

Module Handbook

International Finance Master WiSe 16/17

Valid from: Wintersemester 2020/2021

Version: 3, printed 21.10.2022



Modules

1) Masterprüfung IF-Master WiSe 2016

a) 1. Semester ECTS: 30 IF-Master WiSe 2016	
103-001: Financial Management (7 ECTS, jedes Wintersemester)	2
103-002: Financial Analysis (8 ECTS, jedes Wintersemester)	10
103-003: Management Skills (7 ECTS, jedes Wintersemester)	18
103-014: Quantitative Research (8 ECTS, jedes Wintersemester)	26
b) 2. Semester ECTS: 30 IF-Master WiSe 2016	
103-005: Applied International Corporate Finance (7 ECTS, jedes Sommersemester)	32
103-006: Applied Quantitative Corporate Finance (8 ECTS, jedes Sommersemester)	41
103-015: Research in Empirical Finance (7 ECTS, jedes Sommersemester)	49
103-008: Derivatives & Financial Engineering (8 ECTS, jedes Sommersemester)	55
c) 3. Semester IF-Master WiSe 2016	
103-013: Elective: Innovation in the Financial Industry (HfWU) (15 ECTS, jedes Wintersemes	ster) 64
103-009: Elective: Accounting (15 ECTS, jedes Wintersemester)	69
103-010: Elective: Banking (15 ECTS, jedes Wintersemester)	71
103-011: Elective: Business Administration (15 ECTS, jedes Wintersemester)	73
2) Master Thesis ECTS: 15 IF-Master WiSe 2016	
103-012: Master Thesis (15 ECTS.).	75



Description of Module

Code	Title of Module
103-001	Financial Management

Significance of Module for the Goals of the Study Course

Qualification Goals

Students shall be able to do the following:

- Summarize and interpret concepts and differences in international accounting, management accounting and financial accounting.
- Interpret and apply different concepts of modern financial management.
- Recognize new problems in financial management, compare various methods and implement them in a suitable and effective way.

Content

Financial Management

- · Management Accounting
- · Financial Modeling
- Applied IFRS

Teaching Forms

Lectures and Practicals,

Requirements for Participation

Knowledge, Skills, Competencies	Basics in accounting
Preparation for the Module	Online course "Financial Accounting" of Harvard Business School recommended.
	Pre-reading of the recommended literature.

Practicability of Module

Modules within this Study	Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance and Business Administration modules.
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content

The contribution of the module to sustainable development is the awareness that all company stakeholders must gain thorough insight into the economic development of companies based



on international accounting standards. Especially in internationally operating companies, the consolidation of financial figures is a prerequisite for sustainable management. Furthermore, sustainable development demands transparent coverage of all internal processes and calculations.

Exam Requirements (necessary for the awarding of points)

Type and Duration (min.)	Weighting %
Klausur (90 Minuten)	70 %
Schriftliche Arbeit (keine Einheit gewählt)	30 %

Organization of Course

Organization of oodisc		
Responsible for Module		
Prof. Dr. Daniela Fischer		
Further Persons Responsible for	Module	
Prof. Dr. Dr. Dietmar Ernst, Mr N	Marco Koch	
Type of Module	Recurrence	Duration
	jedes Wintersemester	1 Semester
Admission Criteria	ECTS Points	Weekly Attendance
none	7,00	6,00
Workload		
7,00 x 25 Stunden = 175,0 Stun	den, mit der folgenden Aufteilung	
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group
67,5 Std. / 38,6 %	0,0 Std. / 0,0 %	Work
		0,0 Std. / 0,0 %

Content Structure

Code	Title of the Module Element
103-001-01	Management Accounting
103-001-02	Financial Modeling
103-001-03	Applied IFRS



Code	Title of the Module Element
103-001-01	Management Accounting

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- 1. summarize and interpret state-of-the-art concepts in management accounting and performance management
- 2. evaluate and manage overhead costs adequately by applying Traditional Costing as well as Activity Based Costing an interpreting the compiled information
- 3. support new product development according to market needs, particularly meeting the necessary price and cost targets by applying Target Costing
- 4. see the different management accounting and performance management concepts and tools in an overall context and understand their interdependences

With respect to acquired skills, students shall be able to do the following:

- 1. identify data relevant to management accounting and performance management
- 2. solve problems in theory and practice by applying the above mentioned concepts and tools
- 3. evaluate and interpret practical cases and derive conclusions independently

With respect to acquired competencies, students shall be able to do the following:

- recognize practical business challenges in the areas of management accounting and performance management
- 2. apply and modify their knowledge to new and complex challenges
- 3. draw on and make use of adequate sources of information in order to solve these challenges
- 4. perform necessary calculations in the course of problem solving with the above mentioned concepts and tools
- 5. reflect the derived results critically and draw conclusion

Wissen	Knowledge	Skills	Competencies

Content

Part 1: Focus on Decision Making

Chapter 1: Managerial Accounting, the Business Organization, and Professional Ethics

Chapter 2: Introduction to Cost Behavior and Cost-Volume-Profit Relationships

Chapter 3: Measurement of Cost Behavior

Chapter 4: Cost Management Systems and Activity-Based Costing

Chapter 5: Relevant Information for Decision Making with a Focus on Pricing Decisions

Chapter 6: Relevant Information for Decision Making with a Focus on Operational Decisions



Part 2: Accounting for Planning and Control

Chapter 7: Introduction to Budgets and Preparing the Master Budget

Part 3: Product Costing (corresponds to part 4 in the textbook)

Chapter 12: Cost Allocation

Chapter 13: Accounting for Overhead Costs

Teaching Forms

Lectures and Practicals

Teaching Methods

Lectures, discussions, exercises, case analysis, group work.

Literature/Learning Materials

Horngren/Sundem/Stratton/Burgstahler/Schatzberg: Introduction to Management Accounting, 16th Global Edition, Pearson 2014, ISBN-13: 9780273790013

Specifics

Animated PowerPoint-presentations, Audience response system

Weekly Attendance	Division into Groups	Recommended	Language
2,00	ja	Semester	Englisch
		1 Semester	
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
	0,0 Std.		
Hours	0,0 Std.		Group Work



Code	Title of the Module Element
103-001-02	Financial Modeling

Content Structure

Qualification Goals

Knowledge and skills in the subject:

- · to discuss the principles of financial modeling and integrated corporate planning
- to prepare a corporate plan with the help of financial modeling principles
- to structure a business planning problem with modules using different Excel functions and Model Review functions.
- to check the correctness of the corporate planning drawn up

Systemic knowledge, skills and competences:

 to combine different fields of accounting, planning and financial modeling to create selfdeveloped solutions

Knowledge, skills and competences related to self-organisation:

- · to solve guided case studies and to create a business plan independently
- · to control the own results independently
- to organize independently the preparation and follow-up of the lecture in group work

Knowledge, skills and competences related to social competence:

- · to work out solutions to the case studies or exercises in partner or small group work
- · to present results and conclusions to a professional auditorium and to discuss

Wissen Knowledge	Skills	Competencies
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Content

- The Top 10 Financial Modeling Standards
- Case study "Business Plan" for a listed company in Excel
- · Planning assumptions
- P&L planning
- Balance sheet planning
- · Planning of the cash flow statement
- Model review

Teaching Forms

. Lectures and Practicals

Teaching Methods

Lectures, case study, discussions, exercises, case studies, group work, presentations, project work



Literature/Learning Materials

- Benninga, S.: Financial Modeling, MIT Press, 2008
- Ernst D., Häcker, J. (2017, editors): Financial Modeling Business excellence in Financial Management, Corporate Finance, Portfolio Management and Derivatives, Basingstoke (England) and New York (US)

Specifics

Overhead Projector, PowerPoint-presentations for the Case Study, Live-simulations, Excel sheets for the Case Study

Weekly Attendance 2,00	Division into Groups ja	Recommended Semester 1 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/S	Self-Study	Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-001-03	Applied IFRS

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- · summarize and interpret concepts and differences in international accounting
- describe the concepts and role of revenue, expense, asset, liability and equity accounts in financial accounting
- give an overview of the presentation and disclosure components of financial statements
- explain significant deviations between IFRS and US GAAP
- set the current legal environment in relation to the audit approach of an accounting firm

With respect to acquired skills, students shall be able to do the following:

- demonstrate valuation and presentation of balance sheet asset and liability accounts
- evaluate and analyze entity information and identify data relevant to financial accounting and reporting
- interpret basic financial statement information like balance sheet, income statement and statement of cash flows
- report results of conversion to international accounting in writing in a (consolidated) financial statement format

With respect to acquired competencies, students shall be able to do the following:

- perform calculations of measurement and valuation of important financial statement positions
- compare IFRS vs. US GAAP or local accounting standards

Wissen	Knowledge	Skills	Competencies	
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Content

Content

1. Concept of International Accounting:

Capital market based history of US GAAP and IFRS, Standard setting bodies, Framework of international accounting (objective basic principles, Elements of F/S, Accounting policies, Subsequent events)

2. Presentation and disclosure of financial statements:

Balance sheet, Income statement, Statement of changes in Equity, Statement of cash flows, Notes to the financial statements (incl. Segment reporting), Interim financial reporting, Related Parties disclosures

3. Recognition, measurement and valuation of financial statement positions



- Tangible assets (PPE, leases, non-current assets held for sale, discontinued operations)
- Goodwill and Intangible assets (R&D)
- · Impairment
- Financial assets (business combinations, associates, joint ventures, financial instruments, cash)
- Inventories, construction contracts, revenue recognition (POC method etc.)
- · Provisions, contingent liabilities
- Employee benefits, stock compensation
- Income taxes (incl. Deferred taxes)
- 4. Conversion process of a company to international GAAP (first time adoption of IFRS)
- 5. The audit approach of an international accounting firm
- 6. Summary: IFRS / US-GAAP comparison
- Recent developments (i.e. analysis of financial statement restatements, development of IFRS / US GAAP, IFRS 15 and 16)

Teaching Forms

Lectures and Practicals

Teaching Methods

Lecture, discussions, exercises, case analysis

Literature/Learning Materials

Wiley (Wiley VCH Verlag GmbH & Co. KGaA, (2020): International Financial Reporting Standards (IFRS) 2019: English & German edition of the official standards approved by the EU (paperback)

Ernst & Young (Ernst & Young von John Wiley & Sons): International GAAP: Generally Accepted Accounting Practice under International Financial Reporting Standards (IFRS). 2020 (paperback)

Specifics

Board, PowerPoint-presentations, Case studies in word and excel, sample financial statements

Weekly Attendance 2,00	Division into Groups nein	Recommended Semester 1 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/S	Self-Study	Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Description of Module

Code	Title of Module
103-002	Financial Analysis

Significance of Module for the Goals of the Study Course

Qualification Goals

Students shall be able to do the following:

- · Analyze and evaluate financial statement, bonds and stocks
- · apply modern instruments of corporate, bond and stock analysis
- draw on and make use of adequate sources of information in order to assess and value companies, bonds and stocks

Content

Financial Analysis:

- Portfolio Management
- Bond Analysis
- · Equity Analysis

Teaching Forms

Requirements for Participation

Knowledge, Skills,	Basics in accounting
Competencies	
Preparation for the Module	Pre-reading of the recommended literature.

Practicability of Module

Modules within this Study	Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance and Business Administration modules.
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content

Sustainable investment decisions demand careful and sophisticated financial analysis. They require in-depth knowledge of instruments in order to scrutinize different asset classes such as stocks or bonds. Furthermore, students need to possess the skills to analyze financial statements in order to assess the sustainability of investments.

Exam Requirements (necessary for the awarding of points)



Type and Duration (min.)	Weighting %
Klausur (90 Minuten)	70 %
Referat/Präsentation (keine Einheit gewählt)	30 %

Organization of Course

Responsible for Module		
Prof. Dr. Serge Ragotzky		
Further Persons Responsible for	Module	
Prof. Dr. Frank Andreas Schitte	nhelm, Prof. Dr. Leander Geisinger, H	Hr. Metzger
Type of Module	Recurrence	Duration
	jedes Wintersemester	1 Semester
Admission Criteria	ECTS Points	Weekly Attendance
none	8,00	6,00
Workload		
8,00 x 25 Stunden = 200,0 Stun	den, mit der folgenden Aufteilung	
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group
67,5 Std. / 33,8 %	0,0 Std. / 0,0 %	Work
		0,0 Std. / 0,0 %

Content Structure

Code	Title of the Module Element
103-002-01	Portfolio Management
103-002-02	Bond Analysis
103-002-03	Equity Analysis



Code	Title of the Module Element
103-002-01	Portfolio Management

Content Structure

Qualification Goals

With respect to this module, students shall be able to do the following:

- Explain the business modell of an Asset Management company and how an Asset Manager operates (what does a Portfolio Manager do, back office vs. front office)
- Describe the difference between Asset Management and Investment Banking
- Understand different types of investment approaches
- Explain possible parts of an investment approach (absolute return vs. relative return, technical vs. fundamental analysis, bottom up vs. top down, discretionary vs. systematic)
- Understand different investment products and different kind of fees regarding these products (mutual fund vs. individual investment mandate)

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Wissen	Knowledge	Skills	Competencies

Content

- 1. How works an Asset Management Company / what is the business model / case study: "beauty contest" / Q&A with Christop Eibl (founder of Tiberius Asset Management)
- 2. What is an investment approach / different approaches of different companies / case study: "manager selection" / Q&A with Michael Wimmer (fund analyst)

Teaching Forms

Lectures and Practicals

Teaching Methods

Lectures, Discussions, Practicals, Case Studies, Exercises, Q&A with experts

Literature/Learning Materials

Lecturers own script

Specifics

Weekly Attendance 2,00	Division into Groups ja	Recommended Semester 1 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-002-02	Bond Analysis

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- explain the features of different bond types
- summarize the real world factors that influence the price of bonds
- · describe the difference between spot and forward interest rates
- · describe different risk measures for bonds
- · explain and compare different bond strategies

With respect to acquired skills, students shall be able to do the following:

- apply basic mathematical approaches for bond valuation
- · interpret different risk measures of bonds such as duration and convexity
- implement different bond strategies
- · classify bond strategies with respect to their risk

With respect to acquired competencies, students shall be able to do the following:

- · evaluate and analyze the inherent risk of bonds
- apply bond analysis knowledge to solve complex problems in portfolio and risk management
- · analyze investment restrictions and apply suitable bond strategies

Wissen Knowledge	Skills	Competencies
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Content

1. Bonds

Feautures of a Bond; Valuation; Real World Factors

2. Risk Measures

· Duration; Convexity

3. Bond Strategies

 Cash Flow Matching; Barbell Strategy; Duration Matching; Duration-Gap Analysis; Riding the Yield Curve; Arbitrage Strategies

Teaching Forms

Lectures and Practicals

Teaching Methods

Lectures, lectures with exercises

Literature/Learning Materials



Fabozzi: Bond Markets, Analysis and Strategies, Prentice Hall International

Bodie/Kane/Marcus: Investments, McGraw-Hill

Arnold: Corporate Financial Management, Prentice Hall

Ross/Westerfield/Jordan: Fundamentals of Corporate Finance, Irwin

McGraw-Hill

Specifics

PowerPoint-presentations, Excel sheets for downloading

Weekly Attendance 2,00		Recommended Semester 1 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-002-03	Equity Analysis

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- describe the essential tools necessary for the job of an equity analyst, including capital market concepts, financial statement analysis, financial planning and valuation methods
- describe the main steps in financial planning and in corporate valuation
- understand the top down (economy-industry-company) approach to financial planning and forecasting
- discuss differences between discounted cash flow based models and relative valuations as well as advantages and disadvantages of these approaches
- · explain one-stage and multiple-stage valuation models
- · explain advantages and disadvantages of relative valuation approaches
- list and explain the impact of the most relevant macroeconomic drivers of corporate valuation

With respect to acquired skills, students shall be able to do the following:

- Be able to consistently derive a forecast of a company's future financial statements based on an analysis of reported financial data and on assumptions regarding macroeconomic conditions, industry structure, competition, etc.
- apply one-stage and multiple-stage discounted cash flow models
- · construct risk-adjusted discount rates
- use earnings-based, book value-based, revenue-based and sector specific multiples to perform a relative valuation of a company
- · derive theoretically justified multiplies based on company fundamentals
- implement planning and valuation procedures in spreadsheet models
- · analyze the expected impact of macroeconomic factors on corporate valuations

With respect to acquired competencies, students shall be able to do the following:

- independently perform an analysis and valuation of a potential equity investment
- identify the key drivers of the valuation of a company
- systematically derive an investment or disposal recommendation
- analyze and challenge proposals developed by others and identify the key drivers leading to the given investment recommendation

Wissen	Knowledge	Skills	Competencies

Content

- 1. The purpose of Equity Analysis
- 2. Financial Statement Analysis



 The basics: financial analysis as a prerequisite for financial planning; Liquidity; Operating Performance; Risk Analysis; Adjustments to corporate accounts; Derivation of free cash flow (FCF)

3. Financial Planning and Forecasting

- Technical aspects of the planning process (top-down planning; closed-loop planning using spreadsheet models)
- Industry analysis and sales planning (Determinants of Industry unit sales and price levels;
 the industry life cycle; cempetition analysis
- External factors and longer-term growth (external factors affecting longer-term growth perpectives; modelling consistent long-term growth estimates: the DuPont system)

4. Valuation

- · Valuation approaches
- Discounted cash flow valuation (one-stage, two-stage,three-stage models; approaches to modelling the terminal value; comparison of dividend-discount, FCF-to-equity, and FCF-to-firm models; determining the discount rate)
- Relative Valuation (earnings-based, book value-based, revenue based and sector specific multiples; Definitional, descriptional, analytical and application tests of multiples)
- 5. Macroeconomic Aspects of Equity Analysis
 - Business Cycle and asset allocation; impact of macroeconomic factors on stock prices

Teaching Forms

Lectures and Practicals

Teaching Methods

Lectures, discussions, exercises, case studies, group work

Literature/Learning Materials

- · Brown, Keith C., Reilly, Frank K. (2009): Analysis of Investments and Management of Portfolios, 9thedition, South-Western
- · Damodaran, Aswath (2002): Investment Valuation, 2ndedition, New York: John Wiley
- · Benninga, Simon (2008): Financial Modelling, 3rd edition, Cambridge: MIT Press

Specifics

PowerPoint-presentations, Excel spreadsheets, Overhead projector

Weekly Attendance 2,00	Division into Groups nein	Recommended Semester 1 Semester	Language Englisch
Attendance / Contact Hours	'		Time for Exercises/ Group Work



22,5 Std.	0,0 Std.



Description of Module

Code	Title of Module
103-003	Management Skills

Significance of Module for the Goals of the Study Course

Qualification Goals

Students shall be able to do the following:

- Recognize intercultural management and conflict management as an influential parameter in companies and organizations.
- Act and react sensible and with appropriate sensitivity in groups, meetings, and 1:1 talks with managers and employees, also concerning gender, ethnic background, or other diversity criteria.
- Apply international management knowledge to develop skills and operational abilities to manage intercultural conflict appropriately, effectively, satisfactorily and productively.

Content

Management Skills

- · Strategic Management
- Intercultural and Conflict Management
- Project

Teaching Forms

Block course

Requirements for Participation

	Knowledge, comprehension, skills and competences from the first study. Willingness and curiosity to ask questions and to discuss topics with general arguments as well as with personal opinions and experience.
Preparation for the Module	Pre-reading of the recommended literature, preparation of sessions with given literature

Practicability of Module

Relationship to other Modules within this Study	Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance
Course	and Business Administration modules.
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development



Content

Management skills are the basis for responsible and sustainable management decisions. Social sustainability in companies is one of the key success factors in a knowledge and technology driven society and can be regarded as a source for sustainable HR development programs and innovation processes. Especially in an international context, intercultural management and conflict management contribute to the long-term success of a globally operating company. International teams perform successfully when they are aware of the intercultural differences of their team members.

Exam Requirements (necessary for the awarding of points)

Type and Duration (min.)	Weighting %
Schriftliche Arbeit (keine Einheit gewählt)	25 %
Referat/Präsentation (keine Einheit gewählt)	75 %

Organization of Course

Organization of oodisc		
Responsible for Module		,
Prof. Dr. Dr. Dietmar Ernst		
Further Persons Responsible f	or Module	
Ms Vera Naumann; Mr Matthia	as Pohl	
Type of Module	Recurrence	Duration
	jedes Wintersemester	1 Semester
Admission Criteria	ECTS Points	Weekly Attendance
none	7,00	6,00
Workload		
7,00 x 25 Stunden = 175,0 Stu	unden, mit der folgenden Aufteilung	
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group
67,5 Std. / 38,6 %	0,0 Std. / 0,0 %	Work
		0,0 Std. / 0,0 %

Content Structure

Code	Title of the Module Element
103-003-01	Strategic Management
103-003-02	Intercultural Management and Conflict Management
103-003-03	Project



Code	Title of the Module Element
103-003-01	Strategic Management

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to:

- Understand the phases of the strategic management process
- Understand the targets of the different phases of the strategic management process
- Understand the different tools useable during the different phases of the strategic management process

With respect to acquired skills, students shall be able to:

- Evaluate and analyse given case examples of company strategies
- · Implement tools within the strategic management process
- · Present their results convincingly
- · Plan and conduct a strategic management project individually and without support

With respect to acquired competencies, students shall be able to:

- · Apply skills developed in the course "Strategic Management"
- Structure a strategic management project and implement the single process phases
- Discuss and criticize existing strategic management approaches and tools
- Comprehensively present their research results in a professional way

Wissen Knowledge Skills Competencies	Wiccon Knowledge Skills Comp.	etencies
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Content

The lecture "Strategic Management" comprises the theoretical background of the strategic management process, introduces tools which are used in the single phases of the process, gives case examples and executes group work.

Teaching Forms

Teaching Methods

Lectures, discussions, group work with presentations

Literature/Learning Materials

Script Literature

Specifics

Board, Beamer



Weekly Attendance 2,00	Division into Groups nein	Recommended Semester 1 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/S	Self-Study	Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-003-02	Intercultural Management and Conflict Management

Content Structure

Qualification Goals

Students shall be able to do the following:

- Recognize and discuss intercultural management and conflict management as an influential parameter in companies and organizations
- Act and react sensible and with appropriate sensitivity in groups, meetings, and 1:1 talks with managers and employees, also concerning gender, ethnic background, or other diversity criteria
- Apply international management knowledge to develop skills and operational abilities to manage intercultural conflict appropriately, effectively, satisfactorily and productively

Wissen Knowledge Skills Competencies		Skills Competencies
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Content

Management skills are to a great extent personal social skills. Conceptualizing and comparing personal experience with typical patterns becomes a rich source for managerial practice and conflict competence. These patterns can be cultural, they can relate to gender or to group dynamics or the typical stages in groups, or social systems. Special tools help to recognize, analyze and shape communication in a goal-oriented way, starting with personal feedback to an employee or colleague (or receiving such feedback) up to giving directions to a group member. Leadership behaviour mostly consists in verbal communication, such as managing tasks, giving praise or encouraging someone. Open and critical awareness of one's own experience is necessary to acquire knowledge.

Teaching Forms

Teaching Methods

Interactive Lecture

Literature/Learning Materials

Geert Hofstede et al.: Cultures and Organizations. Software of the mind. Intercultural Cooperation and its Importance for Survival. – McGraw-Hill 2010

Harry C. Triandis: Culture and sovial behavior. - McGraw-Hill Inc., 1994

Club of Rome: Earth for all. A survival guide for humanity. – Publication in print expected in September 2022

Daniel Kahnemann: Thinking, fast and slow. - Penguin Books, Great Britain, 2012



Rogers, Carl: On Becoming a Person. A Therapist's View of Psychotherapy [Orig.: 1961], many later editions

Eric Berne: Games People Play: The Psychology of Human Relations. Originally 1964, many later editions, e. g. Grove Press 1978

Additional excerpts of relevant books will be provided to students according to economical and political news and new literature.

Specifics

Discussion, Exercises, Online-tools, Learning Team, Case Study, Role Play, Presentation

Weekly Attendance 2,00	Division into Groups ja	Recommended Semester 1 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/S	Self-Study	Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-003-03	Project

Content Structure

Qualification Goals

The involvement of students in professors' research projects as well as in practical projects between universities and companies or other organisations creates the transfer between study, independent learning and practical implementation. The students learn the methodology of scientific work, quantitative methods, goal-oriented teamwork as well as the consideration of expectations and framework conditions on the part of the project partners.

Examples of projects:

- · Cooperation in the research project of a professor
- Collaboration in a joint project between a professor and a company

Wissen	Knowledge	Skills	Competencies
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Content

Research projects:

- Methods of scientific work
- Methods of quantitative finance
- Approach and organization of research projects
- Empirical work: Conception, implementation, evaluation
- Preparation of a scientific seminar paper

Practice project:

- Project Management
- · Technical content according to project content
- · Processing of subprojects
- Presentation of the project results

Teaching Forms

Block course, Lectures and Practicals

Teaching Methods

Lectures, peer teaching, case study, discussions, exercises, group work, presentations, project work

Literature/Learning Materials

depends on the project

Specifics

PowerPoint-presentations for the Case Study, Live-simulations, Excel sheets for the Case Study



Weekly Attendance 2,00	Division into Groups nein	Recommended Semester 1 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Description of Module

Code	Title of Module
103-014	Quantitative Research

Significance of Module for the Goals of the Study Course

Qualification Goals

Students shall be able to do the following:

- Explain the statistical and mathematical concepts underlying financial theory and econometric modelling
- Solve quantitative problems in finance using modern IT-tools and econometric analysis.
- Evaluate the results, estimation and hypothesis testing of quantitative models and econometric models.

Content

Quantitative Research

- · Quantitative Risk Management with Matlab
- Designing and Publishing Empirical Research in Business

Teaching Forms

Practicals

Requirements for Participation

Knowledge, Skills, Competencies	Basics in mathematics and statistics
Preparation for the Module	Online course "Quantitative Methods" of Harvard Business School recommended.
	Pre-reading of the recommended literature.

Practicability of Module

Relationship to other Modules within this Study Course	Students can apply acquired knowledge, skills and competencies in following other courses: • Financial Management • Financial Analysis • Management Skills • Applied International Corporate Finance • Applied Quantitative Corporate Finance • Research in Empirical Finance • Derivatives and Financial Engineering
	Innovation in the Financial Industry



	As well as all other programmes in Finance and Business Administration
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content

Quantitative Research provides the more technical skills for sustainable management decisions. Without the necessary quantitative background managers are unable to make profound und responsible decisions. Sustainable development requires quantitative skills to reproduce the complex reality in a simplified way. They provide feasibility and decision support, reduced risk, additional insights and knowledge gain.

Exam Requirements (necessary for the awarding of points)

Type and Duration (min.)	Weighting %
Mündliche Prüfung (10 Minuten)	50 %
Schriftliche Arbeit (keine Einheit gewählt)	50 %

Organization of Course

Responsible for Module	Responsible for Module				
Prof. Dr. Dr. Dietmar Ernst	Prof. Dr. Dietmar Ernst				
Further Persons Responsible for	Further Persons Responsible for Module				
Prof. Dr. Anja Blatter, Prof. Dr. Holger Graf					
Type of Module	Recurrence	Duration			
	jedes Wintersemester	1 Semester			
Admission Criteria	ECTS Points	Weekly Attendance			
none	8,00	4,00			
Workload					
8,00 x 25 Stunden = 200,0 Stunden, mit der folgenden Aufteilung					
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group			
45,0 Std. / 22,5 %	0,0 Std. / 0,0 %	Work			
		0,0 Std. / 0,0 %			

Content Structure

Code	Title of the Module Element	
103-014-001	Quantitative Risk Management with Matlab	
103-014-002	Designing and Publishing Empirical Research in Business	



Code	Title of the Module Element
103-014-001	Quantitative Risk Management with Matlab

Content Structure

Qualification Goals

Students know the risks that have to be managed by financial institutions as well as methods to decrease the individual financial risks and the regulatory framework. Moreover, they are able to apply techniques to measure risk and conduct calculations via Matlab.

Wissen Knowledge	Skills	Competencies
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Content

- 1. Sources of financial risks
 - SpeichernMarket risk; Credit Risk; Insurance Risk, Operational Risk
- 2. Introduction to Matlab
- 3. Risk Handling
 - · Risk Management Cycle
 - Regulation
- 4. Risk Measures
 - Value at Risk; Expected Shortfall; Coherent Measures of Risk; Backtesting
- 5. Capital Requirement
 - Regulation; A Standardized Approach; Internal Rating Based Models
- 6. Probability of default
 - External credit ratings; internal credit ratings; Merton's model; concept of copulas
- 7. Stress testing

Teaching Forms

Teaching Methods

Students are invited to actively participate in the lecture. Therefore, activating methods are used. In addition, the students are encouraged to work on practical applications using suitable computer programs such as EXCEL and MATLAB.

Literature/Learning Materials

Lecture notes are provided. Theory, exercises and case studies are included in the lecture notes as well as enough space to fill in derivations and solutions to exercises.

Literature:

McNeil, A. J., Frey, R. und Embrechts, P.: Quantitative RiskManagement: Concepts, TechniquesandTools, Princeton University Press, 2015.



Hull, J.: Risk Management and Financial Institutions, Wiley, 2015

Specifics

Combination of lecture and intensive coaching in MATLAB coding.

Weekly Attendance 2,00	Division into Groups nein	Recommended Semester 1 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-014-002	Designing and Publishing Empirical Research in Business

Content Structure

Qualification Goals

Students are able to:

- successfully plan their research (e.g. empirical master thesis) as a project
- to find the relevant (also international) literature, to read it critically and to use it productively in their research work
- select the appropriate empirical methodology for their research questions and their research object
- · write according to the conventions in the scientific community
- use IT tools such as literature databases or the reference management program Citavi
 effectively and efficiently
- better assess the working methods and conditions of scientific research projects and thus to obtain suggestions for a possible scientific career at a later date
- prepare an exposé on their research work

Wisself Midwiedge Skills Competencies		Wissen	Knowledge	Skills	Competencies
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Content

- Finding and reading scientific literature
- Writing a literature review and identifying a research gap
- Defining a research question
- Developing hypotheses
- Chosing an empirical method
- Publishing research results

Teaching Forms

Practicals

Teaching Methods

- weekly lecture with exercises
- students prepare an individual research exposé
- bi-weekly coaching sessions structured by a milestone plan (students prepare first draft for each milestone in a team of two people, but submit individual research exposés which are also graded individually)

Literature/Learning Materials

Bryman, Alan and Bell, Anna: Business research methods, 4th edition, Oxford: Oxford University Press, 2015



Saunders, Mark, Lewis, Philip and Thornhill, Adrian: Research methods for business students, 7th edition, London: Financial Times Prent., 2015

Specifics

Combination of lecture and intensive small-group coaching

Weekly Attendance 2,00	Division into Groups nein	Recommended Semester 1 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Description of Module

Code	Title of Module
103-005	Applied International Corporate Finance

Significance of Module for the Goals of the Study Course

Qualification Goals

Students shall be able to do the following:

- Summarize and interpret the reasons and success factors of applied international corporate finance.
- Evaluate and analyze motives for corporate acquisitions and corporate disposals and set up appropriate financial acquisition financings.
- Recognize practical business challenges in the areas of applied international corporate finance.

Content

Applied International Corporate Finance:

- Mergers and Acquisitions
- · Private Equity & Acquisition Financing
- IPO & Investor Relations

Teaching Forms

Requirements for Participation

Knowledge, Skills, Competencies	Knowledge, comprehension, skills and competences from following course units:
	Financial ManagementFinancial AnalysisManagement SkillsQuantitative Research
Preparation for the Module	Pre-reading of the recommended literature

Practicability of Module

Relationship to other Modules within this Study Course	Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance and Business Administration modules.
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content	
Content	



Applied international corporate finance shows which growth strategies exist and how companies finance their expansion plans. Growth provides chances, but also contains substantial risks. Sustainable development of companies requires a sustainable financing with equity and debt in order to reduce the risks of a hazardous expansion.

Exam Requirements (necessary for the awarding of points)

Type and Duration (min.)	Weighting %
Klausur (120 Minuten)	83 %
Referat/Präsentation (keine Einheit gewählt)	17 %

Organization of Course

or Module	
ndemann, Mr Kofler	
Recurrence	Duration
jedes Sommersemester	1 Semester
ECTS Points	Weekly Attendance
7,00	6,00
ınden, mit der folgenden Aufteilung	
Preparation/Homework/Self-Study	Time for Exercises/Group
0,0 Std. / 0,0 %	Work
	0,0 Std. / 0,0 %
	jedes Sommersemester ECTS Points 7,00 Inden, mit der folgenden Aufteilung Preparation/Homework/Self-Study

Content Structure

Code	Title of the Module Element
103-005-01	Mergers & Acquisitions
103-005-02	Private Equity & Acquisition Financing
103-005-03	IPO & Investor Relations



Code	Title of the Module Element
103-005-01	Mergers & Acquisitions

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- Summarize and interpret the reasons and success factors of M&A (including PMI).
- Give an overview of the main milestones of the M&A-process.
- Derive main ideas of business alliances as alternatives to M&A.
- Set M&A in relation to other corporate finance transactions like Going Public and Private Equity.

With respect to acquired skills, students shall be able to do the following:

- Ultimately be enabled to work in corporate departments being involved in M&A- and PMI
 -projects as well as advisors in M&A (e.g. investment banking, strategy consulting) after
 having finished their master education.
- Evaluate and analyze motives for corporate acquisitions and corporate disposals.
- Implement strategies for corporate acquisitions and corporate disposals applying the above mentioned milestones of the M&A-and PMI-process.
- Analyze and interpret practical M&A-cases and derive conclusions for the business practice independently.
- Present results of the M&A milestones convincingly.
- Set up an integration strategy.

With respect to acquired competencies, students shall be able to do the following:

- Apply and modify their knowledge to real M&A -transactions (via case-studies).
- Organize complex M&A-transactions on a strategic and financial basis.
- Structure M&A-milestone applying adequate legal documents.
- Recognize practical business challenges in the areas of M&A.
- Creatively develop a M&A- and PMI-strategy for buyers and sellers of corporate assets and corporate shares.
- Criticize the result of M&A strategies in business practice.
- Combine interdisciplinary knowledge (intercultural and conflict management as well as legal issues) in order to solve integration problems of an acquired entity.
- Develop alternative solutions for corporate acquisitions and corporate disposals and give recommendations to clients.
- Comprehensively present solutions to clients and defend them.

Wissen Knowledge Skills Competencies

Content



Why Mergers & Acquisitions?

 The Term Mergers & Acquisitions; Reasons and Success Factors of M&A; The Process of M&A

Initial Phase

Pitch; Choice of Process; Candidate Screening and Selection; Advisers; Mandate Letter;
 Confidentiality Agreement

Contacting Interested Parties

Documentation (Information Memorandum); Letter of Intent

Financial Aspects of M&A

· Due Diligence

Legal Aspects in the M&A Sales Process

· How a Negotiated Deal takes place; Purchase Agreement

Post-Merger Integration (PMI)

Key Issues; Integration Planning, Project- and Change Management in PMI Projects

Teaching Forms

Lectures and Practicals

Teaching Methods

Lectures, Case Studies, Group Presentations, Discussions, Exercises,

Literature/Learning Materials

- Bruner, R. F. (2004); Applied Mergers&Acquisitions, Hoboken, John Wiley & Sons, Inc.
- DePamphilis, D. (2001), Mergers, Acquisitions, and other Restructuring Activities, San Diego: Academic Press
- Ernst, D., Häcker, J. (2007), Applied International Corporate Finance, Vahlen, Munic
- Weston, J.F., J.A. Siu & B.A. Johnson (2001), Takeovers, Restructuring, and Corporate Governance, 3rd ed., Upper Saddle River, NJ: Prentice Hall

Specifics

board, overhead projector, PowerPoint presentations

Weekly Attendance	Division into Groups	Recommended	Language
2,00	nein	Semester	Englisch
		2 Semester	
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-005-02	Private Equity & Acquisition Financing

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- Give an overview of private equity financing and acquisition financing.
- See private equity and acquisition financing in context with other corporate finance transactions like IPO and mergers & acquisitions.
- Set private equity in relation to equity financing over organized capital markets.
- Summarize and present the different goals of equity and debt provider.
- Describe in their own words the most important financial instruments of equity financing, mezzanine financing and debt financing.
- · Derive main ideas of LBO transactions.
- Ultimately be enabled on this basis to act as a junior in a private equity company and in an acquisition financing department after finishing their master education.

With respect to acquired skills, students shall be able to do the following:

- Have the ability to plan, conduct, finance and monitor an investment of a private equity company.
- Implement strategies for funding and organising a private equity company.
- Be able to analyze and identify promising investment opportunities and derive conclusions for the private equity company independently.
- Demonstrate how LBOs can be financed by debt.
- Present results of the investment process convincingly.
- Act as a reliable support and private equity manager to the top-management.

With respect to acquired competencies, students shall be able to do the following:

- Structure private equity investments from a financial, tax and legal perspective.
- Organize the investment process and exit based on a medium-term strategy.
- Recognize practical business challenges when financing companies by equity.
- Creatively develop an IPO strategy for issuers.
- Apply and modify their knowledge to real investment opportunities of private equity companies.
- Criticize the business ethics of financial investors focussing on their medium-term investment horizon.
- Value investment opportunities using specific valuation methods like multiples approach and IRR approach.
- Draw on and make use of adequate sources of banks in order to set up acquisitions financing models.



- Develop alternative financial models for companies looking for a private equity and debt financing.
- Comprehensively present different financial concepts to clients and defend them in argument.

Wissen	Knowledge	Skills	Competencies

Content

Part 1: Private Equity

- What is private equity all about? Definitions; Case Study: Private Equity Ltd. acquires Packaging Group; Motives for private equity financing; Types of investments
- Who drives private equity?Bidder groups for equity capitalThe role of banks in the private equity businessInvestors in private equity
- How are private equity companies organised? Separation of fund and managementSubsidiariesManagement-, control- and advisory organsInner organisation
- Investment contractBasic types and significant parts of the contractAdoption of existing contracts, important side contracts and covenantsProject-oriented milestonesParticipation in advisory and control organs
- How is private equity done? Milestones of a private equity processOrganizational milestonesProject-oriented milestonesCase Study: Private Equity Ltd. acquires Packaging Group

Part 2: Acquisition Financing

- What makes acquisition-financing special? Definition; The challenges of acquisition financing; Acquisition financing vs. buy-out / buy-in financing
- How does acquisition financing work? Functionality of Leveraged Buy-Outs; Exploiting the Leverage-Effect; Improvement of cash-flows; Improvement of company valuation; Integral parts of successful Leveraged Buy-Outs
- How to structure an acquisition? Acquisition financing structuring the project under company law; Asset-Deal vs. Share-Deal; Acquisition financing - structuring the financing tools
- How to determine the financial structure of an acquisition financing? Determination of the debt service ability; Acquisition financing - role of equity capital; Acquisition financing - role of outside capital; Mezzanine capital

Teaching Forms

Lectures and Practicals

Teaching Methods

Lectures, Exercises, Discussions, case studies

Literature/Learning Materials

lecturer's script

Specifics



Board, overhead projector, PowerPoint presentations

Weekly Attendance 2,00	Division into Groups nein	Recommended Semester 2 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-005-03	IPO & Investor Relations

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- · Give an overview of IPO and investor relations.
- See IPO and investor relations in context with other corporate finance transactions like IPO and mergers & acquisitions.
- Set private equity in relation to private equity financing, company valuation and mergers & acquisitions.
- Summarize and present the different goals of equity investors.
- Describe in their own words the most important mielstones in the IPO process and in the communication with equity investors.
- · Derive main ideas of IPOs and investor relations.
- Ultimately be enabled on this basis to act as a junior in equity capital markets department after finishing their master education.

With respect to acquired skills, students shall be able to do the following:

- Have the ability to plan, conduct, and monitor an IPO process in an investment bank.
- Be able to analyze and identify promising IPO candidates and derive conclusions for the equity capital markets department of an investment bank independently.
- Demonstrate how a professional communication strategy can be developed with retail and institutional investors..
- Present results of the IPO process and the communication strategy of a listed company convincingly.
- Act as a reliable IPO and investor relation manager to the top-management.

With respect to acquired competencies, students shall be able to do the following:

- Structure the IPO process from a financial, tax and legal perspective.
- Organize the IPO and an d investor relation process based on a long-term strategy.
- Recognize practical business challenges when financing companies on the stock exchange.
- Creatively develop an IPO strategy for issuers.
- Apply and modify their knowledge to real investment opportunities of retail and institutional investors.
- Criticize the business ethics of retail and institutional investors investing in listed companies.
- Determine the issue price using specific valuation methods like multiples approach.
- Draw on and make use of adequate sources of banks (for instance bloomberg) in order to set up a IPO specific valuation model.
- Develop alternative financial models for companies looking for equity investments.



• Comprehensively present different communication concepts to retail and institutional investors and defend them in argument.

Content

Part IPO

- Why Initial Public Offering (IPO)?: Definition, reasons, global IPO market, history, pros and cons, case study
- Key factors of a successful IPO: Pre-IPO strategy, business plan, equity story, time table, governance, financial reporting, issue concept, excursus ICO
- Valuation: Peergroup, multiples
- Placement process I: Syndicate, structure, research, marketing
- Placement process II: Pricing, allocation, fees, designation, stabilization
- Documentation: Beauty contest, consultants, advisors, due diligence, prospectus, comfort letter, agreements
- Post IPO obligations and Investor Relations activities

Part Investor Relations

- · What is Investor Relations?
- Role and Target of Investor Relations
- IR Environment; Managing Expectations; Objetives of Investor Relations
- Target Groups
- Communication Tools
- · Do we need IR?

Teaching Forms

Lectures and Practicals

Teaching Methods

Lectures, Discussions, Exercises

Literature/Learning Materials

lecturer's script

Specifics

PowerPoint presentations

Weekly Attendance 2,00	nein	Recommended Semester 2 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of Module
103-006	Applied Quantitative Corporate Finance

Significance of Module for the Goals of the Study Course

Qualification Goals

Students shall be able to do the following:

- Set company valuation in perfect capital markets and imperfect capital markets in relation to other corporate finance topics like mergers & acquisitions, going public and private equity. Furthermore, they should also be able to apply the quantitative content from other lectures.
- Interpret the results of the company valuation on perfect and imperfect capital markets and derive conclusions for corporate finance transactions independently.
- Apply and combine knowledge and skills from different course units to company valuation

Content

Applied Quantitative Corporate Finance:

- Company Valuation
- Tutorial: Copany Valuation
- Corporate Finance on Imperfect Capital Markets

Teaching Forms

Requirements for Participation

,	Knowledge, comprehension, skills and competences from following course units: knowledge gained from the first semester lectures
Preparation for the Module	Pre-reading of the recommended literature.

Practicability of Module

Relationship to other	Students can apply acquired knowledge, skills and competencies
Modules within this Study	within the International Finance programme as well as other Finance
Course	and Business Administration modules.
Relevance to other Study	
Courses	

Contribution of the Module to Sustainable Development

Content

Applied quantitative finance deals with valuation instruments and how to apply them on imperfect capital markets. Models of perfect capital markets ignore important risk components and can therefore lead to wrong decisions and endanger the sustainable development of companies.



The combination of risk management and corporate finance should lead to an adequate representation of all relevant risk groups and their interaction.

Exam Requirements (necessary for the awarding of points)

Type and Duration (min.)	Weighting %
Klausur (120 Minuten)	100 %

Organization of Course

Responsible for Module		
Prof. Dr. Dr. Dietmar Ernst		
Further Persons Responsible	or Module	
Type of Module	Recurrence	Duration
	jedes Sommersemester	1 Semester
Admission Criteria	ECTS Points	Weekly Attendance
	8,00	6,00
Workload	-	
8,00 x 25 Stunden = 200,0 St	unden, mit der folgenden Aufteilung	
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group
67,5 Std. / 33,8 %	0,0 Std. / 0,0 %	Work
		0,0 Std. / 0,0 %

Code	Title of the Module Element
103-006-01	Company Valuation
103-006-02	Tutorial: Company Valuation
103-006-03	Corporate Finance on Imperfect Markets



Code	Title of the Module Element
103-006-01	Company Valuation

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- · Give an overview of the main valuation methods
- Set company valuation in relation to other corporate finance topics like Mergers & Acquisitions, Going Public and Private Equity.
- Relate corporate planning to corporate valuation and to describe the linkages in their own words.

With respect to acquired skills, students shall be able to do the following:

- critically evaluate the results of the corporate valuation and to clarify any differences.
- interpret the results of the corporate valuation and to independently draw conclusions for corporate finance transactions.
- review the structure of the valuation model and the results of the corporate valuation with the help of a model review.

With respect to acquired competencies, students shall be able to do the following:

- transfer the results from the corporate valuation to other modules such as financial management, portfolio management and derivatives and to combine them with these modules.
- · master theoretical and empirical challenges of corporate valuation.
- apply their knowledge to specific valuation projects and to adjust it to actual valuation situations.
- critically challenge the assumptions, algorithms and results of every valuation approach.
- present and defend the valuation results in front of clients.

Wissen	Knowledge	Skills	Competencies
1 100011	Ithowhougo	J CKIIIG	Oompotonoico

Content

In the class "Company Valuation" students value a DAX listed company based on the business model the students created in the first semester.

- Overview of the Methods of Company Valuation
- Discountes Cash Flow Method
- WACC Approach
- APV Appraoch
- · Equity Approach
- Multiples
- Trading Multiples



- Transaction Multiples
- Acquisition Financing

Teaching Forms

Lectures and Practicals

Teaching Methods

Lectures, case study, discussions, exercises, group work, project

Literature/Learning Materials

Ernst D., Häcker, J. (2017, editors): Financial Modeling - Business excellence in Financial Management, Corporate Finance, Portfolio Management and Derivatives, Basingstoke (England) and New York (US).

Specifics

The students evaluate the company for which they have prepared a business plan in Financial Modeling in the first semester. The students carry out the valuation using their own Excel model.

Weekly Attendance 2,00	nein	Recommended Semester 2 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-006-02	Tutorial: Company Valuation

Content Structure

Qualification Goals

With respect to acquired skills, students shall be able to do the following:

- use their knowledge about planning and valuation methods to develop a professional standard model for corporate valuation which incorporates the principles of financial modeling.
- obtain the data necessary for a corporate valuation from information providers such as Bloomberg or Thomson Reuters and to process the data.
- independently structure complex tasks in corporate valuation and to develop independent modules to solve these tasks.

With respect to acquired competencies, students shall be able to do the following:

- manage a project in the field of corporate valuation and to develop proprietary solutions in a team of valuation experts.
- compile a transparent and comprehensive documentation of assumptions and methods for a given valuation project.
- structure the process of corporate valuation and to apply the standards of professional financial modeling.
- master theoretical and empirical challenges of corporate valuation.

Wissen	Knowledge	Skills	Competencies

Content

For the content, please refer to the lecture Company Valuation

Teaching Forms

Teaching Methods

Lectures, case study, discussions, exercises, group work, project

Literature/Learning Materials

Ernst D., Häcker, J. (2017, editors): Financial Modeling - Business excellence in Financial Management, Corporate Finance, Portfolio Management and Derivatives, Basingstoke (England) and New York (US).

Specifics

Laptops, beamer, board, overhead projector, MS Excel, MS PowerPoint



Weekly Attendance 2,00	nein	Recommended Semester 2 Semester	Language Englisch
Attendance / Contact Hours 22,5 Std.	Preparation/Homework/Self-Study		Time for Exercises/ Group Work 0,0 Std.



Code	Title of the Module Element
103-006-03	Corporate Finance on Imperfect Markets

Content Structure

Qualification Goals

- The students know the differences between perfect and imperfect capital markets and can apply them to current issues.
- The students know the peculiarities of imperfect capital markets and can apply them in models.
- The students implement different approaches of imperfect capital markets in financial models.
- The students develop and discuss new models to solve current problems.
- Students can independently apply complex models.

Wissen Knowledge Skills Competencies

Content

- · Risk Management in Corporate Finance
- · Theories and models for imperfect capital markets
- · Preparation of a business plan with company-specific risks
- Risk aggregation with Monte Carlo simulation
- Valuation of companies in imperfect capital markets

Teaching Forms

Teaching Methods

Lectures, case study, discussions, exercises, group work, project

Literature/Learning Materials

- Ernst D., Häcker, J. (2017, editors): Financial Modeling Business excellence in Financial Management, Corporate Finance, Portfolio Management and Derivatives, Basingstoke (England) and New York (US)
- Case Study Financial Engineering in Risk Management
- Case Study Company valuations for professionals

Specifics

The students work on case studies and use different software solutions to solve them.

Weekly Attendance	Division into Groups	Recommended	Language
2,00	nein	Semester	Englisch
		2 Semester	



Attendance / Contact	Preparation/Homework/Self-Study	Time for Exercises/
Hours	0,0 Std.	Group Work
22,5 Std.		0,0 Std.



Code	Title of Module
103-015	Research in Empirical Finance

Significance of Module for the Goals of the Study Course

Qualification Goals

Students shall be able to do the following:

- Explain the statistical and mathematical concepts underlying financial theory and predictive analytics such as linear regression, multiple regression as well as times aeries analysis and forecasting
- Solve quantitative problems in finance using modern IT-tools and econometric analysis.
- Evaluate the results, estimation and hypothesis testing of quantitative models and econometric models.
- Prepare, present and critically discuss the results of their own empirical research.

Content

- · Finding and reading scientific literature
- · Writing a literature review and identifying a research gap
- · Defining a research question
- Developing hypotheses
- · Instruments of quantitative research
- · Quantitative research with Matlab and other software tools

Teaching Forms

Requirements for Participation

Knowledge, Skills, Competencies	In-depth knowledge of mathematics and statistics	
Preparation for the Module	Online course "Quantitative Methods" of Harvard Business School recommended.	
	Pre-reading of the recommended literature.	

Practicability of Module

Modules within this Study	Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance and Business Administration modules.
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content	
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Empirical Research provides the empirical background for sustainable management decisions. Without the necessary quantitative background managers are unable to make profound und responsible decisions. Sustainable development requires quantitative skills to reproduce the complex reality in a simplified way. They provide feasibility and decision support, reduced risk, additional insights and knowledge gain.

Exam Requirements (necessary for the awarding of points)

Type and Duration (min.)	Weighting %
Schriftliche Arbeit (keine Einheit gewählt)	50 %
Klausur (60 Minuten)	50 %

Organization of Course

Responsible for Module Prof. Dr. Dr. Dietmar Ernst Further Persons Responsible for Module Prof. Dr. Blatter; Prof. Dr. Graf, Hr. Kamaras Type of Module Recurrence jedes Sommersemester Admission Criteria none ECTS Points 7,00 Workload 7,00 x 25 Stunden = 175,0 Stunden, mit der folgenden Aufteilung Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study 0,0 Std. / 0,0 % Work 0,0 Std. / 0,0 %			
Further Persons Responsible for Module Prof. Dr. Blatter; Prof. Dr. Graf, Hr. Kamaras Type of Module Recurrence jedes Sommersemester 1 Semester Admission Criteria none 7,00 Workload 7,00 x 25 Stunden = 175,0 Stunden, mit der folgenden Aufteilung Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study 0,0 Std. / 0,0 % Time for Exercises/Grounders	Responsible for Module		
Prof. Dr. Blatter; Prof. Dr. Graf, Hr. Kamaras Type of Module Recurrence jedes Sommersemester 1 Semester Admission Criteria none 7,00 Workload 7,00 x 25 Stunden = 175,0 Stunden, mit der folgenden Aufteilung Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study 0,0 Std. / 0,0 % Time for Exercises/Grouwork	Prof. Dr. Dr. Dietmar Ernst		
Type of Module Recurrence jedes Sommersemester 1 Semester Admission Criteria none 7,00 Workload 7,00 x 25 Stunden = 175,0 Stunden, mit der folgenden Aufteilung Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study 0,0 Std. / 0,0 % Time for Exercises/Grounders Work	Further Persons Responsible f	or Module	
jedes Sommersemester 1 Semester Admission Criteria ECTS Points Weekly Attendance 4,00 Workload 7,00 x 25 Stunden = 175,0 Stunden, mit der folgenden Aufteilung Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study 0,0 Std. / 0,0 % Work	Prof. Dr. Blatter; Prof. Dr. Gra	f, Hr. Kamaras	
Admission Criteria pone ECTS Points pone 7,00 Workload 7,00 x 25 Stunden = 175,0 Stunden, mit der folgenden Aufteilung Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study pone Vork Time for Exercises/Grounders Work	Type of Module	Recurrence	Duration
none 7,00 4,00 Workload 7,00 x 25 Stunden = 175,0 Stunden, mit der folgenden Aufteilung Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study 0,0 Std. / 0,0 % Work		jedes Sommersemester	1 Semester
Workload 7,00 x 25 Stunden = 175,0 Stunden, mit der folgenden Aufteilung Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study 0,0 Std. / 0,0 % Work	Admission Criteria	ECTS Points	Weekly Attendance
7,00 x 25 Stunden = 175,0 Stunden, mit der folgenden Aufteilung Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study 0,0 Std. / 0,0 % Work	none	7,00	4,00
Attendance / Contact Hours 45,0 Std. / 25,7 % Preparation/Homework/Self-Study 0,0 Std. / 0,0 % Work	Workload		·
45,0 Std. / 25,7 % 0,0 Std. / 0,0 % Work	7,00 x 25 Stunden = 175,0 Stu	unden, mit der folgenden Aufteilung	
0,0 3(d. 7 0,0 70	Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group
0,0 Std. / 0,0 %	45,0 Std. / 25,7 %	0,0 Std. / 0,0 %	Work
			0,0 Std. / 0,0 %

Code	Title of the Module Element	
103-015-001	Predictive Analytics	
103-015-002	Seminar: Empirical Finance	



Code	Title of the Module Element
103-015-001	Predictive Analytics

Content Structure

Qualification Goals

In this lecture, students learn to independently understand, present and discuss methods in predictive analytics and its applications in finance. Moreover, students are able to apply basic theory in predictive analytics to issues in the financial sector. In addition, the module promotes students' presentation and discourse skills and prepares them for their final thesis.

Wissen	Knowledge	Skills	Competencies
--------	-----------	--------	--------------

Content

- 1. Linear Regression (Least Square Method; Coefficient of determination; Model assumptions; Testing of Significance; Using the estimated regression equation for estimation and prediction; Matlab solution; Case Study)
- 2. Multiple Regression (Least Square Method; Multiple coefficient of determination; Model assumptions; Testing of Significance; Using the estimated regression equation for estimation and prediction)
- 3. Times Series Analysis and Forecasting (Time Series Patterns; Forecast Accuracy; Moving Average and Exponential Smoothing; Trend Projection; Seasonality and Trend; Time Series Decomposition)

Teaching Forms

Teaching Methods

Interactive lecture, group work, peer teaching, presentation, intense coaching in Matlab coding.

Literature/Learning Materials

Anderson, D.R., Sweeney, D.J., Williams, T.A., Camm, J.D., Cochran, J.J., Statistics for Business and Economics, South-Western Cengage, 2020

Specifics

Preparation of theory sessions and respective applications in finance in groups. Limited participants (max. 4 persons), registration and allocation to groups at the end of the previous semester, independent preparation of theory, developing and holding your own session, ongoing consultation and advice during the processing phase, attendance obligation at all sessions.

Weekly Attendance	Division into Groups	Recommended	Language
2,00	nein	Semester	Englisch
		2 Semester	



Attendance / Contact	Preparation/Homework/Self-Study	Time for Exercises/
Hours	0,0 Std.	Group Work
22,5 Std.		0,0 Std.



Code	Title of the Module Element
103-015-002	Seminar: Empirical Finance

Content Structure

Qualification Goals

In this seminar, students learn to independently prepare, present and critically assess papers on current topics in the field of financial market research. The aim of the course is to impart skills in building and structuring information and to apply this knowledge to a specific issue. In addition, the module promotes students' presentation and discourse skills and prepares them for their final thesis.

Wissen	Knowledge	Skills	Competencies
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Content

The seminar "Empirical Financial" deals with selected empirical questions from the areas of Corporate Finance and Capital Markets, which are oriented to current publications and working papers in the respective field. The objective of the seminar is to familiarize students with empirical research in the field of finance and to prepare them for the requirements of a master thesis.

- 1. Empirical Asset Pricing
- 2. Econometrics of Market Microstructure
- 3. Event Studies
- 4. Volatlity models
- Time Series Models in Financial Econometrics

Teaching Forms

Teaching Methods

Interactive seminar, group work, peer teaching, presentation

Literature/Learning Materials

The students primarily research relevant literature.

Campbell J., Lo A. und MacKinlay A.C. (1997): The Econometrics of Financial Markets, Princeton University Press

Cochrane J. (2001): Asset Pricing, Princeton University Press, 2001

Hamilton, J: Time Series Analysis, Princeton University Press, 1994

Specifics

Different parallel seminar groups with different specialisations, small seminar groups with limited participants (max. 4 persons), registration and allocation to seminar groups at the end of the previous semester, independent preparation of term papers, developing and holding your own



specialist lecture, ongoing consultation and advice during the processing phase, attendance obligation at all seminar session.

Weekly Attendance 2,00	Division into Groups ja	Recommended Semester 2 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/S	Self-Study	Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of Module
103-008	Derivatives & Financial Engineering

Significance of Module for the Goals of the Study Course

Qualification Goals

Students shall be able to do the following:

- State the key principles of financial theory, essential mathematical methods, and the concept of risk-neutral pricing.
- · Analyze and structure derivatives
- Implement advanced mathematical methods and computer technology to create innovative solutions for pricing, hedging and trading of financial derivatives

Content

Derivatives & Financial Engineering.

- Derivatives
- · Financial Engineering
- Tutorial: Derivatives & Financial Engineering

Teaching Forms

Lectures

Requirements for Participation

	Knowledge, comprehension, skills and competences from following course units:knowledge gained from the first semester lectures
Preparation for the Module	Pre-reading of the recommended literature.

Practicability of Module

Modules within this Study	Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance and Business Administration modules.
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content

Derivatives are instruments used to hedge risks of volatile currencies, interest rates or commodities. Financial engineering is the technique used to create custom-made financial solutions. Hedging instruments always need a counterpart, and this comes in the form of a speculator. This means that hedging has two sides of a coin, which are risk reduction and



speculation. Sustainable development in financial industries requires in-depth knowledge about how derivatives are engineered and how they can be used for companies' purposes. The module contains a critical review of derivatives in the context of an abusive use of speculation.

Exam Requirements (necessary for the awarding of points)

Type and Duration (min.)	Weighting %
Klausur (120 Minuten)	100 %

Organization of Course

r Module	
r Bloss	
Recurrence	Duration
jedes Sommersemester	1 Semester
ECTS Points	Weekly Attendance
8,00	6,00
nden, mit der folgenden Aufteilung	
Preparation/Homework/Self-Study	Time for Exercises/Group
0,0 Std. / 0,0 %	Work
	0,0 Std. / 0,0 %
	Recurrence jedes Sommersemester ECTS Points 8,00 nden, mit der folgenden Aufteilung Preparation/Homework/Self-Study

Code	Title of the Module Element
103-008-01	Financial Engineering
103-008-02	Derivatives in Financial Engineering
103-008-03	Tutorial: Derivatives in Financial Engineering



Code	Title of the Module Element
103-008-01	Financial Engineering

Content Structure

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- State the key principles in financial theory, essential mathematical methods, and the concept of risk-neutral pricing
- Frame and describe in detail the valuations for forwards, swaps and options
- Explain the theoretical basis for the risk-neutral pricing approach including the underlying assumptions

With respect to acquired skills, students shall be able to do the following:

- · Analyze and structure derivatives
- Identify and set up various trading and hedging strategies depending on given underlying risks and/or market expectations

With respect to acquired competencies, students shall be able to do the following:

- Understand the proper utilization of derivatives in practice
- Implement advanced mathematical methods and computer technology to create innovative solutions for pricing, hedging and trading of financial derivatives
- Apply both discrete and continuous time models in order to provide insights into the concept of risk-neutral pricing, which has significant ramifications both in theory and practice

Wissen	Knowledge	Skills	Competencies

Content

- 1. Valuation and analysis of forwards and futures
- 2. Valuation and analysis of swaps
- 3. Stochastic processes in discrete and continuous time
- 4. Determination of option prices in discrete time
- 5. Determination of option prices in continuous time
- 6. Greeks
- Hedging Strategies

Teaching Forms

Lectures, Practicals, Lectures and Practicals

Teaching Methods

Lectures, Discussions, Exercises

Literature/Learning Materials



- Hull, J. (2008) Options, Futures, and Other Derivatives
- Watsham, T. & Parramore, K. (1996) Quantitative Methods for Finance, optional
- Tuckman, B. (2002) Fixed Income Securities, optional
- Brealey, R., Myers, S. & Allen, F. (2010) Principles of Corporate Finance, optional

Specifics

Flipchart, Metaplan board, PowerPoint-presentations, Excel sheets for downloading

Weekly Attendance 2,00	Division into Groups nein	Recommended Semester 2 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/S	Self-Study	Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-008-02	Derivatives in Financial Engineering

Content Structure

Qualification Goals

Qualification Goals

With respect to acquired knowledge, students shall be able to do the following:

- Summarize the theoretical toolbox of derivatives and a multitude of smaller exercises/case studies.
- · Understand the derivative instruments in interest rates, credit and equities
- Explain the risk/return profile of structured products
- Describe in their own words the most important financial instruments in Financial Engineering.
- · Derive main ideas of derivative transactions.

With respect to acquired skills, students shall be able to do the following:

- · apply this theoretical framework in business practice
- apply knowledge in the structuring process of tailor made financial solutions
- Have the ability to plan and carry out suitable experiments and to evaluate and interpret the resulting data to arrive at conclusions

With respect to acquired competencies, students shall be able to do the following:

- fill a position in a trading and sales unit of an international bank
- design simple financial engineering solutions independently
- combine interdisciplinary knowledge in order to solve (new) problems

Wissen	Knowledge	Skills	Competencies

Content

- 1. Derivatives Exchanges
 - Electronic trading vs. open outcry
 - Eurex, CBOE, CME, LIFFE (Clearing and Margining)
- 2.1 RBM (Risk based margining) vs. SPAN (Standard Portfolio Analysis of Risk) and TIMS (Theoretical Intermarket Margin System); Eurex Clearing Prisma
 - · Margining of Options; Margining of Futures
- 2.2 The Margincall: (Risk controlling and risk management)
- 3. Risk Controlling Options and Futures Acc. and Traders; Risk Controlling of A1; Risk Controlling of M1 (Derivatives Instruments and Valuation)
- 4. Options; Futures; Options on Futures; Combinations; Exotic Options (Interest Rate Derivatives of Fixed Income Solutions); Plain vanilla derivatives, OTC and exotic derivatives.



- 5.OTC Derivatives; Listed Options and Futures (Instruments, valuation, risk controlling).
- 6. Definition; Instruments used in Portfolio Management; Hedge funds management; Instruments used in Fond Management; Financial Engineering with Derivatives; Motives for equity & fixed income derivatives and financial engineering (credit derivatives and related instruments)
- 7. Definition; Instruments; Valuing of credit derivatives (pricing of derivatives)
- 8. Quantitative methods in Financial Engineering; Pricing models: Black Scholes Model; Binomial Methods (Cox, Ross, Rubinstein); Garman-Kohlhagen; Monte Carlo Methods, Sparse Grid Method; Valuing of listed and non-listed derivatives;
- 9. Greeks first order: Delta; Gamma; Theta; Rho; Vega; Greeks used in hedging transactions; Greeks used in special market situations; Greeks second order incl. Vanna-Volga pricing; Delta and gamma neutral hedging transactions.
- 10. Strategies with Options and Futures
 - Speculation; Hedging; Spread Trading; Combinations
- 11. FX Derivatives: Pricing of FX Derivatives; Strategies, Valuing
- 12. Commodity Derivatives: Pricing of commodity Derivatives; Strategies for hedging, speculation and spread trading
- 13. Swap and Swaptions: Instruments; Valuing; Strategies
- 14. Exotic Options
 - Instruments; Pricing and valuing of exotic options; Strategies with exotic options; Exotic options in financial engineering products; Risk management of exotic options.
- 15. Derivatives Used in Financial Engineering and in Risk Management

Financial Engineering Process; Instruments and strategies used in the financial engineering process; Valuing of a financial engineering product; Desks of a financial engineering department; Issuers and products; Offering (Public Offering; Private Placement); Derivatives in Risk management.

Teaching Forms

Teaching Methods

Lectures, Discussions, Exercises, Group work, presentation.

Literature/Learning Materials

Lecturers own script

Michael Bloss, Dietmar Ernst, Joachim Häcker, Daniel Sörensen: Financial Engineering

Specifics

Flipchart, Metaplan board, PowerPoint-presentations, Excel sheets for downloading, Live-simulations, Bloomberg, Matlab®, etc.



Weekly Attendance 2,00	nein	Recommended Semester 2 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of the Module Element
103-008-03	Tutorial: Derivatives in Financial Engineering

Content Structure

Qualification Goals

Active and independent insertion of derivatives and trading solutions

- · Constructing financial engineering products
- · Review and explanation of existing product
- · Analyse and structure derivatives
- · Valuation and modelling

With respect to acquired competencies, students shall be able to do the following:

- Understand the proper utilization of derivatives in practice
- Implement trading strategies in terms of exchange-traded derivatives.
- · Inserting and evaluating OTC derivatives
- · Use of financial engineering products

Wissen Knowledge Skills Competer

Content

- Derivatives Trading Strategies
- Eurex Trading
- Applied Trading OTC derivatives market
- Create Financial Engineering Products
- Financial Engineering Process
- Construct and evaluation of Financial Engineering Products
- · Applied: Physics in Finance; Econophysics and Quantitative Models in Financial Engineering
- · Practical use of Derivatives in Financial Engineering

Teaching Forms

Lectures, Practicals, Lectures and Practicals

Teaching Methods

Lectures, Discussions, Exercises

Literature/Learning Materials

Bloss, Ernst, Häcker, Sörensen (2012) Financial Engineering

Hull, J. (2016): Options, Futures, and Other Derivatives

optional: Lecturers own script

Specifics



Flipchart, Metaplan board, PowerPoint-presentations, Excel sheets for downloading; Bloomberg, Matlab®

Weekly Attendance 2,00	ja	Recommended Semester 2 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of Module
103-013	Elective: Innovation in the Financial Industry (HfWU)

Significance of Module for the Goals of the Study Course

Qualification Goals

Students shall be able to do the following:

- Summarize and interpret concepts of innovations in the financial industry.
- Interpret and apply different concepts and technologies in the modern financial industry.
- Recognize problems, challanges and concepts in the financial industry, compare various methods and implement them in a suitable and effective way.

Content

- · Starts-ups, Data Science and Machine Learning in the Financial Industry
- Data Science & Data Science in Finance: Financial Analytics
- Digital Finance/Fin Tec

Teaching Forms

Seminar

Requirements for Participation

Competencies	Knowledge, comprehension, skills and competences from the first two semesters. Willingness and curiosity to ask questions and to discuss topics with general arguments as well as with personal opinions and experience.
Preparation for the Module	Pre-reading of the recommended literature.

Practicability of Module

Modules within this Study	Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance and Business Administration modules.
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content

The currently observable transformation in the financial industry demand careful and sophisticated analysis of innovations. TThey require in-depth knowledge of technological innovations and their impact on existing business areas in the financial industry. Furthermore, it is necessary to actively manage the transformation process in order to ensure the long-term success of the company.

Exam Requirements (necessary for the awarding of points)



Type and Duration (min.)	Weighting %
Klausur (120 Minuten)	25 %
Referat/Präsentation (keine Einheit gewählt)	45 %
Schriftliche Arbeit (keine Einheit gewählt)	30 %

Organization of Course

Responsible for Module			
Prof. Dr. Dietmar Ernst			
Further Persons Responsible for	Module		
Prof. Dr. Detscher, Prof. Dr. Geisinger, Prof. Dr. Graf, Mr McCall			
Type of Module	Recurrence	Duration	
	jedes Wintersemester	Semester	
Admission Criteria	ECTS Points	Weekly Attendance	
none	15,00	8,00	
Workload			
15,00 x 25 Stunden = 375,0 Stunden, mit der folgenden Aufteilung			
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group	
90,0 Std. / 24,0 %	52,5 Std. / 14,0 %	Work	
		50,0 Std. / 13,3 %	

Code	Title of the Module Element
103-013-001	Digital Finance/Fin Tec
103-013-002	Data Science & Data Science in Finance:Financial Analytics
103-013-003	Starts-ups, Data Science and Machine Learning in the Financial Industry



Code	Title of the Module Element
103-013-001	Digital Finance/Fin Tec

Content Structure

Qualification Goals

- 1. Learn how to run own research in your field of studies
- 2. Gain knowledge on digitalisation in the Finance area/ on Fintech
- 3. Strengthen your skills in presenting topics adequately

Wissen Knowledge	Skills	Competencies
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Content

- Disruption of Finance Industry's business models and value generation
- Emergence of FinTech business models and new investment categories (Cryptocurrencies/ ICOs, Crowd Funding, P2P, Robo Advisors)
- Digitalization of major value generation steps (AI, Chatbots, RPA, Payment Automation)

Teaching Forms

Seminar

Teaching Methods

Interacitve seminar with intro session, interim presentation & feedback session plus final seminar paper submission & presentation.

Literature/Learning Materials

Theo Lynn/ John G. Mooney/ Pierangelo Rosati/ Mark Cummins (2019): Disrupting Finance - FinTech and Strategy in the 21st Century, Cham.

Specifics

Weekly Attendance 2,00	nein	Recommended Semester 3 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	52,5 Std.		Group Work
22,5 Std.			50,0 Std.



Code	Title of the Module Element
103-013-002	Data Science & Data Science in Finance:Financial Analytics

Content Structure

Qualification Goal	Qualification Goals				
Wissen	Knowledge	Skills	Competencies		
Content					
The course "Data Science & Data Science in Finance:Financial Analytics" is provided by the BSc study programme "International Financial Management". Please check their prospective module handbook for a detailled description.					
Teaching Forms					
Teaching Methods					
Literature/Learning Materials					
Specifics	Specifics				

Weekly Attendance 4,00	Division into Groups nein	Recommended Semester 3 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
45,0 Std.			0,0 Std.



Code	Title of the Module Element
103-013-003	Starts-ups, Data Science and Machine Learning in the Financial Industry

Content Structure

Qualification Goals

- 1. An understanding of the startup ecosystem.
- 2. Knowledge of how venture capital assists in scaling startup growth
- 3. Understanding of how technologies are used to disrupt industries

Wissen Knowledge	Skills	Competencies
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Content

- 1. Startup Ecosystem and Lifecycle
- 2. Al in Startups: A look across industry verticals (Finance, Pharma, Retail, Logistics, Auto, Govt/NGO)
- 3. Entrepreneurial Finance: Venture financing lifecycle; Seed, Angel, Venture finance.

Teaching Forms

Teaching Methods

Literature/Learning Materials

To be provided in syllabus in first class.

Specifics

Weekly Attendance 2,00	nein	Recommended Semester 3 Semester	Language Englisch
Attendance / Contact	Preparation/Homework/Self-Study		Time for Exercises/
Hours	0,0 Std.		Group Work
22,5 Std.			0,0 Std.



Code	Title of Module
103-009	Elective: Accounting

Significance of Module for the Goals of the Study Course

Qualification Goals

Accounting is one of the core competencies in finance. The aim of this module is to create competencies in the measurement, processing, and communication of financial and non financial information about economic entities such as businesses and corporations. The students are able to measure the results of an organization's economic activities and conveys this information to a variety of users, including investors, creditors, management, and regulators.

Content

Please refer to the module descriptions of the respective university abroad.

Teaching Forms

Requirements for Participation

Competencies	Knowledge, comprehension, skills and competences from the first two semesters. Willingness and curiosity to ask questions and to discuss topics with general arguments as well as with personal opinions and experience.
Preparation for the Module	Pre-reading of the recommended literature.

Practicability of Module

Relationship to other Modules within this Study Course	Accounting is a topic that is relevant to all modules of the study programme. There are close links to the module "Financial Accounting".
	Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance and Business Administration modules.
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content

Sustainability is a very important topic for companies. In the financial sector, the sustainability rating often determines whether and which access companies have to financing. Accordingly, sustainability must be documented in a company and shown in various reports. This task is taken over by accounting.

Exam Requirements (necessary for the awarding of points)



Type and Duration (min.)	Weighting %
· · · · · · · · · · · · · · · · · · ·	

Organization of Course

Responsible for Module				
Prof. Dr. Dietmar Ernst				
Further Persons Responsible f	or Module			
Type of Module Recurrence Duration				
	jedes Wintersemester	1 Semester		
Admission Criteria	ECTS Points	Weekly Attendance		
	15,00	0,00		
Workload				
15,00 x 25 Stunden = 375,0 Stunden, mit der folgenden Aufteilung				
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group		
0,0 Std. / 0,0 %	0,0 Std. / 0,0 %	Work		
		0,0 Std. / 0,0 %		

Code Title of the Module Element	
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Code	Title of Module
103-010	Elective: Banking

Significance of Module for the Goals of the Study Course

Qualification Goals

Banking is one of the core competencies in finance. A bank is a financial institution licensed to receive deposits and make loans. Banks may also provide financial services such as wealth management, currency exchange, and safe deposit boxes. There are several different kinds of banks including retail banks, commercial or corporate banks, and investment banks. In most countries, banks are regulated by the national government or central bank. Students deepen their competences in the different types of banking, depending on how this module is designed.

Content

Please refer to the module descriptions of the respective university abroad.

Teaching Forms

Requirements for Participation

Competencies	Knowledge, comprehension, skills and competences from the first two semesters. Willingness and curiosity to ask questions and to discuss topics with general arguments as well as with personal opinions and experience.
Preparation for the Module	Pre-reading of the recommended literature.

Practicability of Module

Relationship to other Modules within this Study Course	Banking is a topic that is relevant to all modules of the study programme. There are close links to the module "Financial Accounting". Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance and Business Administration modules.	
Relevance to other Study Courses		

Contribution of the Module to Sustainable Development

Content

Sustainability is a very important topic for companies. Sustainability in the Banking System deals very intensively with sustainable forms of financing and investment opportunities. These activities are often also referred to as ESG (Ecological Social Governance).

Exam Requirements (necessary for the awarding of points)



Type and Duration (min.)	Weighting %

Organization of Course

Responsible for Module		
Prof. Dr. Dr. Dietmar Ernst		
Further Persons Responsible f	or Module	
Type of Module	Recurrence	Duration
	jedes Wintersemester	1 Semester
Admission Criteria	ECTS Points	Weekly Attendance
	15,00	0,00
Workload		
15,00 x 25 Stunden = 375,0 S	tunden, mit der folgenden Aufteilung	
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group
0,0 Std. / 0,0 %	0,0 Std. / 0,0 %	Work
		0,0 Std. / 0,0 %

Code Title of the Module Element	
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Code	Title of Module
103-011	Elective: Business Administration

Significance of Module for the Goals of the Study Course

Qualification Goals

Business Administration deals intensively with management issues. Students in the Master International Finance deal intensively with numerous financial management and strategic management issues. In order to further qualify themselves for top management positions, it makes sense for students to deepen their knowledge in the subject of Business Administration.

Content

Please refer to the module descriptions of the respective university abroad.

Teaching Forms

Requirements for Participation

Competencies	Knowledge, comprehension, skills and competences from the first two semesters. Willingness and curiosity to ask questions and to discuss topics with general arguments as well as with personal opinions and experience.
Preparation for the Module	Pre-reading of the recommended literature.

Practicability of Module

Course	Business Administration is a topic that is relevant to all modules of the study programme. Students can apply acquired knowledge, skills and competencies within the International Finance programme as well as other Finance and Business Administration modules.
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content

Sustainability is a topic that is important in all areas of business administration. Especially at management level, it must be ensured that sustainability is consistently implemented.

Exam Requirements (necessary for the awarding of points)

Type and Duration (min.)	Weighting %



Responsible for Module			
Prof. Dr. Dietmar Ernst			
Further Persons Responsible for Module			
Type of Module Recurrence Duration			
	jedes Wintersemester	1 Semester	
Admission Criteria	ECTS Points	Weekly Attendance	
	15,00	0,00	
Workload			
15,00 x 25 Stunden = 375,0 Stunden, mit der folgenden Aufteilung			
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group	
0,0 Std. / 0,0 %	0,0 Std. / 0,0 %	Work	
		0,0 Std. / 0,0 %	

Code	Title of the Module Element
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Code	Title of Module
103-012	Master Thesis

Significance of Module for the Goals of the Study Course

Qualification Goals

Qualified research and evaluation of scientific literature. For this they use articles from international journals as well as practical information from companies. Research questions, hypotheses and research design can be convincingly developed. The work is well structured and convincingly presented in written form. Systemic knowledge, skills and competences: Students are able to independently produce a demanding scientific paper. Knowledge, skills and competence related to self-organization: Students are responsible for the project of writing their master's thesis. Knowledge, skills and competences related to social competence: Students can convincingly present their approach and work results in the colloquium with the professor.

Content

The contents of the Master's thesis are coordinated with the first supervisor.

Teaching Forms

Requirements for Participation

Knowledge, Skills, Competencies	Excellent knowledge of scientific work is required from the seminar "Designing and publishing empirial research" of the first semester.	
Preparation for the Module	This takes place through the seminars in the first two semesters, especially through the seminar "Designing and publishing empirial research"	

Practicability of Module

Relationship to other Modules within this Study Course	The master thesis is based on all previous modules, especially on the seminar "Designing and publishing empirial research".
Relevance to other Study Courses	

Contribution of the Module to Sustainable Development

Content

The relation to sustainable development depends on the chosen topics. Students are encouraged to deal intensively with topics of sustainable development or to critically discuss the topic of their thesis against the background of sustainable development.

Exam Requirements (necessary for the awarding of points)



Type and Duration (min.)	Weighting %
Masterarbeit (4 Monate)	NaN %

Organization of Course

Responsible for Module				
Prof. Dr. Dietmar Ernst				
Further Persons Responsible for Module				
all first and second supervisors				
Type of Module	Recurrence	Duration		
	keine Angabe	1 Semester		
Admission Criteria	ECTS Points	Weekly Attendance		
	15,00	0,00		
Workload				
15,00 x 25 Stunden = 375,0 Stunden, mit der folgenden Aufteilung				
Attendance / Contact Hours	Preparation/Homework/Self-Study	Time for Exercises/Group		
0,0 Std. / 0,0 %	0,0 Std. / 0,0 %	Work		
		0,0 Std. / 0,0 %		

Code Title of the Module Element	Code
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Modules

103-001: Financial Management	2
103-002: Financial Analysis	10
103-003: Management Skills	18
103-005: Applied International Corporate Finance	32
103-006: Applied Quantitative Corporate Finance	41
103-008: Derivatives & Financial Engineering	55
103-009: Elective: Accounting	69
103-010: Elective: Banking	71
103-011: Elective: Business Administration	73
103-012: Master Thesis	75
103-013: Elective: Innovation in the Financial Industry (HfWU)	64
103-014: Quantitative Research	26
103-015: Research in Empirical Finance	40