additional qualifications are: introduction to the theory of science, applying for project funding and carrying out scientific projects, techniques for communicating in the scientific community and with relevant stakeholders, scientific writing, gender-specific courses, or university didactics.

	Elective Modules	Sem.	ECTS credits
1	Core Subject 1 []	2	4
2	Core Subject 2 []	2	4
3	Core Subject 3 []	2	4
4	Core Subject 4 []	2	4
5	Core Subject 5 []	2	4
6	Additional qualification	2	4
	Total	12	24

(3) The module "Doctoral Thesis Defense", equal to 2 ECTS credits, is mandatory:

1	Mandatory module	Sem. hours	ECTS credits
	Doctoral Thesis Defense	nours	2
	Total		2

§ 9 Courses of mandatory and elective modules

(1) Mandatory modules referred to in § 8 (1):

1	Mandatory Module: Mathematics	Sem.	ECTS credits
а	VU Mathematics	3	6
	Revision of core concepts in order to produce a uniform		Ü
	level of knowledge among the participants. Presentation		
	of new concepts and important methods of proofs. The		
	course content is coordinated with the courses in		
	microeconomics, macroeconomics, and game theory.		
	Total	3	6
	Learning objectives of the module:		
	Having completed this module, students are acquainted wi	th the m	ost
	common advanced mathematical methods and can read as	well as	critically
	reflect on scientific publications that employ these method	s. They c	an use
	these methods with sufficient confidence and can independ	dently ap	ply
	them to their own scientific questions.		
	Admission requirements: none		

2	Mandatory Module: Statistics	Sem.	ECTS credits
а	VU Statistics	3	6
	Teaching central theorems and proofs of advanced		
	statistical theory. The course content is coordinated with		
	the course "Econometrics".		
	Total	3	6
	Learning objectives of the module:		
	Having completed this module, students are acquainted wi	th the m	ost
	common advanced statistical methods and can read as wel	l as critic	ally
	reflect on scientific publications that employ these method	s. They c	an use
	these methods with sufficient confidence and can independ	dently ap	ply
	them to their own scientific questions.		
	Admission requirements: positive completion of the Mandatory Module		
	"Mathematics"		

3	Mandatory Module: Econometrics	Sem.	ECTS
		hours	credits
а	VU Econometrics	3	6
	Presentation of advanced methods of econometrics. In		
	coordination with the Mandatory Module "Statistics", the		
	following are taught: application of existing methods to		
	economic questions, critical evaluation of methods, and		
	the combination and/or adaption of individual		
	procedures to solve concrete problems.		
	Total	3	6
	Learning objectives of the module:		
	Having completed this module, students are acquainted wi	th the m	ost
	common advanced econometric methods and can read as v	well as cr	ritically
	reflect on scientific publications that employ these method	s. They c	an use
	these methods with sufficient confidence and can independ	dently ap	ply
	them to their own scientific questions.		
	Admission requirements: positive completion of the Mand	atory Mo	odules
	"Mathematics" and "Statistics"		

4	Mandatory Module: Microeconomics	Sem. hours	ECTS credits
а	VU Microeconomics Conveying knowledge of microeconomic core concepts in a rigorous and particularly formal manner including the pertinent proofs. The course teaches how to construct formal models and prove propositions. The course offers in-depth treatment of selected topics across a wide area of the field.	3	6
	Total	3	6
	Learning objectives of the module: Having completed this module, students are acquainted wi common microeconomic methods of proof and analysis and well as critically reflect on scientific publications that emplotechniques. They can use these techniques with sufficient can independently apply them to their own scientific quest	d can rea by these confident ions.	ad as ce and
	Admission requirements: positive completion of the Mand "Mathematics"	atory M	odule

5	Mandatory Module: Macroeconomics	Sem.	ECTS
		hours	credits
а	VU Macroeconomics	3	6
	Conveying knowledge of core models and techniques of		
	theoretical macroeconomics as well as their empirical		
	application. The course focuses on the use of recursive		
	methods and dynamic programming for the construction		
	and solution of macroeconomic models.		
	Total	3	6
	Learning objectives of the module:		
	Having completed this module, students are acquainted wi	th the m	ost
	common core models and techniques of theoretical macro	economi	cs and
	can read as well as critically reflect on scientific publication	s that er	nploy
	these models and techniques. They can use these models a	nd techr	niques
	with sufficient confidence and can independently apply them to their own		
	scientific questions.		
	Admission requirements: positive completion of the Mand	atory M	odule
	"Mathematics"		

6	Mandatory Module: Game Theory	Sem. hours	ECTS credits
а	VU Game Theory	3	6
	Teaching advanced concepts of non-cooperative game		
	theory and core concepts of cooperative game theory.		
	Total	3	6
	Learning objectives of the module:		
	Having completed this module, students are acquainted wi	th the m	ost
	common concepts of non-cooperative game theory and wit	th the co	re
	concepts of cooperative game theory. Students can read as	well as	critically
	reflect on scientific publications that employ these concept	s. They o	an use
	these concepts with sufficient confidence and can independ	dently ap	ply
	them to their own scientific questions.		
	Admission requirements: positive completion of the Mandatory Module		
	"Mathematics"		

7-9	Mandatory Module: Dissertation Seminar	Sem.	ECTS
		hours	credits
а	Dissertation Seminar The objective of this module is for students and dissertation supervisors to guide the dissertation project from the first project idea to the analysis of the current state of scientific discussion, to the selection of suitable theoretical methods, and to the discussion and interpretation of results. Accordingly, the method consists of composing a written basic text, presenting the project, discussing content, and writing a summary of the results.	2	2
	Total	2	2

Learning objectives of the module:

Clear structuring of the student's research project, critical assessment of the student's own project and its results, constructive impulses for the further development of the project. At the same time, students train the skill to communicate scientific questions and results to experts and colleagues, but also in the context of academic teaching in an appropriate manner.

Admission requirements: none

(2) Elective modules referred to in § 8 (2):

1-5	Elective Module: Core Subject []	Sem.	ECTS
		hours	credits
а	VU Core Subject []	2	4
	Field courses provide a survey of the most important		
	publications of a strand of literature with special focus on		
	current contributions. Important methods and processes		
	are taught which enable the participants to conduct their		
	own research in the respective area.		
	Total	2	4
	Learning objectives of the module:		
	After completing the module, students are able to acquire	the cont	ent of
	current scientific publications independently. They are fam	iliar with	the
	most important current questions in the respective subject	area and	d know
	which methods can be employed for solving these question	is. More	over,
	they are able to critically evaluate the significance of publis	hed resu	ılts. By
	presenting the latest scientific findings to colleagues, the base	asis for	
	academic teaching is laid and developed.		
	Admission requirements: positive completion of Mandator	y M <mark>odul</mark>	es
	"Econometrics" and "Microeconomics"		

6	Elective Module: Additional Qualification	Sem.	ECTS
		hours	credits
а	VU Additional Qualifications	2	4
	In this module type, skills are trained that do not belong		
	to the core areas of economics but are important for the		
	career of a scientist.		
	Total	2	4
	Learning objectives of the module:		
	The students expand the spectrum of purely subject-specifi	ic educat	ion by
	skills in an area they can choose; this area must have a clos	e relatio	nship to
	research activities.		
	Admission requirements: none		

(3) Mandatory module referred to in § 8 (3):

	Mandatory Module: Doctoral Thesis Defense	Sem.	ECTS		
		hours	credits		
	Final oral dissertation defense before an examination	-	2		
	board				
	Public presentation of central elements of the				
	dissertation and discussion of the results with the				
	examination board.				
	Total	-	2		
	Learning objectives of the module:				
	Students present, reflect on, and analyze their dissertation results in the				
	overall context of the Doctoral Program in Economics. They concentrate on				
	summarizing and explaining results of the research project, on presenting				
	the increase of knowledge in the discipline, on demonstrating evaluation				
	and method competences, as well as on presentation skills.				
	Admission requirements: positive completion of all other modules and				
	positive evaluation of the dissertation. The module concludes the Doctoral Program.				

§ 10 Dissertation

- (1) In the course of the PhD Program in Economics, a dissertation has to be written, which equals 112 ECTS credits. The dissertation is a piece of scientific work which serves to prove the student's ability to cope with scientific questions in an independent way.
- (2) The dissertation can consist of articles that are related in terms of subject matter or methods. In this case, the dissertation must consist of a minimum of three scientific articles. A minimum of two of these articles have to be accepted for presentation by a reviewed international conference. The latter is not necessary, if at least one scientific article has been published or has been accepted for publication in a journal with a journal ranking of at least "B" according to the Tinbergen Journal Ranking. The articles must be preceded by an introduction which explains how they are related in terms of subject matter or method. If the articles were written by several authors, the doctoral student's own contribution must be shown in the introduction, as well. In their expert opinions, the evaluators of the dissertation have to examine both the subject matter of the articles and adherence to the requirements of a dissertation which consists of several scientific articles as stated above.
- (3) The dissertation topic must be chosen from the field of economics.
- (4) The dissertation has to be registered at the university where the student is registered. The statutes of the corresponding university determine topic approval, supervision and evaluation of the dissertation.
- (5) After the positive evaluation of the dissertation, the program must be completed with the Module "Doctoral Thesis Defense".

§ 11 Examination regulations

(1) The evaluation of modules which include a course with continuous performance assessment is

based on the performance evaluation of the course with continuous performance assessment.

(2) In courses with continuous performance assessment, the lecturer determines the examination

method - oral exam/written exam/exam project(s) - before the course starts.

(3) The evaluation of the final Mandatory Module "Doctoral Thesis Defense" as referred to in § 8 (3)

is based on an oral exam taken before an examination board consisting of three examiners. The examination is public and, in particular, requires the candidate to give a short lecture about the

content of the dissertation.

(4) The statues of the university where the exam takes place determine the administration and

repetition of exams.

§ 12 Academic degree

Graduates of the PhD Program in Economics are awarded the academic degree of "Doctor of

Philosophy", or "PhD", in short. The degree is awarded by the university where the student is

registered.

§ 13 Implementation

This curriculum of the PhD Program in Economics comes into force on the $\mathbf{1}^{\text{st}}$ of October following

the announcement of the curriculum in the bulletins of both participating universities.

For the Curriculum Committee:

Univ.-Prof. Dr. Rudolf Kerschbamer

For the Senate:

Univ.-Prof. Dr. Ivo Hajnal

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Appendix: Recommended course of studies

Modules with a dark grey background should take place in Innsbruck, modules with a white background in Linz, and modules with a light grey background both in Innsbruck and Linz.

	Mandatory Modules	Elective Modules Special area []	Dissertation Seminars/ Elective Module: Additional Qualifications	
Semester 1	Mathematics			
	Statistics			
	Microeconomics			
Semester 2	Econometrics			
	Macroeconomics			
	Game Theory			
Semester 3		Core Subject []	Dissertation Seminar 1	
		Core Subject []		
		Core Subject []		
Semester 4		Core Subject []	Elective Module Additional	
		Core Subject []	Qualification	
Semester 5	Work on the dissertation (starting as early as the 2 nd , 3 rd , and 4 th semester)		Dissertation Seminar 2	
Semester 6	Work on the dissertation and dissertation defense		Dissertation Seminar 3	