

Business Courses in English

Double Degree

Bachelor level | Winter Term 2024/2025

Each course = 5 ECTS Credits

Non-restricted Specialization courses

1. Business Analysis (75114)
2. Advanced Mathematics and Statistics for Business and Economics (75165)
3. Corporate Finance (75617)

Restricted Specialization courses*

4. Change and Project Management (75117)
5. Sustainability Accounting (75119)
6. Topics in International Economics (75120)
7. Supply Chain Management (75608)
8. International Management Training (75644)
9. Value Based Management (75124)
10. Leadership and Personality (75648)

**Previous registration due to limited seats required by August 21st 2024.
Registration information will follow by e-mail. Only if you got confirmation, you
are allowed to participate in the course!*

1. Business Analysis (75114)

Learning Outcomes:

This course aims to introduce students to business analysis and valuation. By the end of the course, students should be able to apply an economic framework for the analyses of a firm's expected performance and firm's shares. The students are able to draw up a modified balance sheet using financial statements according to IFRS (International Financial Reporting Standards), to carry out a split of the results, and to calculate key financial ratios to reflect particular aspects of the financial position and financial performance. They independently assess the economic situation of the respective (concrete) company based on the ratios determined and qualitative aspects of the financial statement analysis.

The students are able to present professional problems and the proposed solutions in writing and verbally.

Contents:

This course first introduces and develops an economic framework for business analysis and valuation. This framework covers key analysis components such as business strategy analysis, accounting analysis, financial analysis, and prospective analysis, with a strong emphasis on equity (stock) valuation. This framework is then applied to a variety of decision contexts including valuation, merger and acquisition analysis, and corporate financial policies analysis.

Each of the topics introduced in this course covers both institutional details and results of relevant academic research. It is furthermore supported by a series of case studies. This course should thus appeal to students interested in the use of financial accounting in auditing, corporate finance, equity research, fund management, and strategy consulting.

2. Advanced Mathematics and Statistics for Business and Economics (75165)

Learning Outcomes:

The students can apply advanced mathematical methods to illustrate and analyze economic problems quantitatively. Using methods of descriptive statistics, they can visualize and interpret economic data; using methods of inferential statistics, they can derive estimates and draw conclusions from the data. Students are familiar with several basic stochastic processes, their structural differences (e.g. autocorrelation), and corresponding areas of application, like modeling inflation rates, stock prices or insurance contracts. Students are well-equipped in preparation for other econometric methods or a quantitative thesis.

Contents:

Statistics

- Quantile measures and boxplots
- Random variables, dependence and conditional probabilities
- Probability distribution
- Estimators and Confidence Intervals

Mathematics

- Integration rules (including integration by parts and by substitution)
- Hotelling Model
- Standard Hotelling Model
- 2-stage-game with location choices

3. Corporate Finance (75617)

Learning Outcomes:

The students understand the complex tasks of modern financial management. They are accustomed with the major determinants of a financing policy. They are able to calculate market based cost of capital and to provide market based valuations of companies. They know how to derive a meaningful financial leverage. The students master the basics of modern portfolio theory and risk management.

Contents:

1. Introduction
2. Valuing Stocks
3. Risk and Return
 - 3.1. Capital Markets and the Pricing of Risk
 - 3.2. Optimal Portfolio Choice and the Capital Asset Pricing Model
 - 3.3. Estimating the Cost of Capital
 - 3.4. Investor Behavior and Capital Market Efficiency
4. Capital Structure
 - 4.1. Capital Structure in a Perfect Market
 - 4.2. Debt and Taxes
 - 4.3. Financial Distress, Managerial Incentives, and Information
 - 4.4. Payout Policy
5. Capital Budgeting and Valuation with Leverage

Prior knowledge of the contents of the module 'Finanzwirtschaft' or 'Finance' is strongly recommended. The modules of the major 'Financial Management' do not require a specific sequence. 'Financial Management' may be combined with all other majors.

4. Change and Project Management (75117)

Learning Outcomes:

Students will develop:

The capability to study, understand and apply theory on change management (i.e. models, frameworks as well as their scientific foundation);

The capability to reflect on why changes happen and to ascertain what can be done in a specific situation in order to influence a change positively;

The capability to act from an own vision based on creation of (added) value to society;

The capability to operate and to communicate in a dynamic, creative working environment;

The capability to initiate, organize and manage changes.

Contents:

To innovate always means to change someone's behavior. If you, for instance, invent a new product, people need to learn how to use it. Thus, they need to adopt their own behavior to the usage of this new product. Changing behavior becomes even more necessary in case of process innovation. Usually a process is conducted by a person, which means that a behavioral change is a necessary requirement for process innovations.

Students who participate in the module Change Management will understand why changes happen, how they happen and what needs to be done to make changes a welcome rather than a dreaded concept. Frameworks, models and ways of approaching changes will be presented and discussed. Students will learn how to apply the right approach to each unique situation.

In scope of the module Change Management following topics will be examined in detail:

Levels of Changes (person - team - organization)

Change Perspectives (Personality, Leadership, Resistance, Change Agent)

Change Management Methods (e.g. 7C's of change)

Success Factors of Changes

Practical Application



5. Sustainability Accounting (75119)

Learning Outcomes:

The overall aim of this seminar is to enable the students to understand the contribution of Controlling to help managers make better decisions. By emphasizing human behaviour aspects and focusing on concepts, analyses and procedures Controlling is recognized as an essential managerial tool for business strategy and operational implementation.

Contents:

The controller's role in the organization will be discussed and controlling terms and tools will be introduced. Special emphasis will be laid on reporting, budgetary planning and responsibility accounting. Relevant information for decision making and incremental analysis will be discussed. Finally the balanced scorecard will be evaluated as a tool for implementing an organisation's strategy.

6. Topics in International Economics (75120)

Learning Outcomes:

Students have a deepened understanding of economic methods to be applied to selected international economic topics. They are able to analyze recent economic problems in an international context and to evaluate political solutions. They are able to follow competently and question critically recent economic discussions. They know how to present economic ideas in front of a plenary, to tackle critical questions, and to lead a discussion.

Contents:

Selected recent topics in international economics such as recent developments in trade policy, the European monetary crisis, development economics, public debt, electronic currencies, Brexit, migration etc. Students need approval of the lecturer, but basically choose their own topic to work on themselves.

7. Supply Chain Management (75608)

Learning Outcomes:

- > The students recognize problems and challenges of a supply chain resulting from a vertical division of labor between different companies.
- > The students understand the relevance of a professional supply chain management for the success of companies.
- > The students understand the development stages starting with basic logistic activities and leading to modern SCM approaches. They can recognize in a company for they are working, on which development stage this is operating. From this, they derive the appropriate measures.
- > The students know the topics relevant to the conceptual design and design of supply chains and they are familiar with the decisions to be take.
- > The students know the planning and controlling tasks of supply chain management. They are familiar with methods and tools to cope with the typical challenges.

Description of Content:

Introduction to Supply Chain Management

- > The historical development of SCM in the 20th and 21st centuries
- > The complexity of today's value chains and their drivers
- > Logistic core tasks in supply chain management

Design and operations of Supply Chains

- > Outsourcing and make-or-buy decisions as facilitators for supply chain management
- > The strategic design of supply chains and its most important models and methods
- > The operational tasks and processes of coordinating supply chains

Management of distribution networks

- > Basic concepts of distribution logistics
- > Service level and inventory management
- > Supply Chain postponement



8. International Management Training (75644)

Learning Outcomes:

This subject develops an understanding of the nature of intrapersonal and interpersonal competencies and their relevance to management development in contemporary organisations. It explores behavioural skill learning in order to establish a platform for continued development. Students learn and take over the role as management trainers. All participants will be able to create a self-diagnosis in terms of the basic training skills. They will design an practical management training plan, checked and coached by either the lecturer as well as by a coaching partner during the semester. Participants are able to develop a practical training unit in terms of developing management skills. They know how to apply the methodology of Kolb and Fry "Experiential Learning" by realizing a practical training unit. They are able to reflect their own behaviour in different situations of international management contexts. They know how to enlarge their own behavioural range for practicing the culturally appropriate style in situations of communication, conflict, leadership, teamwork etc.

Contents:

Theoretical approaches of International Management Training. Methodology of management training, didactical approaches, media, brain-friendly learning, experiential learning according to Kolb and Fry. Tools and instruments assessing and developing intercultural and managerial competencies.

9. Value Based Management (75124)

Learning Outcomes:

Students understand the key foundations of value and are able to apply the core principles of value creation: (1) the idea that return on invested capital and growth drive cash flow, which in turn drive value, and (2) the conservation of value principle, which says that anything that doesn't increase cash flow doesn't create value (unless it reduces risk) on real world examples.

Students can analyse historical performance, forecast free cash flows, estimate the appropriate opportunity cost of capital, and based on such input parameters can use the discounted cash flow model and economic value-added model to estimate and identify sources of value and interpret the results.

Description of Content:

After a first general introduction of the discipline itself and the wider environment in which it is set, the first part of the lecture deals with the foundations of value. We discuss the fundamental principals of value creation as well as the conservation of value and the role of risk. Based on such knowledge, the alchemy of stock market performance is discussed. The first part concludes with an analysis of the two drivers of cash flow, i.e. return on invested capital and growth.

The second part of the lecture is about core valuation techniques based on DCF and residual income. Students learn the frameworks for valuation and how to reorganize the financial statements in order to analyse performance and thus to forecast performance and to estimate the continuity value.

The single chapters are complemented with detailed case studies that highlight the practical judgement involved in value-based management and thus how to make good decisions about courses of action for a company.



10. Leadership and Personality (75648)

Learning Outcomes:

Participants acquire further competencies in the area of leadership with particular focus on professional decision making and the management of change processes. The lecture is organized in four parts:

Part 1: In the first part, students are introduced to details of their own motivation, preference models, personality traits and decision-making processes using structured models of personality psychology.

Part 2: In the second part, students acquire skills to identify and prevent unconscious biases and fallacies that occur in the context of decision-making processes.

Part 3: The third part focuses on prescriptive and normative-ethical decision theory. In particular, students learn the basics of analytical/statistical prioritization of alternatives under certainty and uncertainty. Furthermore, fundamental models of ethical decision-making are introduced.

Part 4: The fourth part covers the management of stakeholders and various decision makers as well as basics of change management and the practical implementation of decisions.

Generally, the focus of the lecture Leadership & Personality lies in the practical applicability and the independent transfer of the acquired competences and knowledge to practical cases and examples.

Contents:

- > Basics of prescriptive, normative and descriptive decision theory
- > Unconscious biases
- > Models of personality psychology (Big Five personality traits, MBTI)

- > Heuristics
- > Expectation theory and utility hypothesis
- > Basic models of ethical decision-making
- > Introduction to Change Management
- > Stakeholder Management and interaction of decision makers
- > Influencing techniques and activist investors



Further information about all business courses:

<http://www.campus.fh-aachen.de>