# **SBWL Finance: Markets, Institutions & Instruments**

# Guideline

# Institute for Finance, Banking and Insurance

In the specialization **Finance: Markets, Institutions & Instruments,** students gain an understanding of the economic mechanisms that drive financial markets, their instruments and value added. By learning the methods of finance, students acquire the competence to discuss, analyze, and solve financial issues related to decision-making of households, investors, corporations, financial institutions, and financial market regulators. Graduates master state-of-the-art models for investment decisions and for the pricing and management of portfolio risks, including stocks, bonds, and derivative securities.

Students obtain practically relevant qualifications based on a sound methodological background, qualifying them for expert and management careers in all areas of financial markets. Moreover, graduates of this specialization qualify for elite master programs in finance worldwide.

The specialization is designed to attract students with a genuine interest in economics and finance who have the capabilities to

- understand the relevance of financial statements and contracts
- structure questions related to financial decision making
- develop solutions based on analytical methods and economic reasoning.

The specialization is taught in English and can be chosen by students of the following Bachelor's programs:

- Bachelor Business, Economics and Social Sciences
- Bachelor Business Law
- Bachelor Business and Economics

#### 1. Admission

The specific requirements for admission to a specialization are stated in the Bachelor program's curricula.

In addition, there is a selection procedure for the specialization Finance: Markets, Institutions & Instruments. To participate in that selection process, students have to register for the course ET "Access to Specialization in Business Administration: Finance: Markets, Institutions & Instruments" by signing up on LPIS with the corresponding course number. The course number and registration period are listed in the <u>online course catalogue</u>. Students don't have to submit any transcripts or other documents during the application process. The results of the selection procedure are e-mailed to students in the course of September and February, respectively.

There is no admission exam. Each semester, up to 300 spots are offered (including repeaters of Course I and/or Course II) to students with the highest overall GPA. The GPA is retrieved from the student administration system which means that students don't have to submit their transcripts.

After being admitted to the specialization, students have to register for and actively participate in at least one course in the semester of admission. Otherwise they have to take part in the selection process again.

All students with at least one positive grade in a course of the specialization in their first semester have a fixed spot in the specialization — even if they do not attend a course in the following semester.

Students with a negative grade in Course I and/or Course II in their first semester have the unique opportunity to repeat these courses in the following semester. This means that admission to the specialization remains valid for these students in their second semester and they do not have to re-apply for the specialization. If, however, they do not apply for any course in their second semester, the spot expires and the specialization is considered to be abandoned. If they wish to resume at a later stage, they must take part in the selection process again.

# 2. General Structure & Recommended Order of Study

The specialization consists of five courses:

- I. Principles of Capital Markets
- II. Financial Management and Valuation
- III. Corporate Finance
- IV. Risk Management
- V. Elective Course

Courses I to IV are VUE - lectures with interactive elements. Course V is PI – a course with continuous assessment of student's performance. The successful completion of courses I and II is the prerequisite for admission to courses III, IV, and V.

Course I
Principles of Capital Markets
VUE 2 credit hours
4 ECTS credits

Course II
Financial Management and Valuation
VUE 2 credit hours
4 ECTS credits



Course III
Corporate Finance
VUE 2 credit hours
4 ECTS credits

Course IV
Risk Management
VUE 2 credit hours
4 ECTS credits

Course V
Elective
PI 2 credit hours
4 ECTS credits

All five courses of the specialization are offered each semester. Registration is based on the first come-first serve principle. No preferences (compatibility with job, internship, other courses, etc.) can be taken into account. The registration periods are listed in the online course catalogue.

## **Recommended Order of Study:**

First semester	First half semester	Course I
	Second half semester	Course II
Second semester	First half semester	Course III
	Second half semester	Course IV
Third semester		Course V

# 3. Details on the Structure of Courses I to IV

Courses I to IV are held in half semesters with the final exams taking place in the second and third examination week.

- The lecture and exercise units of courses I and III are taught in the first half semester. The corresponding exams take place in the second examination week.
- The lecture and exercise units of courses II and IV are taught in the second half semester. The corresponding exams take place in the third examination week.

**Courses I to IV** are split into a lecture part and an interactive ("exercise") part. The lecture part is organized as one big class for all students taking the specialization. The interactive sessions alternate with the lecture part and are held in small groups of a maximum of 30 students. The number of available spots may be lower during the application process to ensure a balanced booking among all classes and prevent course cancellations.

The lecture parts of Courses I to IV consist of five units that usually take place weekly. Minor deviations from the weekly routine of the lectures are possible due to didactical or organizational reasons. Participation in the lecture units is not mandatory, but highly recommended.

The interactive parts of Courses I to IV also consist of five units each taking place weekly. The interactive units usually start one week after the first lecture unit. Participation in the interactive units is mandatory. Students need to solve mini-cases for each interactive unit and need to be prepared to present their solutions and/or be tested on these mini-cases during class. Students who do not attend an interactive unit cannot present their solutions or be tested and therefore lose grading relevant points.

The grading of Courses I to IV consists of students' achievements in the interactive part (60%) and a final exam (40%). Additionally, students need to solve a minimum threshold of mini-cases in the interactive part to pass the course.

## 4. Content of the Courses

The focus of the specialization is on understanding the economic mechanisms that drive financial markets, their instruments, and value added. Students learn the methods of finance for investment decisions, pricing and management of financial risks. Thereby they acquire the competence to discuss, analyze, and solve financial issues related to decision-making of households, investors, corporations, financial institutions, and financial market regulators.

Courses I to IV are based on the textbook "Financial Markets and Corporate Strategy" by Hillier, Grinblatt & Titman, 2<sup>nd</sup> European Edition.

## 4.1. Course I – Principles of Capital Markets

The objective of Course I is to provide an introduction to finance including decision making of investors, diversification through capital markets, portfolio management, and pricing of financial assets.

The course is based on chapters 1-6, 9 and 10 of the textbook (Hillier et. al.):

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

The contents of chapters 1-3, 9 and 10 will mostly be known from previous courses and therefore need to be prepared by students before the first lecture.

# 4.2. Course II – Financial Management and Valuation

The objective of Course II is to understand how a firm should value risky projects and choose projects, i.e. allocate capital, in line with its corporate strategy.

The course is based on chapters 7, 8, 11, and 12 of the textbook (Hillier et. al.):

- Binomial pricing models and risk-neutral valuation
- Binomial option valuation
- Investing in risky projects
- Allocating capital and corporate strategy

## 4.3. Course III – Corporate Finance

The objective of Course III is to understand how a corporation should finance its investment projects, what the optimal capital structure depends upon, and how it affects firm value.

The course is based on chapters 13-18 of the textbook (Hillier et. al.):

- Irrelevance of capital structure (Modigliani-Miller Theorem)
- Relevance of capital structure under frictions
  - o corporate taxes
  - financial distress of corporations
  - o agency conflicts between debtholders, shareholders, and management of a corporation
  - o informational frictions about firm value

#### 4.4. Course IV – Risk Management

The objective of Course IV is to understand why and how a corporation should manage its exposure to risk.

The course is based on chapters 21-23 of the textbook (Hillier et. al.) and additional readings:

- Risk Measures
- Relevance of risk management
- Credit risk management
- Interest rate risk management
- Foreign exchange risk management

#### 4.5. Course V - Elective

Course V is a PI – a course with continuous assessment of student performance. Each semester, up to10 different courses are offered. Further details can be found in the <u>online course catalogue</u>.

## 5. Bachelor Thesis

The Institute for Finance, Banking and Insurance only supervises the bachelor theses of students who successfully participate in the formal thesis selection procedure. The first step of this process is to register for the bachelor thesis supervision. We recommend that students have at least positively completed Course I of the Finance specialization at this point. Students who have not yet completed Course I can still register, but have a lower chance of being assigned a bachelor thesis topic. Further details about the thesis selection procedure can be found on the website.

# 6. Master Programs in Finance

The Institute for Finance, Banking and Insurance offers two Master programs:

- Finance and Accounting (German) in cooperation with the Institute for Accounting and Auditing
  - For this Master program, it's highly recommended that Bachelor students select the specialization *International Accounting & Controlling* or *Rechnungslegung und Steuerlehre* as a second specialization.
- Quantitative Finance (English) in cooperation with the Institute for Statistics and Mathematics

For this Master program, it's highly recommended that Bachelor students select the specialization *Business Mathematics* as a second specialization. Students have to apply for admission to this Master program by proving their aptitude and showing their achievement potential (GMAT, GRE, recommendations ...).

# 7. Job profile

Graduates of the specialization are qualified for expert and management careers in all areas of financial markets:

- Financial institutions
  - commercial and investment banks
  - o investment companies
  - securities trading
  - investment advisory
  - insurance companies
  - o pension funds
- Finance and Accounting divisions of corporations (treasury / controlling, risk management)
- Consulting (investment, asset, and financing)
- Public sector (budget, controlling)
- Financial market regulators

Graduates of the specialization qualify for elite master programs in finance worldwide.

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## Subject to change!