

# **Curriculum for the master's programme in Research in Economics and Finance**

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# § 1 Objectives and qualification profile

- (1) The objective of the master's programme in Research in Economics and Finance at the University of Vienna is to consolidate and complement students' academic education in the fields of economics and finance. Accordingly, the programme provides a profound advanced education in the core subjects as well as an introduction to current research in economics and finance. The master's programme aims to qualify students for a doctoral programme in Economics and/or Finance and a subsequent professional career in the academic sphere or research establishments.
- (2) Graduates of the master's programme in Research in Economics and Finance at the University of Vienna are able to deal with economic and financial issues using the methods and instruments of theoretical and empirical economic research. The skills acquired go beyond those taught in the associated bachelor's programme. Graduates of the master's programme in Research in Economics and Finance are, in particular, able to independently read and understand relevant academic literature, question it critically and apply it to specific economic issues. They are familiar with modern theories of economics and finance and are able to examine projections of theory based on data. Graduates have knowledge enabling them to pursue a doctoral programme in business and economics with independent academic research.

# § 2 Duration and scope

- (1) The workload for the master's programme in Research in Economics and Finance comprises 120 ECTS credits. This is equivalent to a degree programme duration of four semesters.
- (2) The programme is deemed completed if 52 ECTS credits as defined in the provisions on compulsory modules, 44 ECTS credits as defined in the provisions on alternative compulsory modules and/or elective modules, 22 ECTS credits as defined in the provisions on the master's thesis and 2 ECTS credits as defined in the provisions on the master's examination have been obtained.

# § 3 Entry requirements

- (1) To be admitted to the master's programme in Research in Economics and Finance
- a) students must have completed an eligible bachelor's programme or an eligible degree programme at the same level of university education at a recognised Austrian or foreign post-secondary educational institution.
- b) Furthermore, for admission to the programme, applicants must have been selected in an admission procedure.
- (2) In accordance with para. 1, sub-para. a, the University of Vienna's bachelor's programmes

- in Economics or
- Business Administration are certainly eligible, provided that students have completed the Finance Minor (including courses on mathematics, statistics, econometrics and game theory) and/or the Business Statistics Minor (including game theory and courses from the field of economics or finance).
- (3) To compensate for significant disciplinary differences, supplementary examinations can be stipulated, which have to be completed until the end of the second semester of the master's programme. The Rectorate may specify which supplementary examinations are a prerequisite for taking examinations specified in the Curriculum of the master's programme.
- (4) If the significant disciplinary differences according to para. 3 exceed the extent of 30 ECTS credits, this is not considered an eligible degree programme and the student is not admitted to the master's programme.
- (5) Graduates of degree programmes with a quantitative orientation who fulfil the other legal prerequisites may be admitted to the master's programme in Research in Economics and Finance if the degree programme they completed equips students with knowledge of microeconomics and macroeconomics (6 ECTS credits each). Degree programmes with a quantitative orientation are, in particular:
- Engineering
- Mathematics
- Physics.

If applicants fulfil these criteria but significant disciplinary differences still exist, supplementary examinations can be stipulated to compensate for these differences. The standard of comparison are the degree programmes specified in para. 2.

- (6) The language of instruction of the master's programme in Research in Economics and Finance is English. Therefore, students must have English language proficiency corresponding to level B2 (Common European Framework of Reference for Languages). Regarding the level of language proficiency, the regulations of the University of Vienna apply.
- (7) Further regulations about the selection procedure will be specified in provisions by the Rectorate of the University of Vienna published in the University Gazette.

# § 4 Academic degree

Graduates of the master's programme in Research in Economics and Finance are awarded the degree "Master of Science", abbreviated as MSc. Where the academic degree is stated this must be after the name

# § 5 Structure – Modules with allocated ECTS credits

### (1) Overview

# Overview: structure of the master's programme in Research in Economics and Finance

### **Compulsory modules (48 ECTS credits)**

- Individual Decisions and Markets (12 ECTS credits)
- Growth, Business Cycles and Unemployment (8 ECTS credits)
- Introductory Econometrics (10 ECTS credits)
- Game Theory and Strategic Uncertainty (8 ECTS credits)
- Econometrics II (10 ECTS credits)

Alternative compulsory modules: Economics (44 ECTS credits)	Alternative compulsory modules: Finance (44 ECTS credits)		
Advanced Macroeconomics (8 ECTS credits)	Advanced Finance Courses (12 ECTS credits)		
Electives in Research in Economics (20)	<ul> <li>Electives in Finance (28 ECTS credits)</li> </ul>		
ECTS credits)	Seminar in Finance (4 ECTS credits)		
<ul> <li>Electives in Applied Economics (12         ECTS credits)     </li> <li>Seminar in Economics (4 ECTS credits)</li> </ul>			
Master's Thesis (22 ECTS credits)			
Master's Thesis Seminar (4 ECTS credits)			
Public Defence (2 ECTS credits)			

### (2) Module descriptions

### A. Compulsory modules (48 ECTS credits)

A.1.	Compulsory module Individual Decisions and Markets	12 ECTS credits
Prerequisites	none	1
Recommended prerequisite	none	
Module outcomes	Students know theories of individual behaviour and material a competitive environment. They are able to relationships of dependence, are able to analyse the bullet players and their market interactions and understand how economic variables react to changes in	identify economic behaviour of market
Module structure	Subject to availability, VO (npi) or KU (pi) Microeconon and Finance I, 6 ECTS credits, 3 SSt. Subject to availability, VO (npi) or KU (pi) Microeconon and Finance II, 6 ECTS credits, 3 SSt.	nics for Economics
Proof of performance	Passing of continuous assessment courses (pi) or course npi) specified in the module (12 ECTS credits).	e examinations (pi or
Language	English	

A.2.	Compulsory module Growth, Business Cycles and Unemployment	8 ECTS credits
Prerequisite	none none	
Recommended prerequisite	none	
Module outcomes	Students know theories of economic growth, the e- unemployment. They are familiar with dynamic optimis methods which are frequently applied in macroeconom particular, they are able to analyse the following issues agents take intertemporal decisions in uncertain circu- they react to expected and unexpected changes environment and how do economic decisions affect the the financial sector in macroeconomics?	sation and recursive nics and finance. In : How do economic umstances, how do in the economic
Module structure	Subject to availability, VO (npi) or KU (pi) Microeconom and Finance, 8 ECTS credits, 4 SSt.	nics for Economics
Proof of performance	Passing of the continuous assessment course (pi) or cour or npi) specified in the module (8 ECTS credits).	rse examination (pi

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Language	English			

A.3.	Compulsory module Introductory Econometrics	10 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	Students can apply econometric methods with a focus on the interpretation of empirical models and statistical estimation techniques and statistical tests. Students have practical experience in data analysis, can comprehend empirical studies in literature on economics and finance and are able to perform their own analyses of cross-sectional, time series and panel data.	
Module structure	<ul> <li>KU on Introductory Econometrics (pi), 8 ECTS</li> <li>UE on Introductory Econometrics (pi), 2 ECTS</li> </ul>	· -
Proof of performance	Passing of the continuous assessment courses (pi) specific (10 ECTS credits).	fied in the module
Language	English	

A.4.	Compulsory module Game Theory and Strategic Uncertainty	8 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	Students know different approaches and concepts of game theory. They understand how economic actors take decisions in non-cooperative, strategic situations characterised by uncertainties regarding the behaviour of other actors. They are able to apply game theory concepts of equilibrium in economic and financial contexts.	
Module structure	Subject to availability, VO (npi) or KU (pi) Game Theory SSt.	y, 8 ECTS credits, 4
Proof of performance	Passing of the continuous assessment course (pi) or course or npi) specified in the module (8 ECTS credits).	ırse examination (pi
Language	English	

A.5.	Compulsory module Econometrics II	10 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	Students have a thorough understanding of theories of e particular, with regard to the specification as well as the testing of linear and non-linear relationships and are able theories to concrete issues. They are familiar with the ge provide the basis for the techniques of the Introductory module. Moreover, they are familiar with state-of-the-ar used methods of applied research in the field of economic	estimation and le to apply these eneral concepts that Econometrics t and frequently
Module structure	Subject to availability, VO (npi) or KU (pi) Econometrics 5 SSt.	s II, 10 ECTS credits,
Proof of performance	Passing of the continuous assessment course (pi) or cour or npi) specified in the module (10 ECTS credits).	rse examination (pi
Language	English	

### A. Alternative group of compulsory modules (44 ECTS credits)

Subject to availability, students choose one of the following two alternative groups of compulsory modules:

### 1. Alternative group of compulsory modules: Economics

B.1.1.	Compulsory module Advanced Macroeconomics	8 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	Students know numerical methods that are used in modern macroeconomics. They are able to apply these methods, for example, to analyse the effects of fiscal and monetary policy under dynamic and stochastic framework conditions.	
<b>Module structure</b>	Subject to availability, VO (npi) or KU (pi) Advanced Ma ECTS credits, 4 SSt.	acroeconomics (pi), 8
Proof of performance	Passing of the continuous assessment course (pi) or cour or npi) specified in the module (8 ECTS credits).	rse examination (pi
Language	English	

B.1.2.	Compulsory module Electives in Research in Economics	20 ECTS credits
Prerequisite	none	
Recommended prerequisite	Compulsory modules A.1 Individual Decisions and Mark Business Cycles and Unemployment; A.3 Introductory E	
Module outcomes	Students have profound knowledge of sub-disciplines they selected. Based on the knowledge acquired in the c students are able to apply advanced economic theories a	compulsory courses,
Module structure	Subject to availability, students select courses with non-continuous assessment and/or courses with continuous assessment corresponding to 20 ECTS credits from the range of courses offered in the master's programme in Research in Economics and Finance, at least 12 ECTS credits thereof must be completed in the field of economics.	
	The selection has to be approved by the directorate of The directorate of studies publishes a list of those cours module in the course directory of the University of Vier of which is generally deemed as approved.	ses belonging to the
Proof of performance	Passing of all course examinations (npi) and continuous (pi) specified in the module (20 ECTS credits in total).	assessment courses
Language	English	

B.1.3.	Compulsory module Electives in Applied Economics	12 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	

Module outcomes	Students are able to apply economic concepts and ideas to rigorously investigate the most important policy-relevant topics. Moreover, they have a profound understanding of the context in which economic methods are applied.
Module structure	Subject to availability, students select courses announced in the course directory corresponding to 12 ECTS credits, at least 4 ECTS credits thereof must be completed in the field of applied economics.  The selection has to be approved by the directorate of studies in advance. The directorate of studies publishes a list of those courses belonging to the module in the course directory of the University of Vienna, the completion of which is generally deemed as approved.
Proof of	Passing of all course examinations (npi) and continuous assessment courses
performance	(pi) specified in the module (12 ECTS credits in total).
Language	English

B.1.4.	Compulsory module	4 ECTS credits
	Seminar in Economics	
Prerequisite	Compulsory modules A.1 Individual Decisions and Mark Business Cycles and Unemployment; A.3 Introductory E	
Recommended prerequisite	none	
Module outcomes	Students are familiar with academic research conducted economics by faculty members and PhD candidates at the Vienna.  The module supports students of the master's programm idea for their master's thesis.	ne University of
Module structure	SE Research Seminar in Microeconomics (pi), 4 ECTS constant SE Research Seminar in Macroeconomics (pi), 4 ECTS constant Semina	·
Proof of performance	Passing of the continuous assessment course (pi) specific ECTS credits).	ed in the module (4
Language	English	

# 2. Alternative group of compulsory modules: Finance

B.2.1.	Compulsory module Advanced Finance Courses	12 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	Students know the most important theories as well as the main fields of specialisation in modern finance (asset pricing, contract theory and corporate finance). They are able to carry out rigorous analyses of events in the financial markets based on economic theories.	
Module structure	<ul> <li>Subject to availability, VO (npi) or KU (pi) on Co Finance, 4 ECTS credits, 2 SSt.</li> <li>Subject to availability, VO (npi) or KU (pi) on Co ECTS credits, 2 SSt.</li> <li>Subject to availability, VO (npi) or KU (pi) on As credits, 2 SSt.</li> </ul>	ontract Theory, 4
Proof of performance	Passing of continuous assessment courses (pi) or course npi) specified in the module (12 ECTS credits)	examinations (pi or
Language	English	

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B.2.2.	Compulsory module	28 ECTS credits
	<b>Electives in Finance</b>	
Prerequisite	Compulsory modules A.1 Individual Decisions and Markets; A.2 Growth,	
	Business Cycles and Unemployment; A.3 Introductory Econometrics	
Recommended	Compulsory module B.2.1 Advanced Finance Courses	
prerequisite		
Module outcomes	Students acquire detailed knowledge of specific subject areas of finance that they selected. They are able to apply advanced financial theories and econometric methods to understand financial systems and to support regulation and supervision in a supervisory function.	
Module structure	Subject to availability, students select courses with non-continuous assessment and/or courses with continuous assessment corresponding to 28 ECTS credits, at least 20 ECTS credits thereof must be completed in the field of finance.	
	The selection has to be approved by the directorate of The directorate of studies publishes a list of those cour module in the course directory of the University of Vie of which is generally deemed as approved.	ses belonging to the nna, the completion
Proof of	Passing of all course examinations (npi) and continuous	s assessment courses
performance	(pi) specified in the module (28 ECTS credits in total).	
Language	English	

B.2.3.	Compulsory module	4 ECTS credits
	Seminar in Finance	
Prerequisite	none	
Recommended prerequisite	Compulsory module B.2.1 Advanced Finance Courses	
Module outcomes	Students are familiar with the academic research conducted in the field of finance by faculty members and PhD candidates at the University of Vienna. The module supports students of the master's programme in generating an idea for their master's thesis.	
Module structure	SE Research Seminar in Finance (pi), 4 ECTS credits, 2 SSt.	
Proof of performance	Passing of the continuous assessment course (pi) specified in the module (4 ECTS credits).	
Language	English	

### **B.** Master's Thesis Seminar

С	Compulsory module Master's Thesis Seminar	4 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	Students are able to present their research to a larger group. Moreover, they gain experience of professional discussion and criticism in research.	
Module structure	KU Master's Thesis Seminar (pi), 4 ECTS credits, 2 SSt.	
Proof of performance	Passing of the continuous assessment course (pi) specified in the module (4 ECTS credits).	
Language	English	

# § 6 Master's thesis

- (1) The master's thesis serves to demonstrate the student's ability to achieve adequate standards of content and methodology when independently addressing academic topics. The assignment for the master's thesis must be chosen in a way that the student can reasonably be expected to complete it within six months.
- (2) The topic of the master's thesis must be taken from one of the compulsory modules. If a different topic is selected or if there is uncertainty regarding allocation of the selected topic, the competent body responsible for study matters should decide on whether or not it is admissible.
- (3) The master's thesis comprises 22 ECTS credits.

# § 7 Master's examination

- (1) To be admitted to a master's examination the student must have successfully passed all required modules and examinations and the master's thesis must have been positively assessed.
- (2) The master's examination is a public defence. This form of examination consists of a defence and an examination on the academic disciplines related to the master's thesis. Grading will be conducted as stipulated in the Statutes of the University of Vienna.
- (3) The master's examination comprises 2 ECTS credits.

# § 8 Mobility during the master's programme

The competent body responsible for study matters is responsible for the recognition of academic achievements completed abroad.

# § 9 Course classification

- (1) All courses with non-continuous assessment (npi) have to be offered as one of the following types of courses:
  - Lecture (*Vorlesung*, *VO*):

Lectures serve to present contents, methods and applications of a specific subject. Continuous assessment is not applied in lectures. Contents are presented in the form of presentations delivered by the lecturer or in a similar form. The lecture is completed with an oral or written examination.

- (2) All courses with continuous assessment (pi) are offered as one of the following types of courses:
  - Courses (*Kurs, KU*):

In courses, continuous assessment is applied. On the one hand, contents, methods and applications of a given subject area are taught. On the other hand, students complete tasks independently, such as giving presentations, preparing solutions to given tasks, etc.

• Seminars (*Seminar*, *SE*):

In seminars, continuous assessment is applied. Seminars serve as a setting for academic discussions. Participants are expected to independently work on a topic and present the insights gained in the form of independent oral and written contributions, such as presentations and seminar papers.

• Exercises (*Übung*, *UE*):

Exercises serve the purpose of acquiring, expanding and thoroughly working through course contents as well as practising relevant abilities. Students are expected to actively participate in activities as deemed appropriate and to solve tasks independently. Students must generally complete these tasks outside of the designated course hours. During class, the lecturer comments on, evaluates and adds to the contributions provided by the students. Accordingly, continuous assessment is applied in exercises.

# § 10 Courses with a limited number of participants and registration procedure

(1) The following general limits on the number of students apply in the following courses:

KU: 50 participants SE: 18 participants UE: 50 participants

UE held in computer rooms: 25 participants

For courses allocated to other degree programmes, the limits on the number of students specified in the relevant curricula apply.

(2) Modalities concerning the registration for courses and examinations as well as the allocation of places in courses are governed by the stipulations in the Statutes of the University of Vienna.

# § 11 Examination regulations

(1) Proof of performance in courses

The lecturer of a course is responsible for making the necessary announcements according to the stipulations in the Statutes.

(2) Examination content

The examination content relevant to preparing and holding examinations must be in line with the required number of ECTS credits. This also applies to module examinations.

(3) Examination procedure

The examination procedure is subject to the stipulations of the Statutes of the University of Vienna.

(4) No double recognition and no dual use

Courses taken and examinations passed in the three-year bachelor's programme, which constitute entry requirements for the master's programme, cannot be recognised again in the master's programme. Courses taken and examinations passed from another compulsory or elective module of the degree programme cannot be recognised within another module within the same degree programme. This also applies to recognition procedures.

(5) Examination results must be allocated to the relevant module by the stated ECTS figure and must not be allocated to different proofs of performance.

# § 12 Entry into force

- (1) This Curriculum will enter into force upon announcement in the University Gazette of the University of Vienna as of 1 October 2008.
- (2) The amendments to the Curriculum as stated in the University Gazette of 27 June 2022, number 318, 45th edition enter into force on 1 October 2022.

# § 13 Transitional provisions

(1) This Curriculum applies to all students who commence their degree programme as of the winter semester of 2021/2022.

- (2) If, at a later stage of the degree programme, courses are no longer offered which were compulsory under the original curricula, the competent body responsible for study matters decides ex officio (equivalence regulation) or at the request of the student which courses and examinations have to be completed instead.
- (3) The competent body responsible for study matters specified in the organisational regulations is entitled to determine in general or on a case-by-case basis which of the courses taken and examinations passed will be recognised for this Curriculum.

# **Appendix**

Recommended path through the master's programme:

#### 1st semester:

- Individual Decisions and Markets (12 ECTS credits)
- Growth, Business Cycles and Unemployment (8 ECTS credits)
- Introductory Econometrics (10 ECTS credits)

### 2nd semester:

- Game Theory and Strategic Uncertainty (8 ECTS credits)
- Econometrics II (10 ECTS credits)
- B.1.1 (8 ECTS credits) and 4 ECTS credits from B.1.3, or B.2.1 (12 ECTS credits)

### 3rd semester:

- Master's Thesis Seminar (4 ECTS credits)
- 16 ECTS credits from B.1.2 and 8 ECTS credits from B.1.3, or 24 ECTS credits from B.2.2

### 4th semester:

- 4 ECTS credits from B.1.2, or 4 ECTS credits from B.2.2
- B.1.4 (4 ECTS credits) or B.2.3 (4 ECTS credits)
- Master's Thesis (22 ECTS credits)
- Master's Examination (2 ECTS credits)

### English translation of the module titles:

German	English
Pflichtmodul: Individual Decisions and Markets	Compulsory module: Individual Decisions and Markets
Pflichtmodul: Growth, Business Cycles and Unemployment	Compulsory module: Growth, Business Cycles and Unemployment
Pflichtmodul: Introductory Econometrics	Compulsory module: Introductory Econometrics
Pflichtmodul: Game Theory and Strategic Uncertainty	Compulsory module: Game Theory and Strategic Uncertainty
Pflichtmodul: Econometrics II	Compulsory module: Econometrics II
Alternative Pflichtmodule Economics	Alternative compulsory modules: Economics
Pflichtmodul: Advanced Macroeconomics	Compulsory module: Advanced Macroeconomics
Pflichtmodul: Electives in Research in Economics	Compulsory module: Electives in Research in Economics
Pflichtmodul: Electives in Applied Economics	Compulsory module: Electives in Applied Economics
Pflichtmodul: Seminar in Economics	Compulsory module: Seminar in Economics

Alternative Pflichtmodule Finance	Alternative compulsory modules: Finance	
Pflichtmodul: Advanced Finance Courses	Compulsory module: Advanced Finance Courses	
Pflichtmodul: Electives in Finance	Compulsory module: Electives in Finance	
Pflichtmodul: Seminar in Finance	Compulsory module: Seminar in Finance	
Masterarbeitskonversatorium	Master's Thesis Seminar	
Masterarbeit	Master's Thesis	
Defensio	Public Defence	