

What is "Finance"?



Finance is an integral part of most economic activities and of fundamental importance to the functioning of modern societies.

According to Robert Merton (Nobel laureate 1997) finance provides:

- 1. A **payments** system for the exchange of goods and services
- 2. A mechanism for the **pooling of funds** to undertake large-scale indivisible enterprise
- 3. A way to **transfer economic resources** through time and across geographic regions
- 4. A way to manage uncertainty and control risk
- 5. Timely **price information** that helps coordinate decentralised decision-making in various sectors of the economy
- 6. A way to **deal with asymmetric information and incentive problems** when one party to a financial transaction has information that the other party does not

This may sound a bit abstract, so what exactly will you learn in our specialization?



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



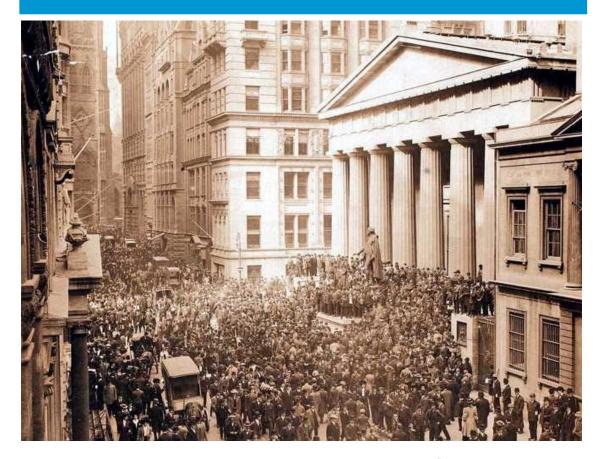
Course I: Principles of Capital Markets



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
- Black-Scholes 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









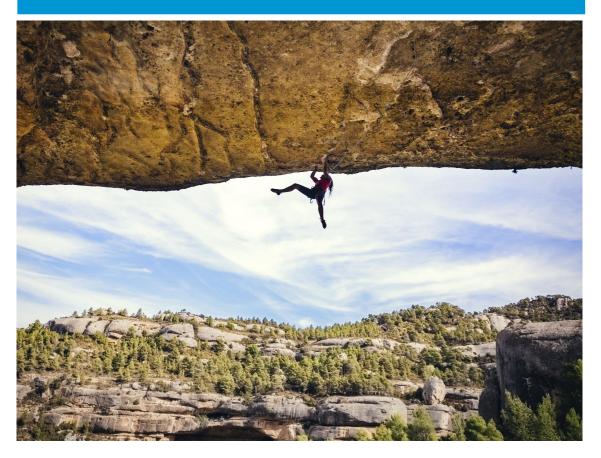
Course IV: Risk Management



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!")

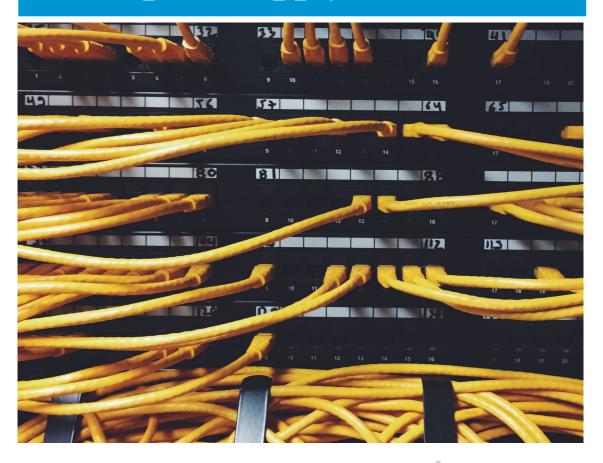


Choose among 8-10 advanced and topical electives

Electives in the 2021-22 winter and/or the 2022 summer term:

- Banks, Accounting and Supervision
- Company Valuation and Capital Budgeting
- Corporate Finance and Valuation
- Corporate Finance: Principles & Practice
- Innovating Exchange Industry
- **Insurance Economics**
- Quantitative Finance
- Quantitative Optimization Methods in **Finance**
- Fintech Lab: Design your own Startup

Deepen & Apply Your Skills



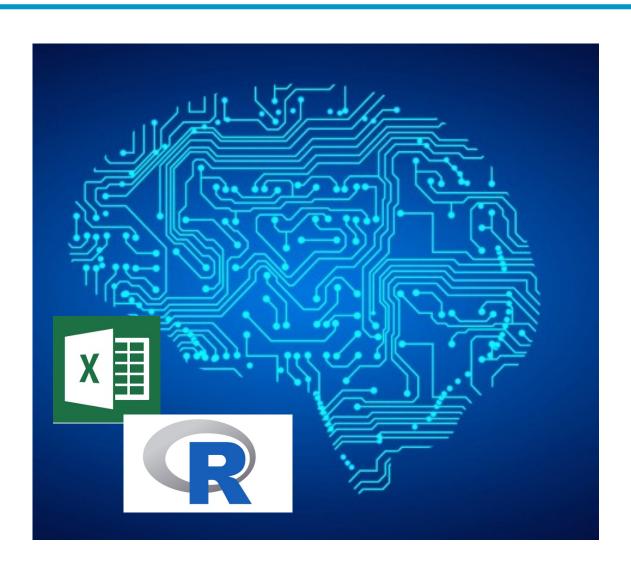






Broaden & sharpen your skill set...





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 Criteria



- Application via LPIS during the official SBWL application period
 - ET "Access to Specialization: Finance: Market, Institutions and Instruments"
- Capacity is limited to 300 students per semester
- Selection process based on grade average (GPA)
- Acceptance only valid for upcoming term
- Acceptance decisions are announced at the end of September and February, respectively
- Current dates are available at wu.ac.at/finance

Structure of Specialization



Semester

Semester 2

1. Half-term 2. Half-term Course I (VUE 4 ECTS) Course II (VUE 4 ECTS) Conditional on successful completion of Courses I & II Course III (VUE 4 ECTS) Course IV (VUE 4 ECTS) Course V (PI 4 ECTS)

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



- Courses I-IV are organized in (up to) 10 parallel VUEs:
 - Joint lecture
 - Individual exercise sessions (Interactive Part)
- Courses I & II: Enrollment after official admission via LPIS
- Courses III & IV: Enrollment after successful completion of Courses I & II
- Lecture (AudiMax if on campus)
 - Once per week over 5 weeks
 - Focus on theoretical foundations
- Interactive Part (no more than 30 students)
 - Interactive exercise sessions once per week over 5 weeks
 - Attendance compulsory (no exceptions!)
 - Focus on applications of concepts introduced in lecture
 - Students present their own solutions in class
- Final grade: Lecture (40%) + Interactive Part (60%)
- See VVZ (or Learn@WU) for more infos and current schedule



Bachelor Theses



- We offer Bachelor theses supervision for ~70 students per semester
- Applications can be submitted via the <u>Institute Website</u> 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 "Wirtschafts-mathematik" 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



For any questions regarding the SBWL Finance:

Nora Brandes

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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
- Univ.-Prof. Dr. Christian Wagner
- 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):

- o.Univ.-Prof. Dr. Stefan Bogner
- Assoz.Prof. PD Dr. Zehra Eksi-Altay
- Mag. Ludwig Hillinger
- Dr. Hanna Karoliina Koivulehto
- Univ.-Prof. Dr. Christian Laux
- Mag. Georg Mikula
- Univ.-Prof. Alexander Mürmann, PhD
- Univ.-Prof. Dr. Stefan Pichler
- Dr. Jens Kaden, Dr. Stefan Rufera, Mag. Erich Stark, BSc., Mag. Tomasz Kilarski, Alexander Aschl, BSc MSc, Daniel Stapelfeldt, 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
- Lukas Handler
- Natalija Kostic
- Dr. Daniela Kremslehner

- Dr. Philipp Lentner
- Viktoria Muthsam
- Dr. Markus Parlasca
- Alexander Pasler
- Zhou Ren
- Maximilian Schleritzko
- Clemens Wagner
- Florian Weinlich

