

WU SBWL Messe, January 15, 2024

SBWL Finance

Markets, Institutions & Instruments

WU

**WIRTSCHAFTS
UNIVERSITÄT
WIEN VIENNA
UNIVERSITY OF
ECONOMICS
AND BUSINESS**

VERSION: JANUARY 2024



What is “Finance”?

- Finance is an integral part of most economic activities and of fundamental importance to the functioning of modern societies.
- According to Bodie (2019)...
 - Finance is a science that deals with the allocation of scarce resources over time under conditions of uncertainty
 - Financial activities consist of borrowing, lending, saving, investing, hedging and insuring
 - Finance also concerns the institutions that intermediate these activities, i.e. banks, mutual funds, insurance companies, pension funds, securities exchanges and regulatory agencies
- Numerous Nobel Prizes for Economics awarded for work in finance, amongst others to Modigliani (1985), Miller (1990), Markowitz (1990), Sharpe (1990), Merton (1997), Scholes (1997) and Fama (2013)

The Finance Specialization: 5 Courses



Course I: Principles of Capital Markets



Course II: Financial Management and Valuation



Course III: Corporate Finance



Course IV: Risk Management



Course V: Elective

Course I: Principles of Capital Markets

What is the expected return of a stock?

- Decision theory under uncertainty
- Measurement of financial risk
- Portfolio choice theory
- Capital Asset Pricing Model
- Factor models

Modern Portfolio Theory

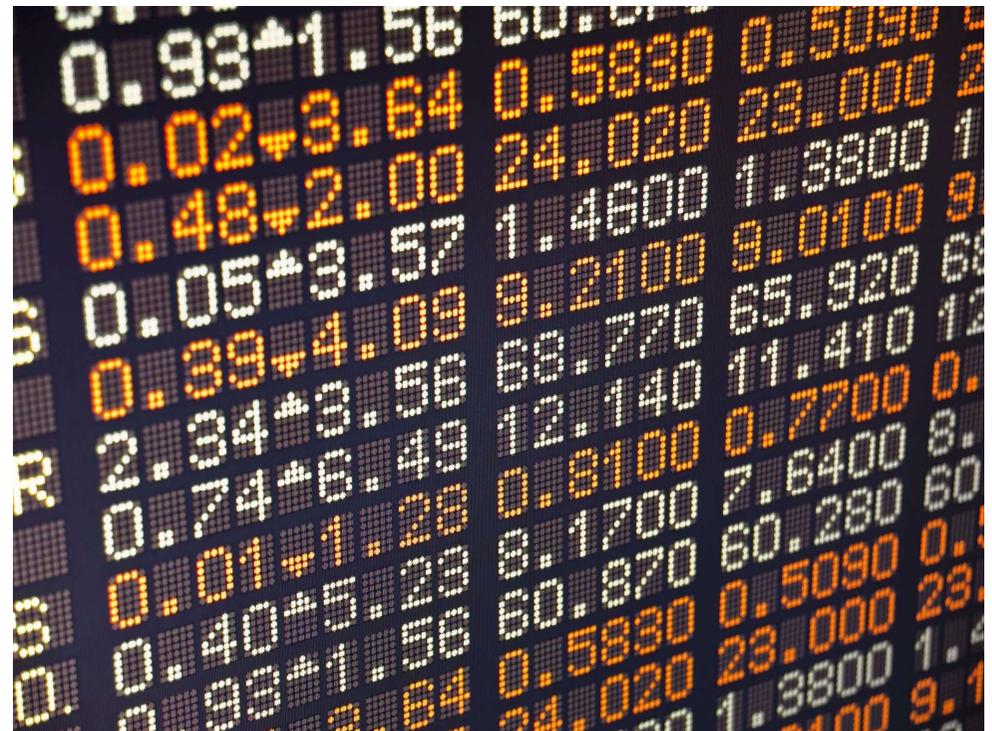


Course II: Financial Management and Valuation

How to evaluate derivatives and investment projects?

- Derivatives (Futures, Forwards, Options, Swaps)
- Binomial pricing models
- Risk-neutral valuation
- Investing in risky projects
- Allocating capital
- Corporate strategy

Derivative Pricing



Course III: Corporate Finance

How should firms finance their operating & investing activities?

- Corporate financing and real asset valuation
- Financing policies and implications for firm value under:
 - Tax shields and financial distress
 - Conflicts of interest between investors
 - Conflicts of interest between owners and management
 - Informational frictions about firm value

Capital Structure



Course IV: Risk Management

How can firms manage their risk?

- Risk measures
- Importance of risk management
- Credit risk
- Interest rate risk
- Foreign exchange risk

Hedging Strategies



Course V: Elective (“Make your pick!”)

Choose among 8-10 advanced and topical electives

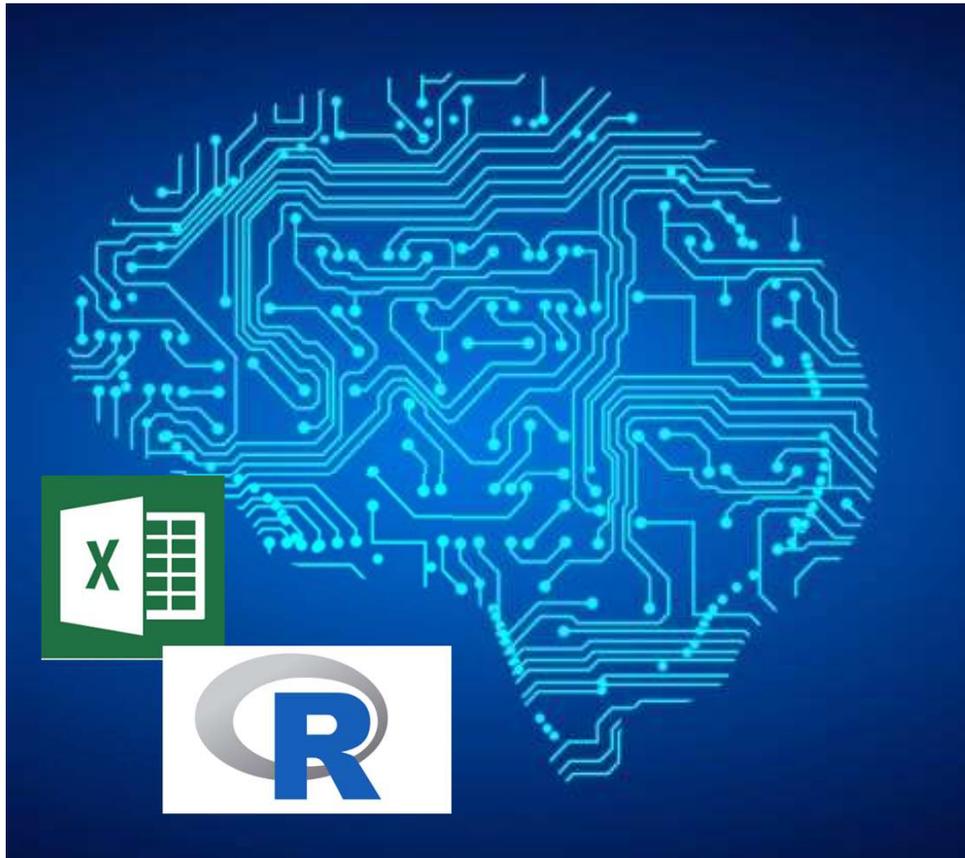
Electives the 2023-24 winter term and/or in the 2024 summer term:

- Banks, Accounting and Supervision
- Corporate Finance: Principles & Practice
- Estimating the Cost of Capital
- Financial Technology and New Sources of Data in Asset Management
- Innovating Exchange Industry
- Insurance Economics
- Quantitative Finance
- Quantitative Optimization Methods in Finance
- Service Valuation
- Fintech Lab: Design your own Start-up

Deepen & Apply Your Skills



Broaden & sharpen your skill set...



In addition, a set of important skills is obtained in the Finance specialization:

- Analytical and computational skills
- Data analysis involving real-world data sets
- Expertise in MS Excel or the programming language R
- Independent problem solving
- Presentation skills (in English)

Career Prospects

Our graduates are well equipped for a career in:

- Corporate finance
 - Treasury
 - Controlling
 - Risk management
- Financial institutions
 - Banks, (re)insurance industry
 - Investment funds, private equity funds, pension funds
 - Securities exchanges
- Wealth management
- Consulting industry
- Financial advisory



You should apply if...

We recommend the Finance specialization to all students who:

- Have a keen interest in **financial economics**
- Have had basic training in **mathematics** (i.e., differential calculus and matrix operations) and **statistics** (i.e., basic probability theory and regression analysis)
- Either have or are willing to acquire expertise in using statistical / computational software (**MS Excel or R**)
- Have good command of (written and spoken) **English**

Further study-regulatory requirements:

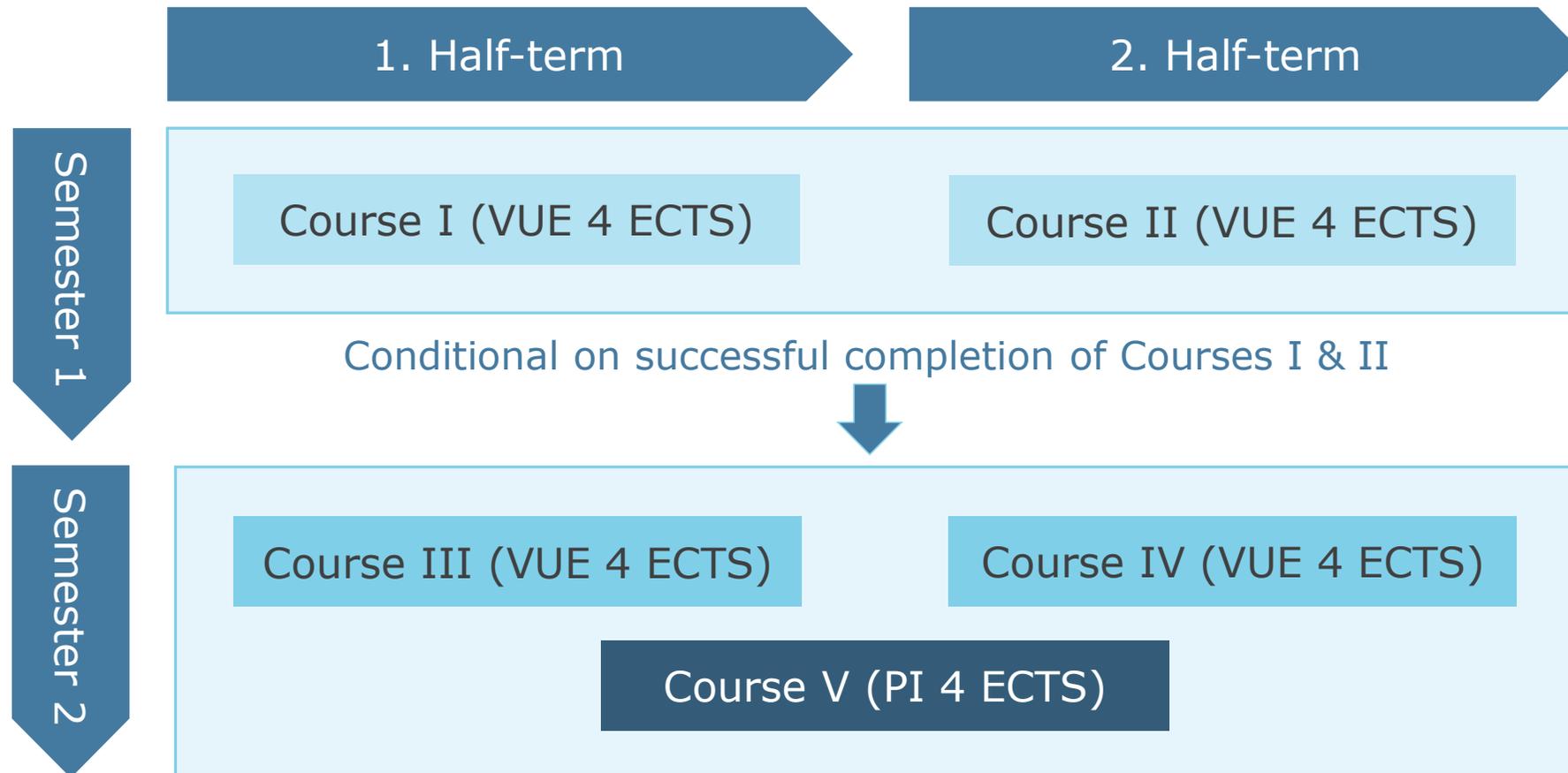
- None (see "Studienplan")

Admission

- Application via LPIS during the official SBWL application period
 - ET “Access to Specialization: Finance: Markets, Institutions and Instruments”
- Capacity is limited to 300 students per semester
- Acceptance only valid for upcoming term
- Final admissions are announced at the end of September and February, respectively
- Next application period: Feb. 1 to Feb. 5, 2024 (please check VVZ)

- After official admission:
 - Enrollment to courses I and II via LPIS
 - Enrollment to courses III, IV and V after successful completion of courses I & II

Structure of Specialization



Combination of Lectures & Interactive Elements (Courses I-IV)

- Courses I-IV are organized in (up to) 10 parallel VUEs:
 - Joint lecture
 - Individual exercise sessions: no more than 30 students per class
- Lecture: no attendance requirements
 - Once per week over 5 weeks
 - Focus on theoretical foundations
- Interactive part: attendance compulsory
 - Interactive exercise sessions once per week over 5 weeks
 - Focus on applications of concepts introduced in lecture
 - Students present their own solutions in class
- Final grade: Lecture (40%) + Interactive Part (60%)
- See VVZ for more infos and current schedule

Bachelor Theses

- We offer Bachelor theses supervision for ~70 students per semester
- Applications can be submitted via the [Institute Website](#) at the beginning of each term
- Allocation is based on both topic preferences and students' GPA
 - Students of the SBWL Finance are given priority
- You can submit your own topic proposal
 - Own proposals usually increase the chance for supervision
- No specific requirements regarding "Grundlagen wissenschaftlichen Arbeitens" (GWA), i.e., every GWA is accepted
- We recommend the prior completion of the lecture "Numerische Methoden in der Finanzwirtschaft" (or the elective "Quantitative Optimization Methods in Finance")

Outlook: Master Programs in Finance

Our institute offers 2 Master programs:

- **Finanzwirtschaft und Rechnungswesen** (“FiRe”, in German)
 - **SBWL Finance** + lectures “Finanzierung” and AMC I-III are sufficient for WiSo students to acquire the formal requirements (35 ECTS from the FiRe area)
 - The additional completion of one of the SBWLs in Accounting is **strongly recommended**
- Quantitative Finance (“QFin”, in English)
 - Multi-stage selection process
 - Assessment of “Achievement Potential” (GMAT, GRE, recommendation letters, ...)
 - In addition to the **SBWL Finance**, the completion of the **SBWL “Wirtschaftsmathematik”** is strongly recommended!

Further Information & Contact Details

You can download this presentation here:

<https://www.wu.ac.at/finance/study/bsc/sbwl-finance-markets-institutions-instruments>



VIENNA UNIVERSITY OF
ECONOMICS AND BUSINESS

For any questions regarding
the SBWL Finance:

sbwl.finance@wu.ac.at

Involved Faculty at the Institute for Finance, Banking and Insurance (I/III)

Program officer (PPV) and lecturers Courses I-IV:

- Univ.Prof. Dr. Rainer Jankowitsch
- Dr. Felix Fattinger
- Dr. Petra Halling
- Univ.Prof. Alexander Mürmann, PhD
- Univ.Prof. Dr. Stefan Pichler

Involved Faculty at the Institute for Finance, Banking and Insurance (II/III)

Lecturers Course V (Electives):

- Univ.Prof. Dr. Stefan Bogner
- ao.Univ.Prof. Dr. Erwin Eszler
- Mag. Ludwig Hillinger
- Dr. Tobin Hanspal, Dr. Rüdiger Weber
- Dr. Hanna Karoliina Koivulehto
- Univ.Prof. Dr. Christian Laux
- Mag. Georg Mikula
- Univ.Prof. Dr. Stefan Pichler
- Dr. Stefan Rufera, Alexander Aschl, BSc MSc, Mag. Tomasz Kilarski, Mag.(FH) Jürgen Schuster, M.A., Johannes Weber, BSc.MSc., Robert Witte, MSc
- Mag. Vinzenz Treytl, Dr. Alexander Eisl, Bakk.techn., Dr. Evgeniia Filippova-Karlusch, Mag. Dr. Walter Mösenbacher, Mariella Schultes, MA, Thomas Pannermayr, MSc
- Mag. Martin Wenzl, Thomas Rainer, MA

Involved Faculty at the Institute for Finance, Banking and Insurance (III/III)

Instructors Interactive Part (Courses I-IV):

- Rainer Brand
- Anna Csiky
- Dr. Rui Duan
- Dr. Felix Fattinger
- Dr. Petra Halling
- Daniel Hill
- Natalija Kostic
- Dr. Philipp Lentner
- Viktoria Muthsam
- Dr. Markus Parlasca
- Alexander Pasler
- Thi Thuy Dung Phung
- Zhou Ren
- Elizabeth Rinde
- Bogdan Stankovski
- Pan Yiming