



Otto Beisheim School of Management



Master of Science in Management (MSc) | Master of Science in Finance (MSc) Master of Science in Entrepreneurship (MSc) | Master of Science in International Business (MSc)

The WHU Otto Beisheim School of Management offers three MSc programs in Management, Entrepreneurship and Finance. Students experience comprehensive and flexible curricula, which give the breadth and depth of knowledge for a career in various types of organizations. The core modules provide the analytical tools and essential skills across general management, finance or entrepreneurship. Next to the core modules, students may also choose from a wide range of electives, which allows them to customize their studies to their interests and goals.

Master of Science in Management (MSc)

The Master in Management (MiM) is a full-time English degree and targets recent graduates having an academic degree in a business-related field of study. While the core electives provide the essential tools and knowledge across general management, students may choose from an exceptionally broad range of electives to tailor their studies to their interests and goals.

Master of Science in Entrepreneurship (MSc)

The Master in Entrepreneurship (MiE) is Germany's first Master of Science program in entrepreneurship. It addresses graduates who would like to found their own business, start a career in various companies or start-ups, or manage a family business. Students will experience a unique program that covers business functions, innovation, product development, and technologies. They will also develop specific tools and skills that are particularly relevant to entrepreneurs, such as coding and prototyping.

Master of Science in Finance (MSc)

The Master in Finance (MiF) is a full-time English degree combining a comprehensive analysis of financial institutions, markets and strategies with practical relevance and an international perspective. Students experience a rigorous but flexible curriculum, starting with three core modules designed to provide students with the necessary fundamental quantitative skills and essential knowledge of financial markets. Furthermore, the electives will allow students to gain a deeper understanding of the theories and concepts of modern finance.

Master of Science in International Business (MSc)

The Master in International Business (MiB) opens the door to a global mindset needed for a career in management working with international teams. The program blends academic excellence with practical applications, allowing you to explore theory in the context of real-life cases. We offer a variety of courses across the field of general management designed to provide you with the skills needed to make an impact in your career. The program is a full-time degree taught solely in English

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The curriculum overview of the Master of Science programs:

#	Overview - Master of Science Programs				Study Section			
					Fall Term (September-December)		Spring Term (January-May)	
	Type	Code	Module	Group	Quarter I (Early Sep-Late Oct)	Quarter II (Late Oct-Late Dec)	Quarter III (Early Jan-Early Mar)	Quarter IV (Early Mar-Early May)
1	Core	ACCT502	Accounting and Financial Analysis (MIE)	Finance and Accounting	5 ECTS			
2	Core Elective	ACCT503	Accounting and Financial Analysis (MIM)	Finance and Accounting	5 ECTS			
3	Core	ACCT505	International Accounting	Finance and Accounting	5 ECTS			
4	Core	ACCT601	International Financial Reporting	Finance and Accounting	5 ECTS			
5	Elective	ACCT602	Financial Statement Analysis and Valuation	Finance and Accounting				5 ECTS
6	Core Elective	ACCT605	International Tax Strategy	Finance and Accounting	5 ECTS			
7	Elective	ACCT606	Financial Reporting and Capital Markets: Current Challenges	Finance and Accounting			5 ECTS	
8	Elective	ACCT607	Current Topics in Accounting	Finance and Accounting				5 ECTS
9	Elective	ACCT609	Accounting for M&A Transactions	Finance and Accounting			5 ECTS	
10	Core	EAI504	Corporate Entrepreneurship	Entrepreneurship and Innovation			5 ECTS	
11	Core	EAI505	Advanced Entrepreneurial Finance	Entrepreneurship and Innovation		5 ECTS		
12	Elective	EAI602	Heinz-Nixdorf--Lecture: Strategic Intellectual Property Management	Entrepreneurship and Innovation		5 ECTS		
13	Elective	EAI613	Value Creation in Family Firms	Entrepreneurship and Innovation	5 ECTS			
14	Elective	EAI614	Venture Capital Finance	Entrepreneurship and Innovation		5 ECTS		

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#	Type	Code	Module	Group	Quarter I (Early Sep-Late Oct)	Quarter II (Late Oct-Late Dec)	Quarter III (Early Jan-Early Mar)	Quarter IV (Early Mar-Early May)
15	Elective	EAI615	E-commerce Operations Management	Supply Chain Management			5 ECTS	
16	Elective	EAI616	Strategic Technology and Innovation Management	Entrepreneurship and Innovation			5 ECTS	
17	Elective	EAI617	Visual Prototyping	Entrepreneurship and Innovation				5 ECTS
18	Elective	EAI619	Entrepreneurial Selling	Marketing and Sales	5 ECTS			
19	Elective	EAI620	Building and Scaling Successful Companies	Entrepreneurship and Innovation				5 ECTS
20	Core Elective	EAI621	Platform Markets and Regulations	Entrepreneurship and Innovation		5 ECTS		
21	Core Elective	EAI622	Managing the Family Business	Entrepreneurship and Innovation				5 ECTS
22	Elective	EAI624	Data Driven Entrepreneurship	Entrepreneurship and Innovation				5 ECTS
23	Elective	EAI625	Elements of Computational Intelligence	Supply Chain Management				5 ECTS
24	Core Elective	ECON503	Industrial Organization	Economics	5 ECTS			
25	Core	ECON504	International Trade and Investment	Economics		5 ECTS		
26	Core	ECON505	Managerial Economics	Economics	5 ECTS			
27	Core Elective	ECON601	Exchange Rates and International Finance	Economics	5 ECTS			
28	Core Elective	ECON603	Economics of Financial Markets	Economics				5 ECTS
29	Elective	ECON608	Health Economics, Policy and Management	Economics			5 ECTS	
30	Core Elective	ECON609	Monetary Economics and Central Banking	Economics	5 ECTS			
31	Elective	FIN601	Mergers & Acquisitions	Finance and Accounting			5 ECTS	
32	Core Elective	FIN602	Advanced Corporate Finance	Finance and Accounting	5 ECTS			

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#	Type	Code	Module	Group	Quarter I (Early Sep- Late Oct)	Quarter II (Late Oct- Late Dec)	Quarter III (Early Jan- Early Mar)	Quarter IV (Early Mar- Early May)
33	Elective	FIN603	Financial Risk Management	Finance and Accounting				5 ECTS
34	Elective	FIN605	Asset Management	Finance and Accounting				5 ECTS
35	Core	FIN607	Capital Market Theory	Finance and Accounting	5 ECTS			
36	Core Elective	FIN608	Corporate Governance	Finance and Accounting		5 ECTS		
37	Elective	FIN613	Financial Technologies	Finance and Accounting			5 ECTS	
38	Elective	FIN614	Investment Banking	Finance and Accounting				5 ECTS
39	Elective	FIN615	Valuation and M&A	Finance and Accounting		5 ECTS		
40	Elective	FIN617	Financial Derivatives	Finance and Accounting				5 ECTS
41	Elective	FIN619	Behavioral and Cultural Finance	Finance and Accounting			5 ECTS	
42	Elective	FIN622	Psychology and Economics	Finance and Accounting			5 ECTS	
43	Elective	FIN624	Seminar Empirical Finance	Finance and Accounting			5 ECTS	
44	Elective	MGMT501	Game Theory	Management	5 ECTS			
45	Elective	MGMT505	Ethics & Leadership	Management			5 ECTS	
46	Core Elective	MGMT509	Advanced Organizational Behavior	Management		5 ECTS		

#	Type	Code	Module	Group	Quarter I (Early Sep-Late Oct)	Quarter II (Late Oct-Late Dec)	Quarter III (Early Jan-Early Mar)	Quarter IV (Early Mar-Early May)
47	Core	MGMT510	International Business Negotiations	Management			5 ECTS	
48	Core Elective	MGMT511	Psychology of Leadership	Management			5 ECTS	
49	Core Elective	MGMT602	Advanced Management Accounting and Control	Management		5 ECTS		
50	Core Elective	MGMT604	Strategy Execution	Management				5 ECTS
51	Elective	MGMT607	Contract Theory	Management		5 ECTS		
52	Elective	MGMT608	Strategy Making in Professional Football	Entrepreneurship and Innovation		5 ECTS		
53	Core Elective	MGMT612	International Strategy	Management	5 ECTS	5 ECTS		
54	Core Elective	MGMT614	Leadership in Practice	Management				5 ECTS
55	Core Elective	MKT502	International Marketing Management	Marketing and Sales		5 ECTS		
56	Elective	MKT603	B2B Pricing: Negotiation, Calculation, Strategy	Marketing and Sales	5 ECTS			
57	Core Elective	MKT606	Luxury Brand Management	Marketing and Sales				5 ECTS
58	Elective	MKT607	B2C Price Management	Marketing and Sales	5 ECTS			
59	Core Elective	MKT609	Leading the High-Performance Sales Force	Marketing and Sales			5 ECTS	
60	Core Elective	MKT610	Product and Shopper Marketing	Marketing and Sales			5 ECTS	
61	Core Elective	MKT611	Actionable Customer Analytics	Marketing and Sales		5 ECTS		
62	Core Elective	MKT613	Sustainable Marketing	Marketing and Sales			5 ECTS	

#	Type	Code	Module	Group	Quarter I (Early Sep-Late Oct)	Quarter II (Late Oct-Late Dec)	Quarter III (Early Jan-Early Mar)	Quarter IV (Early Mar-Early May)
63	Elective	QUANT501	Advanced Methods of Market and Management Research	Marketing and Sales			5 ECTS	
64	Core Elective	QUANT504	Operations Analysis and Control	Supply Chain Management				5 ECTS
65	Elective	QUANT505	Visual Data Analytics	Finance and Accounting		5 ECTS		
66	Elective	QUANT506	Managing Data Science	Finance and Accounting			5 ECTS	
67	Core Elective	QUANT507	Web Mining	Economics				5 ECTS
68	Core Elective	QUANT509	Modern Tools and Applications of Data Science	Supply Chain Management		5 ECTS		
69	Core	QUANT510	Financial Econometrics	Finance and Accounting		5 ECTS		
70	Core Elective	QUANT511	Decision Support Systems (Data Science)	Management		5 ECTS		
71	Core Elective	SCM502	Sustainable Operations Management	Supply Chain Management				5 ECTS
72	Elective	SCM601	Industrial Excellence	Supply Chain Management	5 ECTS			
73	Core Elective	SCM602	Service Excellence	Supply Chain Management			5 ECTS	
74	Core Elective	SCM604	Advanced Supply Management	Supply Chain Management				5 ECTS
75	Elective	SCM606	Transportation Management	Supply Chain Management	5 ECTS			
76	Elective	SCM607	The Analytics' Edge	Supply Chain Management	5 ECTS			
77	Core	SCM609	Managing the Global Supply Chain	Supply Chain Management			5 ECTS	

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Additional Information

German Classes

Every semester, WHU offers free German classes for exchange students at various levels, including basic, intermediate, advanced, and proficient.

Internships

Some exchange students want to work or do an internship during their time in Germany. For all non-EU citizens, it is important that the internship is legally permitted. There are two options that require no extra paperwork:

Students staying at WHU during the spring semester can do a full-time inernship of up to 120 days within their residence permit (applied via WHU). The spring semester officially runs from early-January to the end of August, but classes already finish in early-May, which gives students time to do an internship or travel afterwards until the end of August.

Students joining WHU during the fall or spring semester have the opportunity to work up to 240 days part-time within the residence permit (applied via WHU).



MSc-Level Course Descriptions

The following pages contain summaries of the MSc-courses offered by WHU.

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Fall Term, Quarter I (Early Sep - Late Oct)

Type	Code	Title	Course Description
Core/ Core Elective	ACCT502/3	Accounting and Financial Analysis	Lectures based on intuitive conceptual examples, applied real-world case studies, and accessible scientific evidence. There will be exercises to revisit the concepts from the lectures as well as additional case studies (primarily on a voluntary basis).
Core	ACCT505	International Accounting	This course is designed to provide students with an understanding of the theory and practice of financial accounting and reporting in an international context. Throughout this course, students will (1) learn about the main functions of financial accounting and reporting, (2) understand why accounting historically has developed differently across countries, and why there has been a drive towards an international harmonization of accounting regulation and practice in more recent years, (3) get (re-) acquainted with the basic techniques of financial accounting, (4) become familiar with the components of financial statements (balance sheet, income statement, cash flow statement), and comprehend how they relate to each other, (5) get introduced to International Financial Reporting Standards (IFRS), which are required or allowed as the basis for the financial reporting of companies in more than 100 countries around the globe; in the European Union, all stock-listed companies are required to prepare their consolidated financial statements in accordance with IFRS, (6) also learn about the most important differences between IFRS and U.S. Generally Accepted Accounting Principles (US-GAAP), which form the basis for the accounting of companies that are listed on US stock-exchanges, (7) become aware of the economic consequences of financial reporting, from the perspectives of preparers and of users of IFRS financial statements.
Core	ACCT601	International Financial Reporting	Theories featuring in this course include accounting theory, information economics, and agency theory. To apply and critically assess accounting methods, students will employ critical reasoning skills. Research articles discussed in this course frequently apply multiple regression analysis and other econometric techniques.
Core Elective	ACCT605	International Tax Strategy	The first module outlines the basic principles of taxation in national tax laws and in tax treaty law and how these interact. This comprises an overview on the different forms of corporate organization and how these are taxed. The second module explains the concept of the effective tax rate and provides an overview of how the effective tax rate is impacted by both business decisions and tax planning decisions. In this context, selected tax planning techniques are explained and how they are viewed respectively challenged by tax administrations. The third module provides an insight into the OECD initiative on base erosion and profit shifting which attempts to redesign the interaction between national and tax treaty law based on the principles of transparency, coherence and substance, in an effort to make tax arbitrage increasingly difficult for MNEs. The fourth module elaborates on Transfer Pricing as one important tax planning technique and shows along this example how tax administrations interact with taxpayers and the implications of which this has on the organization of the tax department of an MNE from a tax risk management and compliance perspective. Instruments to resolve double taxation, tax controversy and state aid aspects are also covered in this module. The course addresses students interested in general management positions as well as students with a focus on finance, accounting, investment banking, or strategy consulting.
Elective	EAI613	Value Creation in Family Firms	Themes: Discipline-specific knowledge and competence; Global business environment; Critical thinking and problem solving skills; Management specific skills; Teamwork and responsible leadership. Through these topics, students will: 1) learn about the importance and characteristics of family firms, and basic theories/frameworks to understand family firms; 2) understand the challenges and opportunities of leading family firms, achieving transgenerational entrepreneurship in family firms, and defining appropriate strategic management and governance in family firms; 3) be able to engage in group work; 4) be able to present and defend findings; 5) practice the use of selected frameworks, concepts, and tools by applying them to real-life family firm project; 6) acquire consulting experience; 7) prepare for working in a family firm or in a consulting firm (for family firms).
Elective	EAI619	Entrepreneurial Selling	Every entrepreneur is selling all the time: to customers, employees, and investors. Selling is a skill that can be learnt. Only few people are born as a selling ace. Some investors only invest if the founders themselves are the first sales people. The course content was designed based on interviews with WHU entrepreneurs and WHU investors. The course has four content streams: ·Finding strategic product-market fit (2 sessions) ·Developing personal selling skills (4 sessions) ·Building and managing the sales team (5 sessions) ·Selecting and managing channel partners (2 sessions)
Core Elective	ECON503	Industrial Organization	Industrial organization is a field of microeconomics that explores the dynamics of industries and the way firms compete with each other. Therefore, this course focuses on strategic competitive behavior, with special attention being paid to the perspective of newly founded ventures. Within this context we will discuss how to assess entry timing, pricing mechanisms and R&D investments, as well as how regulations impact strategy design. The course uses a mixture of case studies, lectures and guest lectures. Themes: Market structure and analysis; Market power and its implications; Market disruption; Market competition; Game theory; Linear and non-linear pricing (Price discrimination); Case study analysis (presentation and discussion) on strategic pricing; Workshop on (European) regulations and market disruption.

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Fall Term, Quarter I (Early Sep - Late Oct)

Type	Code	Title	Course Description
Core	ECON505	Managerial Economics	The main goal of this course is to provide an introduction to the main concepts and analytical tools of the theory of managerial economics. Managerial economics is a broad research stream that aims to provide a framework for managerial decision-making. It applies theories of microeconomics to help managers understand complex problems and make better decisions. In this course, we will predominantly confront managerial issues that involve strategic interactions between multiple organizational or market participants, i.e. situations where a person's action has an identifiable impact on another person and prompt them to react. Examples of strategic situations in a business realm abound and include, for example, hiring and incentivizing employees, sourcing inputs, designing, pricing, and distributing products, or investing in advertising and research and development. The course aims to teach students aspiring to manage businesses to use simple game-theoretic models and reasoning, which will crucially improve their understanding of strategic managerial decision-making.
Core Elective	ECON601	Exchange Rates and International Finance	Themes: International transactions and different exchange rate concepts; Interest rates and exchange rates: an asset approach; Money, interests and exchange rates; International linkages of goods and asset markets under fixed exchange rates; International linkages of goods and asset markets under flexible exchange rates; Portfolio balance and exchange rate determination; Market efficiency and rational expectations; Foreign Exchange Intervention; The news model of exchange rate determination; The risk premium; The microstructure of the foreign exchange market and its implications for exchange rate determination.
Core Elective	ECON609	Monetary Economics and Central Banking	The course covers: 1. Monetary Theory; 2. Monetary Policy; 3. The Role of Central Banks for Financial Stability
Core Elective	FIN602	Advanced Corporate Finance	Themes: Applied Theories & Empirical Research; Corporate Governance; Capital Market Theory; Theoretical Foundations of Decision Making; Basic Econometrics.
Core	FIN607	Capital Market Theory	Themes: Neoclassical Capital Market Models; Stochastic Discount Factor Approach; Arbitrage Pricing Theory; State Preference Theory; Derivatives; Option Pricing; Behavioral Finance.
Elective	MGMT501	Game Theory	In the centre of our discussion in this course are multi-person decision making situation in which the outcomes depend on your action and on the actions of others. In Game Theory such a situation is called a game and the actors in such a game are called players, and a player has the move if he is called to act. To classify the variety of games it is useful to consider the following two basic criteria: 1. Timing of moves: According to the timing of the players' moves, games can either be simultaneous or sequential. In the first case, all players choose their actions without knowing how the others have acted or will act. Such games are called simultaneous-move games. In the second case, at least one of the players knows when acting what another has done before. Such a game is called a sequential-move game. 2. Degree of private information: Private information arises in those situations in which at least one player knows more about the decision making situation than another player. If this is the case, the game is one of incomplete information. Otherwise, the game is said to be of complete information. Given these two dimensions, we discuss the following four classes of games in our course: Simultaneous-move Games of Complete Information, Sequential-move Games of Complete Information, Simultaneous-move Games of Incomplete Information, and Sequential-move Games of Incomplete Information.
Core Elective	MGMT612	International Strategy	Strategy is the long-term direction of a firm and critical to the success and survival of all organizations. The expansion of markets and competition has increasingly pushed organizations to expand into international markets. Yet, key strategic considerations differ across international context; this course prepare students to tackle them. Working with an international strategy framework, this course facilitates students applying key strategic principles to varied international setting, thereby garnering greater understanding of the diversity and challenges inherent in international strategy.

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Fall Term, Quarter I (Early Sep - Late Oct)

Type	Code	Title	Course Description
Elective	MKT603	B2B Pricing: Negotiation, Calculation, Strategy	<p>We negotiate all the time - with business partners, with our spouse, with our professors, and others. Some say that, in life, we don't get what we deserve, but what we negotiate. This makes negotiation a crucial social skill both inside and outside business. To any business, price negotiations are of the essence because the price is the key profit driver. There are three types of competitive advantage: value advantage, cost advantage, and price advantage. Today, B2B sales people are increasingly faced with professionally trained buyers who put enormous pressure on prices. Many of the concessions that buyers wrestle from sellers pertain to working capital items. Valuing these concessions, calculating package deals, and estimating the deal's value to the customer requires proficiency in cost accounting and spreadsheet modeling on top of negotiation skills. Even if you have taken a general negotiation class before, you will benefit from this course. The link between cost accounting concepts and sales negotiation techniques makes this course unique.</p> <p>The course emphasizes active, discovery-oriented, experiential learning. It puts the participants in the shoes of the decision-makers and exposes them to managerial dilemmas to educate their judgment. We engage in role-plays, build spreadsheets, and interactively discuss management cases. The video projector will stay turned off for a large part of our sessions. The course is complemented by managerial guest lecturers.</p>
Elective	MKT607	B2C Price Management	<p>The course emphasizes on providing the participants with a solid knowledge in price management through lectures, which are intended to stimulate active discussions throughout the class. Also, with the case study students face relevant practical questions of price management and develop solutions that can compete within a challenging and dynamic environment. Finally, the high profile guest lectures further provide practical examples to apply the learned theory to real life. Themes: Foundations of price management; Price strategy; Pricing analysis; Price decisions; Implementation and monitoring; Industry specific deep dive (FMCG-companies, retailers, service providers); Innovations in price management.</p>
Elective	SCM601	Industrial Excellence	<p>Themes: Strategy Formulation, Cascading, Execution & Alignment; Fair Process Leadership; Decision Trees and Monte Carlo Simulation with @Risk; Supply Chain Coordination and Collaboration; Supply Options and Portfolios of Contracts; Case Study: Lufthansa Cargo AG - Capacity Reservation and Dynamic Pricing; Hedging Retail Promotions; Case Study: Canyon Bicycles - Judgemental Demand Forecasting for Direct Sales; Hedging Supply Uncertainty; Simulation Game: Global Supply Chain Management; Simulation Game: Global Supply Chain Management - Debrief; Returns Management of Online Retailers; The Benefit of Limited Flexibility; Supply Network Management; Case Study: Applichem - Operational Hedging.</p>
Elective	SCM606	Transportation Management	<p>Transportation is one of the fastest growing global industries. Travel and Logistics are the major backbone of our global business and a core element of private life. The objective of this course is to give a comprehensive introduction into the challenges and best-practices of the management of global industry players like passenger airlines or logistics companies. Such a management best practice includes a deeper understanding of the underlying industry dynamics, and the outline of superior strategies as well as commercial and operational management practices of selected industry segments. The course will also highlight some specific future trends and new management approaches illustrating a way to a long-term sustainable industry.</p>
Elective	SCM607	The Analytic's Edge	<p>In the big data landscape, it becomes imperative to understand what tools are available to gather data, to subsequently aggregate data into information and how to use this information to make better decisions. To this end, we discuss approaches to predictive analytics, which refers to the ability of discerning patterns from past and current data to prediction of future events. In particular, we focus on algorithms to tackle classification and regression problems as well as unsupervised learning techniques such as clustering and dimensionality reduction. Examples include healthcare applications such as heart attack pattern detection and financial applications such as fraud detection in regards to credit card usage. We then turn to prescriptive analytics which involves optimization of resources based on existing data and recognized patterns. Applications include revenue management at airlines and hotels or online dating sites where regression and optimization is supposed to figure out the perfect match. The analyses will be carried out in R. Several guest lectures from industry experts will complement the course content.</p>

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Fall Term, Quarter II (Late Oct - Late Dec)

Type	Code	Title	Course Description
Core	EAI505	Advanced Entrepreneurial Finance	This course strives to: Deepen students' understanding on entrepreneurial finance and business models; Students will solve two interactive entrepreneurial case studies and one in-class case; Students will connect with consultancies, investors, and a law firm during the Berlin tour to build up a network of future partners. This course will help all students that consider starting their own company to build and run more successful ventures.
Elective	EAI602	Heinz-Nixdorf-Lecture: Strategic Intellectual Property Management	Themes: Multiple managerial theories; Strategic aspects of intellectual property management (patents, trademarks, and copyrights); Best practices in intellectual property management in various industrial settings (cases and group work).
Elective	EAI614	Venture Capital Finance	Venture capital is an important financial intermediary for, and component of entrepreneurship, innovation and organizational change. By one estimate, over 1,200 VC firms around the world are evaluating more than 20,000 business plans on a given day. The media extensively glorifies venture capitalists, policy-makers increasingly look to venture capital as a source of jobs and economic growth and hardly a day goes without another celebrity in the entertainment industry making a foray into the world of venture capital. Nonetheless, little is understood about the structure, governance, strategy, incentives, culture, capabilities and operational processes of venture capital organizations. These gaps in understanding yield significant missteps and frustration for those intersecting with venture capital and in fact so much that especially many entrepreneurs feel venture capital is the "dark side" and inherently evil. By offering a window into the inside dynamics and the intricacies of venture capital, this course aims to bridge these gaps for students and prepare them as a potential entrepreneur, venture capitalist, institutional investor, management consultant or a policy-maker.
Core Elective	EAI621	Platform Markets and Regulations	Many of today's biggest, fast-growing, and disruptive companies, such as Google, Amazon, Uber, Airbnb, or Paypal, rely on platform business models. While platform markets are revolutionizing the competitive landscape with some of them becoming even industry leaders, their privileged positions raise concerns that they may engage in anti-competitive behaviors. Digital platforms are thus currently facing severe legal problems which are not only costly for those firms but also set their future success at risk. Whether you think about creating a platform business yourself or using existing platforms to facilitate your newly created business, it is important to understand how platform markets work and how regulations influence their success. The main objective of this course is thus to provide an overview of this important topic.
Core	ECON504	International Trade and Investment	This course introduces the major transactions of international business in international goods and financial markets. After a brief discussion of globalization, the course focuses on foreign direct investment, examining both the reasons why firms engage in such investment and the ways in which government policies encourage or discourage these transactions. The course then focuses on the reasons for international trade and the effects of protectionism. In the last part, the working of the foreign exchange market is examined.
Core Elective	FIN608	Corporate Governance	The module offers a theoretical and empirical analysis of the main corporate governance issues where corporate governance refers broadly to the mechanisms which deal with the principal-agent problems between the insiders and the outsiders of corporations. The module looks at the variety of legal systems and other institutions, ownership structures, boards of directors, executive compensation, the relationship between corporate governance and firm value, and governance regulation. A strong emphasis is put on the analysis of how and through which channels corporate governance matters for firm-level and country-level economic performance and whether firm-level actions are effective.
Elective	FIN615	Valuation and M&A	The objective of this course is to provide an overview of different approaches to valuation, with a particular focus on Discounted Cash Flow (DCF) valuation. A special attention is given to the theoretical underpinnings of the discount rate used in the DCF approach (i.e., the cost of financing: from cost of equity and cost of debt to cost of capital) and to its derivation. In addition, relative valuation models (multiples) and specific topics such as valuing private companies and takeover valuation will be discussed.

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Fall Term, Quarter II (Late Oct - Late Dec)

Type	Code	Title	Course Description
Core Elective	MGMT509	Advanced Organizational Behavior	No (wo)man is an island. We all fundamentally define and develop ourselves in relation to other people. While this is certainly true for our private life, it is also true for our working life. We constantly interact with colleagues, try to organize ourselves while handling the requests of others, and jointly develop solutions to advance the business. Organizational behavior (OB) researchers study exactly these interpersonal exchanges and people's experiences in organizations. That is, OB scholars are concerned with understanding the behavior of individuals and teams in organizations. Whereas foundational OB courses tackle the basics of this area (e.g., people's perceptions and emotions in organizations, motivation, team dynamics, leadership), this Advanced OB course goes into more detail by using evidence on recent work- and people-related topics to introduce you to key debates in OB theories and concepts. Specifically, we focus in this Advanced OB on "the new normal" – the debates evolving around hybrid work as the next great disruption or more generally: the future of work.
Core Elective	MGMT602	Advanced Management Accounting and Control	The course "Advanced Management Accounting and Control" intends to give you a comprehensive perspective of both conceptualization and use of strategic Management Accounting Systems (MAS). The first objective of the course is to refresh your knowledge of a couple of strategic MAS (e.g., ABC, Target Costing, Benchmarking, etc.). Casework on these systems will complement the more operative focus of most B.Sc. lectures on management accounting. Based on this, you will be enabled to develop a profound understanding of how MAS can be used, implemented and diffused successfully, in particular how they can be put in place in order to facilitate learning processes in an organization. Finally, we will concentrate on the tasks and roles of controllers as well as CFOs, encompassing the function of controllers supporting managers and the concept of rationality assurance. Lectures will be supported by discussions of research in management accounting as well as by practitioner lectures. This year, these lectures are held by Lothar Burow (Head of Corporate Business Intelligence, Bayer) and Stefan Schnell (Senior VP Corporate Controlling, BASF). You are encouraged to participate actively in class discussion!
Elective	MGMT607	Contract Theory	Contract Theory would be boring, if both the principal and the agent have identical information about all relevant aspects in their relationship: The optimal contract design by the principal in this situation would be simple - "If you do the task as I would do, I pay you a reward, otherwise you get nothing" - and the principal would perfectly control the agent and induce his actions to be what she would like to do herself. So Contract Theory is only interesting, if the agent has some kind of private information. This private information can be of two types and, therefore, induce two different contractual problems: 1) Adverse selection: In some situations, the agent is better informed than the principal about his personal characteristics e.g. his abilities or valuations. These situations are called principal-agent relationships with hidden characteristics and the resulting problem for the principal is called adverse selection. Such a problem might occur, for example, in a situation in which an entrepreneur needs outside financing to undertake a new project. 2) Moral hazard: In other situations, the agent can take an action unobserved by the principal or he receives information during the project not known by the principal. These situations are called principal-agent relationships with hidden action, respectively hidden knowledge, and the resulting problem for the principal is called moral hazard. Given these two principle contractual problems, we discuss the following four classes of principal-agent relationships in our course: Adverse selection and Screening where the uninformed principal offers a contract; Adverse Selection and Signaling where the informed agent signals his private information before the principal offers the contract; Moral hazard and Single Agency where the principal contracts with only one agent; and Moral hazard and Multi Agency where the principal contracts with a group of interacting agents.
Elective	MGMT608	Strategy Making in Professional Football	The course is divided into four sessions that consecutively build upon each other. Guest speakers from football clubs represented in the respective case studies will be invited to discuss major challenges of successful strategy making in professional football and interchange ideas on future developments with students. With the help of case study method, students will apply strategy making tools and frameworks to real-life situations that business executives have faced. They will analyze the situation, decide on the best possible solution and defend their conclusions. We will advance their problem-solving skills as well as their ability to think and reason rigorously. In the first session, student teams will get a work assignment to solve a specific issue on how to develop growth in adjacent businesses of Schalke 04. While in the first three sessions, students will mainly participate in inclass discussions and group work, the fourth session is dedicated to present an overall recommendation to a Schalke 04 executive. The professor and research assistants will coach dedicated groups of students in class as well as in between lectures to support them on their individual learning journey and to help them prepare their final presentation. This will include, amongst others, specific growth measures to be taken by the club, estimates and approximations of expected business impact, and concrete action plans.
Core Elective	MGMT612	International Strategy	Strategy is the long-term direction of a firm and critical to the success and survival of all organizations. The expansion of markets and competition has increasingly pushed organizations to expand into international markets. Yet, key strategic considerations differ across international context; this course prepare students to tackle them. Working with an international strategy framework, this course facilitates students applying key strategic principles to varied international setting, thereby garnering greater understanding of the diversity and challenges inherent in international strategy.

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Please note that all course information is subject to change.

Fall Term, Quarter II (Late Oct - Late Dec)

Type	Code	Title	Course Description
Core Elective	MKT502	International Marketing Management	Course Content: A) Understanding global markets and their marketing environment; B) Assessing global marketing opportunities; C) Approaching global markets; D) Developing and implementing global marketing strategies
Core Elective	MKT611	Actionable Customer Analysis	Actionable customer analytics is aboutmaking data-informed or data driven business decisions. In making these decisions, managers choose from among alternative courses of action in a complex and uncertain world. Eventually, they enable the creation of business intelligence through customer insights, i.e., better decisions through a better understanding of the customer behavior. In this master course, we will work with the most essential data analysis technique on a range of artificial and read data sets. These techniques include regression, logistic regression, and k-means. However, the focus is not on the method alone, but in particular on translating the results into recommendations for management decisions. Using various types of data sources, models, and related exercises tied to recommended software components, course participants will develop marketing plans in various decision contexts.
Elective	QUANT505	Visual Data Analytics	“One Picture is Worth Ten Thousand Words” –this proverb is especially true in the case of Data Analysis. In business contexts, complex quantitative relationships are often ineffectively communicated because analysts underestimate the value of good data visualizations. In times of Big Data, almost every business professional, especially in management and consulting, is involved in Data Analysis. This course aims at enabling students to visually analyze data and to effectively communicate their analytical results. In the first part of the course, examples from practical analytical use cases and scientific insights about visual perception and design lay solid foundations of Visual Data Analysis. Secondly, during a hands-on workshop, students learn how to use a professional Visual Data Analysis software. Finally, students apply what they have learned in a group project and practice their communication skills when presenting their results.
Core Elective	QUANT509	Modern Tools and Applications of Data Science	This course is dedicated to conveying a sense of how to structure analytic projects systematically, from understanding of the business problem over modelling up to model assessment and communication of the project's results (or a project proposal) to a client. The course introduces such a structure with an applied, step-by-step introduction that mixes theory and practical, hands-on implementation tasks (using programming in R). The course also comprises an introduction to visualisation techniques and creation of interactive charts, maps and dashboards with Tableau. Whilst several fundamental data science techniques are introduced, explained and worked with, we do mainly focus on the overall analytic project process. Ultimately, this will also help to evaluate project pitches from a client's perspective.
Core	QUANT510	Financial Econometrics	This course provides a basic treatment of econometric methods, discussing theoretical concepts as well as applying them to real world data sets taken from finance, accounting and/or economics. Building on a sound understanding of the regression model and least-squares estimation, the emphasis lies on the OLS model, as well as estimation and inferences in multiple regression analysis. We will also cover linear probability models, and do a brief introduction in time series and panel data analysis. The course takes the form of interactive lectures with exercises: on the one hand, basic theoretical material is presented and illustrated by means of exercises and the use of the Stata software package; on the other hand, participants are given a bigger course project to practice the use of the software themselves. An additional course feature is the discussion of academic research articles. We will talk about potential research questions and how others have answered these questions by means of econometric techniques. By the end of the course, participants will have knowledge of how to analyse simple econometric models as presently used in finance, accounting and economics. They will be able to follow the state-of-the-art literature on these topics and engage in empirical econometric analyses of their own, using the popular Stata software package.
Core Elective	QUANT511	Decision Support Systems (Data Sceince)	Course Content: Overview of business intelligence, analytics, and decision support; AI: Concepts, drivers, major technologies, and business applications; Nature of data, statistical modeling, and visualization; Data mining process, methods, and algorithms; Machine-Learning techniques for predictive analytics; ANN, deep learning and cognitive computing; Text mining, sentiment analysis, and social analytics; Big Data, cloud computing, and location analytics: Concepts and tools; Robotics: Industrial and consumer applications; Knowledge systems: Expert systems, recommenders, chatbots, virtual personal assistants, and robo advisors; The Internet of Things as a platform for intelligent applications; Implementation issues: From ethics and privacy to organizational and societal impacts.

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Please note that all course information is subject to change.

Spring Term, Quarter III (Early Jan - Early Mar)

Type	Code	Title	Course Description
Elective	ACCT606	Financial Reporting and Capital Markets: Current Challenges	The objective of the course is to gain a critical in-depth understanding of the role of financial accounting and reporting in international capital markets. In addition, the course will develop your abilities to understand and to critically assess empirical accounting research. We will also discuss the practical relevance of the research for company managers, for investors and other actors in financial markets, as well as for accounting standard setters and financial market oversight bodies. Themes: The relevance of financial accounting information to investors; The role of financial analysts; The consequences of the introduction of IFRS; The reasons for, and the implications of, conservatism in financial reporting; Earnings management; The impact of different corporate governance mechanisms on reporting quality; Supervision and enforcement in capital markets, and firms' (non-) compliance with financial reporting regulations.
Elective	ACCT609	Accounting for M&A Transactions	Building on students' general background in financial accounting, this course introduces an area that is highly relevant in practice: the accounting for business combinations (M&A transactions). Students will learn how to prepare and analyze consolidated financial statements. More specifically, it will be explained how newly acquired subsidiaries are incorporated into parent companies' consolidated financial statements (purchase price allocation) and how they are treated in subsequent reporting periods (e.g. goodwill accounting). Based on the above, it will be discussed how M&A transactions affect financial statements and key financial ratios. Accounting theory, finance theory and valuation techniques as well as legal texts will form the basis for the lecture. The examples and exercises discussed throughout the course relate to financial statements prepared under International Financial Reporting Standards (IFRS). However, the issues discussed and the techniques presented also pertain to other national accounting systems (e.g. HGB, US GAAP or UK GAAP).
Core	EAI504	Corporate Entrepreneurship	Continuous creation and exploitation of new business opportunities within the company is an imperative for success. However, corporations often struggle with the identification of promising growth opportunities and the development of new business ideas. This is in part due to the fast changing environment and in part because organizational structures, routines and incentive systems are not always appropriate for the current dynamics and technological settings. This course is designed for those interested in learning how managers can create, develop, sustain and lead innovative new businesses or initiatives within their organizations. We are especially concerned with the interface between the corporation and the innovation and the entrepreneurial ecosystems within which it is embedded. By adopting an open systems perspective, we will focus on how corporate managers can effectively tap into external environment to initiate change, drive innovation and build new growth platforms. During this course, participants will collaborate extensively in groups with some of Germany's leading companies in real-life projects. They will not only hone their skills in solving these real-life corporate entrepreneurship problems, they will get to present their entrepreneurial ideas and solutions to executives from those companies.
Elective	EAI615	E-commerce Operations Management	This course provides students with current show cases how leading e-commerce startups and companies advance their operational performance through digitalization. Themes: Engaging Your Team; Enabling Your <i>Forward</i> Chain; Growing Your Customer Base; Predicting Demand When Your Ordering Decisions are Non-reversible; Profiting from Your <i>Backward</i> Chain; Nudging Mindless Shoppers; Best Practice Talk.
Elective	EAI616	Strategic Technology and Innovation Management	In detail, the course will cover the following main aspects: innovation and competitive advantage, linking business and innovation strategy, defining and implementing innovation strategies, innovation portfolio management, R&D investment decisions, assessing and measuring R&D productivity, open innovation strategies, strategic alliances, M&A, external technology commercialization strategies, globalizing innovation, management of international R&D locations, management of globally dispersed innovation teams and the management of basic research
Elective	ECON608	Health Economics, Policy and Management	The health care market is one of the biggest and most important markets around the world. The US for instance spent 16.9% and Germany 11.2% of their GDP on health in 2018. These expenditures on health are expected to continue to grow due to several reasons, like advanced medical science, ageing of the population, and a shift towards chronic diseases. Health Care is not a regular economic commodity and is widely considered a right, not a privilege. Specific features of health care can easily result in market and/or government failure. Hence, gaining a solid framework in Health Economics, Policy and Management is beneficial for versatile careers ranging from science to business, e.g. in the health insurance, health care or pharmaceutical market. The Course Health Economics, Policy and Management course (HEPM) will provide you with an adequate framework to understand the health care market, its industries and the (regulating) role of the governments within this sector.
Elective	FIN601	Mergers & Acquisitions	The course aims at providing participants general knowledge on M&As from a corporate finance perspective. After successful completion of the course, the course participants will have a solid understanding of the most fundamental issues and concepts in the M&A field. Without being exhaustive, the following topics will be covered during the course: wealth effects associated with M&As, motivations of companies to enter the M&A market, role and value added of investment banks in the takeover process, choice of the sale process, business valuation, merger arbitrage, role of CEOs in large transactions, and further issues related to regulation and social utility associated with the existence of an active M&A market.

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Spring Term, Quarter III (Early Jan - Early Mar)

Type	Code	Title	Course Description
Elective	FIN613	Financial Technologies	The module studies technology-driven innovations in the financial sector; including the blockchain, cryptocurrencies, and smart contracts, with applications e.g., in digital advisory and trading systems, peer-to-peer lending, crowdfunding and mobile payment systems. Such innovations can potentially disrupt existing industry structures, reshape their boundaries, and change the way firms create and deliver products and services. At the same time, they create privacy, regulatory and law-enforcement challenges. We study these issues in a format, which combines lectures, case studies, and experts from the industry.
Elective	FIN619	Behavioral and Cultural Finance	This course discusses important topics in Behavioral Finance, including non-extended utility theory, heuristics and biases, heterogeneous beliefs, and anomalies (such as equity premium puzzle, momentum, and bubbles). The goal is to understand various perspectives in behavioral finance research and its practical relevance. In Emotional Finance psychological and neural aspects of financial decision making are explored, especially the role of emotions such as joy, trust and fear.
Elective	FIN622	Psychology and Economics	In Psychology and Economics, we discuss the relevance of emotions and (childhood) experiences for economic decision-making. We start our discussion by revisiting neoclassical and behavioral economics and introducing the concept of emotions and emotional finance. Psychological theories and especially Freud's comprehensive theory of psychoanalysis are fundamental building blocks for understanding human perception and decision-making, and hence emotional finance. We elaborate Tuckett's approach to emotional finance, which is based on psychoanalysis. As irrational exuberance and panic are stylized facts of capital markets, we study concepts like crowd psychology and herding. In the following, we discuss various applications of these different concepts in finance and economics.
Elective	FIN624	Seminar Empirical Finance	In this seminar, teams consisting of students will conduct empirical research and present their results to the other participants. The topics are from all areas of finance and are of high practical relevance. Students that participate in this seminar gather valuable experience on how to carry out research in empirical finance. This seminar also serves as an ideal preparation for the master's thesis.
Elective	MGMT505	Ethics & Leadership	Not only since the financial crisis in 2008 there are more and more calls for responsible, ethical leaders. To become an ethical leader, managers need to develop awareness for ethical problems and need to develop an own approach of ethical reasoning and decision making. The aim of this course thus is to foster students' awareness for ethical problems and to support their individual ethical reasoning. Even further, ethical leaders are important role models for their organizations. We thus discuss elements of ethical leadership and look at how (ethical) leaders can create ethical organizations on various levels. Thereby, we will analyze scientific literature on these topics and compare the state of the art in research with corporate reality.
Core	MGMT510	International Business Negotiations	International Business Negotiations focuses mainly on deal-making in international contexts. Students will explore core negotiation concepts and are provided with bargaining tools, analytical capabilities, and practical skills to achieve greater deal-making effectiveness. The class is predominantly experiential. We will have complex role-plays in international context on variety of business issues such as company acquisitions and takeovers, strategic alliances, and dispute resolution between business partners/colleagues. The course is for all students who aim to pursue management or entrepreneurial careers in global context
Core Elective	MGMT511	Psychology of Leadership	Leaders are key players in organizational functioning because they critically affect the people they work with - both inside and outside of their organizations. Leaders are in a unique position to motivate employees to deliver excellent performance, engage employees for the organizations' mission and vision, and ensure alignment with societal interests. Meanwhile, leaders may also be a primary source of conflict and demotivation. Some of their behavior may incur major organizational and societal costs. Therefore, it is important to understand how leadership can bring out the best in people, as well as how leadership may go wrong.

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Spring Term, Quarter III (Early Jan - Early Mar)

Type	Code	Title	Course Description
Core Elective	MKT609	Leading the High-Performance Sales Force	The course emphasizes active, discovery-oriented, experiential learning. It puts the participants in the shoes of the decision-makers and exposes them to managerial dilemmas to educate their judgment. We engage in role-plays, build spreadsheets, and interactively discuss management cases. The video projector will stay turned off for a large part of our sessions. The course is complemented by managerial guest lecturers. The course has three parts: 1) Leading frequency-driven sales forces (compensation plan design, sales force sizing and territory alignment, goal setting and sales contests, sales force productivity management, performance appraisal, feedback and coaching techniques, termination), 2) Leading project-driven sales forces (sales enablement and selling toolkit, forecasting, pipeline management, CRM, termination, execution management), and 3) Leading change in the sales force (leading as a young manager, introducing change, implementing a global sales excellence program, charismatic leadership).
Core Elective	MKT610	Product and Shopper Marketing	The course's goals: The participants should...know about the principles and basics of product & shopper marketing...understand how consumers evaluate products.... know how to leverage consumer insights into actionable product and shopper marketing recommendations.... know how to formulate strategies to build, leverage, and defend products.... know how to develop successful (smart) products and avoid product failures....understand how to create compelling product packages and product lines/assortments and how to succeed at the POS.... know how to evaluate product performance.
Core Elective	MKT613	Sustainable Marketing	This course focuses around the question how marketing can contribute to sustainability. This question is viewed from different perspectives: consumer, business and policy. The course will cover the following topics: Overview of different perspectives of sustainability and its importance for business and society; Current environmental, social, and economic challenges and sustainability frameworks; Sustainable marketing strategies and goals; Challenges and trade-offs (e.g., between growth, profitability and sustainability); Consumer behavior: Sustainable consumption and the attitude-behaviour gap; Sustainable branding and marketing mix decisions
Elective	QUANT501	Advanced Methods of Market and Management Research	This course deals with the two fundamental cornerstones of research methodology: Measurement and causality. The first part of the lecture (chapters 2-5) provides an extensive introduction to the measurement of organizational concepts (e.g., salesperson motivation) and consumer psychological variables (e.g., customer satisfaction). The second part of the lecture (chapters 6 and 7) focuses on causal inference, that is, we discuss how to estimate relationships among important business variables and test research hypotheses. In the final part of the lecture (chapter 8), a free and easy to use software tool is introduced which enables participants to implement all discussed methods and models for their own work (e.g., in the course of their MSC thesis). Themes: Introduction; Foundations of psychometric measurement; Dimensionality; Reliability; Validity; Structural equation modeling; Experiments and Rubin's Causal Model; Software.
Elective	QUANT506	Managing Data Science	"The world's most valuable resource is no longer oil, but data" – The Economist, May 2017. Data has the potential to create immense business value, to disrupt existing, and to create new business models. With the recent advances in artificial intelligence (AI), the competitive pressure to harness the potential of the companies' data has further increased. However, it is not enough to hire data scientists and give them some data. Data science, including the development of artificial intelligence systems, is a team sport that needs to be managed. Despite being enabled by technology, data science is a business-centric discipline – managers therefore must understand and think like data scientists and implement the necessary organizational changes in order to facilitate a data-driven business model. This lecture aims at enabling students to build and lead data science teams, to understand and deal with typical risks throughout the lifecycle of data science projects and the development of AI systems. Throughout the whole lecture, examples from "real life" AI & data science projects will be used to illustrate the presented concepts and methods. Understanding the essentials of AI & data science methods including statistics and machine learning will enable the students to ask the right questions and what (not) to expect from AI & data science. Finally, the students will learn about the technical and organizational requirements for utilizing the full business potential of AI & data science.
Core Elective	SCM602	Service Excellence	Services have become the cornerstone of modern economies. This course enables students to understand the key challenges of service companies and design solutions to create truly excellent services and service companies. Themes: Nature of services and service strategy; The role of the customers and the supplier; Designing service processes; Managing demand; Queues and waiting times; Logistics Services.
Core	SCM609	Managing the Global Supply Chain	The following topics will be addressed: supply chain strategy, the pillars of the supply chain strategy (network, inventory, transportation, information), sustainable supply chains, risk management in global supply chains

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Spring Term, Quarter IV (Early Mar - Early May)

Type	Code	Title	Course Description
Elective	ACCT602	Financial Statement Analysis and Valuation	Financial statements are used for a wide range of applications including analysis of firm performance, communication with the markets, firm valuation, and selecting M&A targets. This course provides a framework for using financial statement information in the context of business analysis and firm valuation. The course content includes strategy analysis, accounting analysis, understanding firm performance using ratio analysis and implementing firm valuation. Case studies will illustrate how theoretical knowledge can be applied in practice and will help students to advance their practical skills in business analysis, financial statement analysis, and valuation. Analysis of financial statements is widely applied by financial analysts (valuation), investment bankers (M&As, valuation), bankers (loans, covenants), consultants (business analysis, working capital analysis), professionals working in private equity (business analysis and valuation), and CFOs (communication of financial performance). The course is thus particularly relevant for students aiming to pursue one of these career paths.
Elective	ACCT607	Current Topics in Accounting	This course will provide insights into current topics in financial accounting and reporting that are academically interesting and practically relevant for company managers, investors, financial analysts and other users of financial statements. The course will also acquaint you with discussions among supervisory authorities, standard setters and researchers on future developments and trends in financial reporting on these issues. Since the course structure is similar to a seminar, another objective of this course is to introduce you to academic research and writing in general, and in the area of financial reporting in particular. Gaining skills and experience in conducting research will equip you with essential expertise for your subsequent Master thesis. A further benefit of the course is that you will train your presentation skills, an important competency for executives and academics alike.
Elective	EAI617	Visual Prototyping	In this course we develop your skills for visual thinking and visual prototyping. The course is partitioned into three major parts: Knowledge and application of basic visualization skills (You will learn all the basic skills and tools it takes to generate simple visualizations, both physical as well as electronically (using the program "Concepts")); Knowledge and application of visual tools and applications in business for building fast prototypes (You will learn the underlying logic and background for using fast visualizations in business. This includes an understanding of the setting, the psychology of the audience the choice of visualization and specific visual tools for the business setting); 3D printing (We will build a 3D printer from scratch in class and look into the basic tools and applications around 3D printing).
Elective	EAI620	Building and Scaling Successful Companies	After setting up a start-up company, founders usually face a series of challenges when developing their start-ups into truly operating organisations that employ an increasing number of people and develop a rising level of complexity as they grow and diversify geographically and in terms of product offering. While there are many existing lectures on specific managerial functions in a more stable corporate context (Finance, Marketing, Sales, HR, Supply chain management, Accounting, Innovation management etc. etc.) as well as lectures on general challenges of creating a start-up company (Idea origination, Business plan development, Proof of concept development), this lecture aims at teaching insights on deeply functional topics in a rapid growth company context. The course provides content-driven (guest) lectures by WHU alumni that have experienced these challenges as founder/CEO of a successful growth company and that have developed solutions for these functional challenges. On top, more research based-lectures provide an overview of academical findings on these topics and also contrast differences in appropriate strategies between growth companies and more established, larger companies with less growth. Identification of these differences and a critical reflection of academical concepts are learning goals of the lecture. Students will be able to discuss real-world solutions to challenges in growth setups that are best-in class. Central coordination will ensure that lectures are building upon each other without overlaps. The lectures will provide students with an in-depth knowledge on challenges in growth company setups and how to overcome them by content-driven functional solutions. Moreover, the lecture will foster students' entrepreneurial mindset as to how challenges and risks can be managed. The lecture also can support WHU's positioning as a business school for successful entrepreneurs. Lectures can be recorded and broadcasted and used in various ways for marketing purposes.
Core Elective	EAI622	Managing the Family Business	Family business management is an important topic, as family businesses constitute a significant segment of the global economy. Worldwide around 80% of all businesses are classified as "family businesses." Managing a family business can be especially challenging as family considerations add additional levels of complexity to the tasks of management and can make managing either easier or more difficult or in some cases both at the same time depending on the circumstances. Recent research has shown that family businesses, on average, outperform and last longer than non-family businesses. This course will introduce students to the peculiarities of family businesses and how to successfully manage them. Topics include: Definition and prevalence of family businesses; Governance in the family business; Strategic management in the family business; Family firms & innovation; Succession in the family business; Change and transgenerational value creation; Financial management in the family business; Relationships and conflicts in the family business; Creating family businesses

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Spring Term, Quarter IV (Early Mar - Early May)

Type	Code	Title	Course Description
Elective	EAI624	Data Driven Entrepreneurship	Data are an increasingly important source for founders and investors to make entrepreneurial decisions. Moreover, the introduction of novel digital technologies has facilitated actors to collect and analyze a wide variety of data. The core purpose of this course is to introduce students to multiple methodological approaches and tools that can help them in executing data-driven entrepreneurship. To do so, the following topics will be addressed: Automate data cleaning and data merging; Setting up a dashboard to generate business intelligence for startups; Leveraging tools to generate competitor intelligence; Applying natural language processing algorithms to identify potential partners/competitors. Throughout the different modules, we will use several software packages (e.g. Power BI, Python) to execute assignments. Students will be expected to self-learn the basics of these software packages (relevant learning material will be provided). In the modules, we will focus on applying these software packages to execute specific group and individual assignments. For the assignments, real entrepreneurial data will be provided and analyzed.
Elective	EAI625	Elements of Computational Intelligence	In an era of massive IT advances, computational intelligence is swiftly becoming an integral part of modern businesses. This course first builds a firm quantitative basis in business functional areas including procurement, production, and distribution. Students will master necessary technical skills to successfully apply advanced modelling methods. More importantly, this course will provide students with profound knowledge on core enabling technologies in the context of Internet of Things and cloud background. A significant portion of the course will be entirely dedicated to computer simulations, smart computing applications, as well as virtual enterprise experimentation. Accompanied by a simulation game, students will be able to manage their own manufacturing factories together with procurement and distribution operations. It helps to apply and extend the various approaches discussed in the course, as well as to understand their limitations. Tutorial as well as adequate exercises will be provided when learning and discussing AI modelling optimization software. Main content: 1. Optimization with analytic and modelling software; 2. Approximation with computational intelligence; 3. Biology-inspired smart approaches; 4. Applications in supply chain and manufacturing
Core Elective	ECON603	Economics of Financial Markets	The course deepens students' understanding of financial markets and their paramount role within market economies. Themes: The Role of Financial Markets in the Economy; Monetary Theory; Monetary Policy; Financial Crisis; Financial Supervision.
Elective	FIN603	Financial Risk Management	Themes: Concepts and Methods in Financial Risk Management; Applications in Credit Risk; Applications in Market Risk; Applications in Operational Risk and other Risk; Current Developments in Financial Markets Regulations.
Elective	FIN605	Asset Management	The structure of and the current issues in the active/ passive asset management services market are explained; it is also shown how capital market theory concepts are used in practice; the structure of the German asset management industry is highlighted. The investment styles, tools, techniques and methodologies that are employed by asset managers are discussed and studied, as well as the role of investment consultants are analysed. Important capital market theory aspects are discussed, and special emphasis is put on those that concern model architecture and those that are typically not covered in the textbooks. The demand side in the market is studied by investigating the techniques and tools used by institutional investors. High-profile guest speakers are invited and describe the role of their company in the asset management industry. The lecturer provides different case studies. The students need to sign up to and present the results of a case study.
Elective	FIN614	Investment Banking	Module 1: Introduction to Corporate Finance; Module 2: Valuation I – Relevant Methodologies: Comparable Company and Transaction Analysis; Module 3: Operating Model and Business Plan; Module 4: Valuation II – Relevant Methodologies: DCF, LBO, Merger Model Tuesday Module; 5: M&A Processes – Private M&A; Module 6: Share Purchase Agreement; Module 7: LBOs, Financial Investors and Private Equity as an Asset Class; Module 8: Equity Financing and IPO Process; Module 9: Public Takeovers in Germany; Module 10: Activist Shareholders; Module 11: Modelling Workshop
Elective	FIN617	Financial Derivatives	We discuss important topics in financial derivatives, including option pricing, greet letters, volatility smiles, credit derivatives, real options, etc.
Core Elective	MGMT604	Strategy Execution	Strategy execution matters. In a lot of cases, it is the critical bottleneck to successful strategic management. However, the task is complex and off-the-shelf theories and techniques tend to fall short of corporate reality. We will discuss several teaching cases (Sydney IVF, Citibank, Volkswagen, Henkel, Hydro One, GE). In the process, we cover aspects of capital budgeting, value statements and beliefs systems, boundary systems and risk management, diagnostic control systems (such as the balanced scorecard) and performance measurement, accountability issues, stretch goals, performance rankings and compensation issues, and last but not least interactive control systems.

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Spring Term, Quarter IV (Early Mar - Early May)

Type	Code	Title	Course Description
Core Elective	MGMT614	Leadership in Practice	Leadership in Practice investigates key dimensions of leadership, including personal, situational and contextual determinants of leadership success. Starting with approaches that focus on the individual, a discussion of Great Man and Trait Theories of leadership elaborates how human beings tend to focus on the individual leader, which is reflected in the person centric perspective on leadership. We discuss perceptual biases that lead to a potential overestimation of the personal dimension in others, followed by a process of reflection on personality characteristics. This conversation draws on a discourse on projective and objective personality tests, leading to a detailed analysis of the NEO/ Big 5 model. All participants take a test that builds on the NEO. Test results are then used to explore all factors, and selected facets, in small groups. The purpose of this discussion is to establish an awareness of individual behavioural preferences, and the fact that these vary with personality. From the individual dimension, we move on to discuss team personality, and the risks and opportunities that come with homogeneous vs. heterogeneous teams. The second module elaborates on behavioural and contingency models of leadership (esp. Lewin, Ohio). Starting with an investigation of how specific leadership behaviours can be clustered, and with which consequences these behaviours tend to have in followers concerning social and task-related factors, we move on to models that take into account the situation. The models we focus on in particular are a) Fiedler's contingency model of situational favourableness, and b) Hersey & Blanchard's model of follower maturity. We then move on to discuss personal and contextual determinants of leader charisma, with a particular emphasis on social identity and social categorisation. The third module is dedicated exclusively to Heifetz' theory of adaptive leadership.
Core Elective	MKT606	Luxury Brand Management	Themes: Understanding Luxury; The Luxury Market; Luxury Brand Identity; Creating Luxury; Pricing Luxury; Communicating Luxury; Selling and Representing Luxury.
Core Elective	QUANT504	Operations Analysis and Control	The course is intended to highlight the evolution of concepts and methods relating to operations management. It puts the operations planning and control system into perspective and provides a framework for its exploration. We are primarily concerned with analyzing and controlling all aspects of manufacturing, including managing materials and parts, constructing production systems, scheduling machines and people, and coordinating suppliers and key customers. Starting with basics, we will progress to strongly quantitative oriented approaches. Students will be presented with a variety of applications through examples and cases analyses. In order to solve these complex problems, advanced methodologies in Operations Research and Management Science, such as integer programming, optimization algorithms, and iterative computations, will be introduced.
Core Elective	QUANT507	Web Mining	This course focuses on methods to aggregate textual, audio-visual and numerical data from different sources and types and processes them using appropriate methods to extract valuable information from it. Typical use cases are 1) Understanding the structure of the web as a distributed network using various protocols and standards (HTTP, SOCKS, REST, ...). 2) Automatic news extraction from a website (Web crawling) such as Newspaper websites, Data services 3) Social networks. 3) Text analysis of PDF documents using natural language processing for classification, sentiment analysis, semantic analysis and topic modeling. 4) Cognitive data processing for visual and audio analysis for image and video classification, face and gesture recognition, voice and music pattern recognition. The learning objectives are:-Understanding the structure of the web as a distributed network using various protocols and standards (HTTP, SOCKS, REST, ...)-Analyzing and parsing different document exchange formats such as HTML, XML, and JSON using regular expressions.-Retrieving web resources using Python and storing the data in relational databases or NoSQL databases.-Working and storing large amounts of data using cloud services Parsing PDF and Word documents.-Working with unstructured data such as videos, images and audio data from social networks and extracting semantic information from it.-Applying natural language processing techniques for the classification and semantic analysis of documents.
Core Elective	SCM502	Sustainable Operations Management	Themes: Key dimensions of operations management; sustainable development goals; triple bottom line; carbon footprint; sustainable sourcing; green operations; green logistics; clean energy.
Core Elective	SCM604	Advanced Supply Management	Looking back over the past twenty years, competitive sourcing created significant value for companies by driving substantial cost savings directly to the bottom line. However, the widespread use of standard professional sourcing techniques has eroded the major advantage that it had for pioneers in the 1990s and in the early years of the new century. Since the financial crisis, macroeconomic forces and global competition have created an even more turbulent and uncertain business environment; just saving money on external expenditures will not be sufficient for firms to stay competitive and survive in the years to come. This course will familiarize you with more advanced supply strategies that target at creating value beyond cost, e.g., value chain optimization through supplier assessment/development, risk management, and contracting. You will be able to understand decision schemes behind these concepts both from a theoretical/scientific and managerial perspective. Real-life relevance is a key objective of the course.

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Please note that all course information is subject to change.