This is a translation of the German original. In the event of any discrepancy, the German text prevails.

Universität Hamburg
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FAKULTÄT
FÜR BETRIEBSWIRTSCHAFT

Module Handbook for the Master of Science in Business Administration (MSc)

This module handbook complements the subject-specific provisions (FSBs) for the Master of Science in Business Administration (MSc) in the Faculty of Business Administration (Hamburg Business School) at Universität Hamburg, valid from the date adopted.

Only students beginning their studies from Winter Semester 2020/21 are able to take the Focus Field Business Analytics.

Version E

Approved by the Faculty Council on 31 August 2022

Contents

1. Methods component (MA-METH)

1.1. Module overview—Methods component

Type	Module Code	Module Title	ECTS Credits	Semester Offered
Required elective modules	MA-METH 1(E)	Decision Theory	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-METH 2(E)	Methods of Decision Analysis	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-METH 3(E)	Selected Topics in Statistics	6 ECTS credits	Offered occasionally
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-METH 4(E)	Quantitative Methods	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour) or e-learning unit		
	MA-METH 5(E)	Market Research	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (2 credit hours)		
	MA-METH 6(E)-WI-BIDS	Business Intelligence and Data Science	6 ECTS credits	Generally every summer semester
		Lecture with an integrated practical course (3 credit hours)		
	MA-METH 7(E)-WI-CGP	Computer-Based Planning	6 ECTS credits	Offered occasionally
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-METH 8(E)	Advanced Statistics and Econometrics I	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-METH 9(E)	Advanced Statistics and Econometrics II	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-METH 10(E)	Machine Learning with Applications in Economics and Business Administration	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-METH 11(E)	Qualitative Methods for Business and Management	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-METH 12(E)	Causal Machine Learning	6 ECTS credits	Offered occasionally

		Lecture (2 credit hours) + practical course (1 credit hour)		

A total of 18 ECTS credits must be completed for the Methods component. A maximum of 12 ECTS credits can be credited from the following focus field modules:

- MA-BA 1 Statistical Programming
- MA-BA 3 Mathematical Essentials for Machine and Deep Learning
- MA-BA 5 Choice-Based Optimization
- MA-BA 9 Deep Learning—An Introduction
- MA-OSCM 3 Advanced Topics in Operations Research

1.2. Module descriptions—Methods component

Module ID:	MA-METH 1(E)
Module type:	Required elective module
Title:	Decision Theory
Responsible for module:	Prof. Dr. Petra Steinorth
English translation:	Decision Theory
Learning outcomes	Analytical skills • Students acquire in-depth theoretical and conceptual knowledge of the mechanisms underlying decision-making. • Students hone their ability to reflect critically on original scholarly sources and case studies. Management skills • Students acquire the skills needed to reflect on behaviors and thought processes. Socially responsible decision-making • Students gain knowledge of individual decision-making behavior and learn what extent this can be classified as rational or influenced by external (social) factors. Scholarly thinking • Students gain in-depth knowledge in the resolution and evaluation of decision-making problems and which factors can influence individuals' decisions.
Module content	This module introduces the basic principles of decision-making for individuals (in the case of uncertainty and/or risk). The key concepts of rational decision-making behavior (e.g., risk perceptions, expected utility theory, and stochastic dominance rules) are outlined before moving on to explore interactive decision-related problems. This includes imparting the basics of game theory (e.g., static and dynamic games). Descriptive decision-making theories such as (cumulative) prospect theory, rank-dependent utility theory, and other-regarding preferences (e.g., inequality aversion) are also presented. Students gain the ability to understand various decision-making situations and to apply the decision-making strategies learned.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • (computer-based) simulations/games • digital interaction with lecturers • discussions • case studies • textbook/script • multimedia materials • online learning platform (e.g., Open Olat) • projects (individual)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration.

	Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • course and/or reading materials on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • content, examples, and/or perspectives from practice

Module ID:	MA-METH 2(E)
Module type:	Required elective module
Title:	Methoden der Entscheidungsanalyse
Responsible for module:	Prof. Dr. Guido Voigt
English translation:	Methods of Decision Analysis
Learning outcomes	Analytical skills • Students gain in-depth knowledge of quantitative analysis and support for decision-making. • Students learn to confidently apply methods of simulation and optimization. • Students acquire and practice in-depth theoretical and conceptual knowledge of quantitative support for decision-making. • Students further their ability to apply methodological concepts and theoretical knowledge to concrete strategic, tactical, and operative questions. Scholarly thinking • Students hone their ability to reflect critically on original scholarly sources. • Students acquire the skills needed to independently develop further research questions.
Module content	• simulation • selected solutions for mathematical optimization • managerial economics
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • textbook/script • multimedia materials • online learning platform (e.g., Open Olat) • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: other
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester

Interdisciplinary topics, content, and skills:	
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)

Module ID:	MA-METH 3 (E)
Module type:	Required elective module
Title:	Ausgewählte Themen der Statistik
Responsible for module:	Prof. Dr. Martin Spindler
English translation:	Selected Topics in Statistics
Learning outcomes	In-depth business knowledge • Students are introduced to advanced statistics topics. • Students learn to analyze business administration data. Scholarly thinking • Students acquire the ability to understand the latest academic literature and to use this for their own research.
Module content	Exploration of current research topics within statistics (e.g., high-dimensional statistics, machine learning, causal inference, and modern optimization methods).
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • discussions • textbook/script • online learning platform (e.g., Open Olat) • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Very good knowledge of mathematics (linear algebra and analysis) and statistics (regression analysis); highly motivated
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 90-minute written examination Or an oral examination. The exact examination requirements will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content:

	• research on international topics and/or research in English • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • decent work (SDG 8: Decent Work and Economic Growth) transparency and corruption (SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • research with empirical data sets
Digitalization and e-learning	In this module, digitalization and e-learning as well as the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • course and/or reading materials on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • data collection • digitalization is an important topic in the module • empirical digital data • machine learning and artificial intelligence • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-METH 4(E)
Module type:	Required elective module
Title:	Methoden der empirischen Forschung
Responsible for module:	Prof. Dr. Jonas Schreyögg and Prof Dr. Tom Stargardt
English translation:	Quantitative Methods
Learning outcomes	Scholarly thinking • Students learn to reflect on which empirical methods should be employed to address which research questions. • Students learn to plan and conduct their own empirical research projects. Analytical skills • Students learn to apply qualitative methods of data collection and analysis and to interpret their findings. • Students learn to formulate hypotheses and to apply these in quantitative data collection methods and analyses as well as how to interpret their findings.
Module content	Module contents include: • Fundamentals of empirical research (e.g., research design, data collection, selection, and surveys) • Quantitative analyses (e.g., OLS regression, assumption violations (incl. endogeneity), generalized linear models, multi-level models, as well as • Conducting qualitative analyses.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour) or e-learning unit if announced at the start of the course
Teaching methods	The following teaching methods are planned: • assignments • digital interaction with lecturers • digital interaction between students • discussions • guest lectures • textbook/script • online learning platform (e.g., Open Olat) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The written examination is set in German. Regular class attendance and intensive use of the provided materials is recommended.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours

Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS and (digital) technologies • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning as well as the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: • Topics: • empirical digital data • ethics and data • practical or practice-like applications • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-METH 5(E)
Module type:	Required elective module
Title:	Marktforschung
Responsible for module:	Prof. Dr. Karen Gedenk
English translation:	Market Research
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge of various data sources and data collection methods and learn to design market research studies. Analytical skills • Students gain in-depth knowledge of analysis methods. • Students learn to independently select appropriate methods and perform advanced multivariate analyses. Scholarly thinking • Students hone their ability to reflect critically on empirical studies. • Students acquire the ability to conduct empirical analyses according to academic standards. Management skills • Students learn to manage market research projects. • Students hone their ability to make empirically founded management decisions. Socially responsible decision-making • Students learn to observe ethical principles in market research.
Module content	Concepts and methods of market research are explored in greater depth as central principles for management decisions, and state-of-the-art methods for data collection and analysis are discussed. Options for collecting data are presented and multivariate procedures (e.g., linear regression and logistic regression) for context analysis outlined. Problems specific to market research are considered, such as preference measurement (incl. conjoint analysis), the analysis of moderation and mediation effects (incl. structural equation modeling), and endogeneity. Exercises and practical data analyses are used during the practical course to explore the material covered in the lecture in greater depth.
Teaching format(s)	Lecture (2 credit hours) + practical course (2 credit hours)
Teaching methods	Prescribed teaching methods: • assignments • discussions • case studies • textbook/script • projects (groups) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • other: quizzes
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Basic knowledge of mathematics and statistics is recommended—where necessary, gained through independent study.

Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 42 hours; Independent study: 138 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • content, examples, and/or perspectives from practice • students work together in groups on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning as well as the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • students practice using software Topics: • data analysis and/or mining (structured data) • data collection • empirical digital data • ethics and data • practical or practice-like applications • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-METH 6(E)-WI-BIDS
Module type:	Required elective module
Title:	Business Intelligence and Data Science
Responsible for module:	Dr. Robert Stahlbock
English translation:	Business Intelligence and Data Science
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge of business intelligence and business analytics. • Students learn about the tasks, possibilities, and limitations of business intelligence and data science to support operational decisions. • Students gain in-depth theoretical, conceptual, and technical knowledge of the specifics of business intelligence and data science. Management skills • Students learn to apply in-depth theoretical, conceptual, and technical knowledge of business intelligence and data science relating to management at various organizational levels. • Students develop their reasoning skills further. Scholarly thinking • Students learn to critically question, discuss, and evaluate facts, methods, and actions as well as to apply methods appropriate to the task at hand. Analytical skills • Students develop their analytical skills further, particularly with regard to modern data analysis procedures and specifically in business settings. • Students learn methodological principles of selected business intelligence and data science procedures to enable them to independently perform sophisticated data analyses according to the process for knowledge discovery in data.
Module content	The lecture component consists of two parts: • business intelligence (approx. one-third) • data science (approx. two-thirds) Practical courses complement the lecture. The material covered in the lecture can be explored in greater depth through presentations on business practices as well as discussions and exercises.
Teaching format(s)	Lecture with an integrated practical course (3 credit hours)
Teaching methods	Prescribed teaching methods: • discussions • case studies • guest lectures • textbook/script • multimedia materials • online learning platform (e.g., Open Olat) • software: data analysis
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Basic knowledge of business administration, statistics, and mathematics is recommended.
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration.

	Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: generally 60-minute written examination. Or an oral examination. The module examination is set in the language of instruction.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • guest lectures on practical topics • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • empirical digital data • machine learning and artificial intelligence • software: data analysis

Module ID:	MA-METH 7(E)-WI-CGP
Module type:	Required elective module
Title:	Computergestützte Planung
Responsible for module:	Dr. Kai Brüssau
English translation:	Computer-Based Planning
Learning outcomes	Analytical skills • Students gain in-depth knowledge of the application of methods from statistics, machine learning, and operations research for model-based planning and decision-making support. • Students practice using software to model and solve business forecasting and planning issues. In-depth business knowledge • Students gain in-depth knowledge of current planning issues in production, logistics, and other areas of business administration. Management skills • Students learn to identify, model, and solve business administration planning issues. • Students can situate the results of analyses in a business administration context and communicate them effectively. Scholarly thinking • Students learn research methods from the fields of operations research and data science. • Students gain an understanding of the classification of business administration planning issues from research and of the implementation of solutions to these.
Module content	The module imparts knowledge and skills on the theoretical concepts behind individual analytical procedures and their computer implementation. Case studies are used to explore and practice these procedures. The module consists of the following parts: • introduction to computer-based planning and the classification of individual business administration planning issues from the perspective of model-based decision-making support. • statistical methods for time series analysis and concepts from machine learning for business administration forecasting issues. • application of solutions from the field of operations research, such as mathematical optimization and heuristics. • consideration of current business administration issues in case studies in which the entire planning process—comprising business understanding, modeling, implementation of solutions, and interpretation of results—is practiced.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • discussions • case studies • textbook/script • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	German—unless announced otherwise at the start of the course

Prerequisites	Basic knowledge of an object-oriented programming language (e.g., Python) as well as of statistics and operations research
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 90-minute written examination The module examination is set in the language of instruction.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS and (digital) technologies
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives

	• course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • algebraic modeling language • data analysis and/or mining (structured data) • data collection • digital or social media • digital transformation (impact and process) • empirical digital data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: other

Module ID:	MA-METH 8(E)
Module type:	Required elective module
Title:	Fortgeschrittene Statistik und Ökonometrie I
Responsible for module:	Prof. Dr. Martin Spindler
English translation:	Advanced Statistics and Econometrics I
Learning outcomes	In-depth business knowledge • Students are introduced to advanced statistics and econometrics topics. Analytical skills • Students understand fundamental concepts of (mathematical) statistics.
Module contentsModule content	Fundamental concepts of mathematical statistics, asymptotics, methods for nonlinear models (e.g., GMM and ML), Bayesian statistics, bootstrap methods, and non- and semi-parametric statistics.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • textbook/script • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Interest in statistics and basic knowledge of linear algebra and analysis
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 90-minute written examination Or an oral examination. The exact examination requirements will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English

Ethics, responsibility, and sustainability (ERS)	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • research with empirical data sets
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • course and/or reading materials on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • empirical digital data • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-METH 9(E)
Module type:	Required elective module
Title:	Fortgeschrittene Statistik und Ökonometrie II
Responsible for module:	Prof. Dr. Martin Spindler
English translation:	Advanced Statistics and Econometrics II
Learning outcomes	In-depth business knowledge • Students are introduced to advanced statistics and econometrics topics. • Students are familiarized with important models for empirical practice. Analytical skills • Students understand fundamental concepts of (mathematical) statistics.
Module content	Building on Advanced Statistics and Econometrics I, topics such as bootstrap methods and non- and semi-parametric statistics are complemented with additional topics like quantile regression, logistic regression, and causal inference.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • textbook/script • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Interest in statistics and basic knowledge of linear algebra and analysis
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 90-minute written examination Or an oral examination. The exact examination requirements will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English

Ethics, responsibility, and sustainability (ERS)	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • course and/or reading materials on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • empirical digital data • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-METH 10(E)
Module type:	Required elective module
Title:	Machine Learning with Applications in Economics and Business Administration
Responsible for module:	Prof. Dr. Martin Spindler
English translation:	Machine Learning with Applications in Economics and Business Administration
Learning outcomes	In-depth business knowledge • Students are introduced to the latest methods in machine learning. Analytical skills • Students understand how to apply these methods in business administration and economics. Scholarly thinking • Students gain preliminary programming skills in R.
Module content	This module provides a practical introduction to modern high-dimensional function fitting methods—a.k.a. machine learning (ML) methods (e.g., Lasso, Boosting, and Neural Nets)—for efficient estimation and inference on treatment effects and structural parameters in empirical economic models. Students use R to internalize and use the techniques in their own academic and professional work. With the exception of the introductory lecture, all of the lectures are accompanied by R code that can be used to reproduce the empirical examples provided during the lectures. Hence the boundaries between theory and practice are fluid.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • guest lectures • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Statistics I and II, sound knowledge of regression analysis, and basic knowledge of R and/or a willingness to learn it
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination Or an oral examination. The exact examination requirements will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	

Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • guest articles on international topics and/or in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • transparency and corruption (SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • environmental protection (SDG 13: Climate Action) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • digital transformation (impact and process) • machine learning and artificial intelligence • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-METH 11(E)
Module type:	Required elective module
Title:	Qualitative Methods for Business and Management
Responsible for module:	Prof. Dr. Jan Recker
English translation:	Qualitative Methods for Business and Management
Learning outcomes	Scholarly thinking • Students learn to frame empirically grounded research questions and to design, execute, and report qualitative research studies appropriate for addressing these research questions. Analytical skills • Students learn to apply discipline and technical knowledge along with skills to analyze and evaluate qualitative data. • Students learn to select appropriate qualitative methods of data collection and analysis. Management skills • Students learn to demonstrate written communication skills to structure, explain, and defend thinking and reasoning in qualitative research. • Students learn to demonstrate oral and written communication skills to structure, explain, and defend thinking and reasoning in qualitative research.
Module content	• qualitative research designs and processes • qualitative research philosophies • qualitative data analysis including manual and computational methods • qualitative methods, in particular, document analysis, participant observation, interviewing, focus groups, case study method, and ethnography • qualitative research writing and reviewing
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • digital interaction with lecturers • digital interaction between students • discussions • case studies • guest lectures • textbook/script • online learning platform (e.g., Open Olat) • software: data analysis • other: computational tools for qualitative analysis
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration (MSc). Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • students practice using software • Topics: • data collection • empirical digital data • ethics and data • software: data analysis • other: computational methods for research

Module ID:	MA-METH 12(E)
Module type:	Required elective module
Title:	Causal Machine Learning
Responsible for module:	Prof. Dr. Martin Spindler
English translation:	Causal Machine Learning
Learning outcomes	Analytical skills • Students are able to conduct empirical analyses. • Students use machine learning methods to deepen their knowledge of statistical inference. • Students gain the fundamental ability to implement machine learning methods in R. Scholarly thinking • Students are able to formulate causal effects and structural parameters. • Students understand the differences and commonalities of predictive and causal models. • Students are able to interpret findings from empirical studies.
Module content	Students are provided with tools to conduct modern causal inference using machine learning algorithms that focus on empirical economic issues. State-of-the-art approaches for inference on causal and structural parameters such as double machine learning are introduced. Methods from machine learning developed for prediction purposes are presented and their adaptations to learn causal parameters discussed. The estimation of causal parameters is performed on many practical examples from economics using R.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • case studies • textbook/script • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	• knowledge of mathematical statistics and regression analysis • basic knowledge of R programming language • knowledge of machine learning methods and the fundamental principles of causal inference would be helpful
Module applicability	This module is a required elective for the Methods component of the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise, the module examination will take the form of a 60-minute written examination set in German/English or an oral examination. The exact examination requirements will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • students practice using software Topics: • algebraic modeling language • data analysis and/or mining (structured data) • empirical digital data • machine learning and artificial intelligence • practical or practice-like applications • software: mathematical/statistical (e.g., Python, R, and Matlab)

2. Focus fields

2.1. Focus Field Business Analytics (MA-BA)

2.1.1. Module overview—Focus Field Business Analytics

Type	Module Code	Title	ECTS Credits	Module Frequency
Required elective modules	MA-BA 1(E)	Statistical Programming	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-BA 2(E)	Data Mining	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-BA 3(E)	Mathematical Essentials for Machine and Deep Learning	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-BA 4(E)	Business Process Management	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-BA 5(E)	Choice-Based Optimization	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-BA 6(E)	Advances in Business Analytics	6 ECTS credits	Offered occasionally
		Lecture with an integrated practical course (3 credit hours)		
	MA-BA 7(E)	Seminar—Business Analytics	6 ECTS credits	Generally every winter semester
		Seminar (2 credit hours)		
	MA-BA 8(E)	Current Topics in Business Analytics	6 ECTS credits	Offered occasionally
		Lecture, interactive teaching formats, and/or case studies (3 credit hours)		
	MA-BA 9(E)	Deep Learning—An Introduction	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		

A total of 24 ECTS credits must be completed for the Focus Field Business Analytics (MA-BA). Students must attend a seminar in one of the two focus fields selected.
A maximum of 6 ECTS credits can be credited from the following:

- modules from the Methods component, except seminars
- modules from the Focus Field Operations and Supply Chain Management, except seminars
- modules from the Focus Field Finance and Insurance, except seminars

- MA-WPSTEU 2 Empirical Auditing and Accounting

2.1.2. Module descriptions—Focus Field Business Analytics

Module ID:	MA-BA 1(E)
Module type:	Required elective module
Title:	Statistical Programming
Responsible for module:	Prof. Dr. Martin Spindler
English translation:	Statistical Programming
Learning outcomes	In-depth business knowledge • Students are introduced to statistical programming languages (e.g., R and Python). Scholarly thinking • Students are able to conduct empirical analysis, produce graphical representations, and prepare reports as well as to implement estimators and procedures.
Module content	Basic functionality of statistical programming languages, reading and storing data, data processing, data visualization, generation of reports, and advanced programming techniques
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • discussions • textbook/script • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	Students taking the Focus Field Business Analytics within the Master of Science in Business Administration (MSc) degree program should complete this module in Semester 1 or 3. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination Regular attendance of the lectures and thorough review of the recommended reading and solutions to the exercises is strongly recommended. Unless announced otherwise, the module examination is set in German.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester

Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • students practice using software Topics: • data analysis and/or mining (structured data) • machine learning and artificial intelligence • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-BA 2(E)
Module type:	Required elective module
Title:	Data-Mining
Responsible for module:	Dr. Kai Brüssau
English translation:	Data Mining
Learning outcomes	Analytical skills • Students are familiarized with the procedure for implementing models to complete data mining tasks. • Students learn a programming language (e.g., Python) to complete data mining tasks. • Students implement solutions for data mining tasks in the programming language and analyze the outcomes. In-depth business knowledge • Students gain in-depth knowledge of current data mining tasks in e-commerce, marketing, supply chain management, and other business administration domains. • Students explore the question of how data mining can be meaningfully used in business analytics. Management skills • Students acquire sound knowledge of process models for data mining in order to organize and manage such projects. • Students gain the ability to evaluate the results of data mining for practical use. This is another important skill to be able to make decisions based on these. Scholarly thinking • Students learn structured approaches to data mining. • Students learn to assess approaches such as clustering, classification, or regression and to parameterize and correctly apply related methods. • Students engage with systematic approaches to evaluate results and derive insights from these.

Module content	The module uses exercises and case studies to impart knowledge and skills on theoretical concepts of individual analysis methods as well as their computer implementation. The module consists of the following parts:
	• process models for completing data mining tasks
	• introduction to a programming language (e.g., Python), especially data storage, access, management, and processing as well as the use of common methods for data mining
	• classification, clustering, regression, and related methods
	• examination of case studies
	  ○ data preparation and modeling, for example, for forecasting, recommender systems, and text mining / natural language processing
	  ○ results analysis, calculation of error measures and ratios, and their interpretation
	  ○ presentation of results

Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • discussions • case studies

	• guest lectures • textbook/script • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Basic knowledge of statistics, classification, clustering, and regression is recommended.
Module applicability	This module is a required elective of the Focus Field Business Analytics within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The module examination is set in the language of instruction.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module

Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • digital or social media • digital transformation (impact and process) • digitalization is an important topic in the module • empirical digital data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: other

Module ID:	MA-BA 3(E)
Module type:	Required elective module
Title:	Mathematische Grundlagen des Machine und Deep Learnings
Responsible for module:	Prof. Dr. Michael Merz
English translation:	Mathematical Essentials for Machine and Deep Learning
Learning outcomes	Analytical skills • Students gain in-depth knowledge of the mathematical and statistical models and concepts behind the most common machine and deep learning methods for regression, classification, clustering, and dimensionality reduction. • Students acquire and consolidate their knowledge of the mathematical and statistical methods and concepts presented in the lecture through independent active application of the material learned while completing exercises. • Students can identify the appropriate machine learning or deep learning method to solve economic issues and, in addition to the theoretical basis, also learn about the requirements and limitations for application of these methods. • Students are able to evaluate, adapt, extend, and generalize machine learning and deep learning algorithms and procedures. Scholarly thinking • Students understand the results and evaluation of machine learning and deep learning procedures, and can reflect critically on the results. • Students learn to work independently on new advanced topics within machine learning and deep learning, and to develop and evaluate their own solutions to problems. Management skills • Students are able to communicate about statistical topics confidently and effectively both verbally and in writing.
Module content	Fundamentals of statistical learning theory, linear models for regression problems, linear models for classification problems, k-nearest neighbor and naive Bayes classification, discriminant analysis, decision trees, ensemble methods, principal component analysis and regression, cluster analysis, and artificial neural networks.
Teaching format(s)	Lecture (2 credit hours) + practical courses (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • (computer-based) simulations/games • discussions • textbook/script • online learning platform (e.g., Open Olat) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Business Analytics within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 90-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ethics in research and good scientific practice
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • research with empirical data sets • content, examples, and/or perspectives from practice • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Learning methods: • digitalization: content, examples, and/or perspectives • course and/or reading materials on digitalization Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • empirical digital data • ethics and data • machine learning and artificial intelligence • practical or practice-like applications • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-BA 4(E)
Module type:	Required elective module
Title:	Business Process Management
Responsible for module:	Prof. Dr. Markus Nüttgens
English translation:	Business Process Management
Learning outcomes	Sound business knowledge • Students are introduced to the basic concepts and applications for managing, implementing, and executing business processes. Scholarly thinking • Students are familiarized with selected techniques, methods, and tools of business process management. Analytical skills • Students gain in-depth knowledge of the applications of business process management (incl. (re-)documentation, modeling, analysis, optimization, and implementation). Management skills • Students are familiarized with the technical basis for implementing and executing business processes (integration platforms, end-to-end process integration, service-oriented architectures, coordination and orchestration of web services, and interoperability).
Module content	Examples are provided and relevant techniques, methods, and tools used to introduce basic management concepts in addition to the application and implementation of business processes. More abstract concepts of process maturity models, process life cycle models, and process patterns as well as the integration, management, and automation of business processes within and between companies form the starting point. Value-oriented analysis and planning form the basis of the mapping in a consistent process design, (semi-)automated process implementation, and feedback for process controlling. Platforms for enterprise application integration (EAI) form the technical basis for end-to-end process integration, the development of service-oriented architectures, and the coordination and orchestration of web services and workflows. Consolidating and standardizing basic processes facilitates the consistent integration of various applications and systems for handling business processes reliant on message- and standard-based methods of process integration (interoperability). Topics are covered in greater depth during the lecture and students have the opportunity to also independently work on a selected subtopic in this area (specified by the module organizers) during the practical component.
Teaching format(s)	Lecture (2 credit hours) + practical course / case studies (1 credit hour); use of digital resources and work in small groups
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • digital interaction between students • discussions • case studies • guest lectures • textbook/script • multimedia materials • online learning platform (e.g., Open Olat) • projects (groups)

	• software: data analysis • software: other • other: BPM tools
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Business Analytics within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 90-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice • ERS and (digital) technologies
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • guest lectures on practical topics

	• content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • digital documentation • digital transformation (impact and process) • digitalization is an important topic in the module • practical or practice-like applications

Module ID:	MA-BA 5(E)
Module type:	Required elective module
Title:	Choice Based Optimization
Responsible for module:	Prof. Dr. Knut Haase
English translation:	Choice-Based Optimization
Learning outcomes	Analytical skills • Students learn to confidently apply discrete choice models to estimate the anticipated demands. • Students gain in-depth knowledge of embedding demand models in algebraic decision models. Scholarly thinking • Students acquire the skills needed to independently develop further research questions. In-depth business knowledge • Students further their ability to apply methodological concepts and theoretical knowledge to concrete problems from the field of choice-based optimization.
Module content	The following topics will be covered in the lecture: • design options for data collection • logit models under constant and flexible substitution effects • application of algebraic modeling languages • linearization of nonlinear decision models • simulation of random utility parameters • simulation-supported optimization • practical applications, especially location and assortment planning Case studies are examined during the practical courses that run in parallel to the lectures and focus on application of the material learned, with one problem assigned to each group.
Teaching format(s)	Lecture (2 credit hours) + parallel practical courses (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • (computer-based) simulations/games • digital interaction between students • discussions • projects (groups) • textbook/script • software: mathematical/statistical (e.g., Python, R, and Matlab) • other: GAMS software
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None. Proof of attendance of specific courses is not required. However, good knowledge of statistics, mathematics, and operations research is recommended—where necessary, gained through independent study. Parallel attendance of the module Advanced Statistics and Econometrics I may be helpful.
Module applicability	This module is a required elective of the Focus Field Business Analytics within the Master of Science in Business Administration. The module may also be credited to the Focus Field Operations and Supply Chain Management. The module can be taken as part

	of the free elective area for the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course, two equally weighted examination components must be completed. The first component is a 30-minute group presentation. The second component is a 15-minute oral examination. Both components can be completed in either German or English.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	**Teaching methods and content:** • research on international topics and/or research in English • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	Teaching methods: • ethics in research and good scientific practice Topics: • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	Teaching methods: • use of applications/software from practice • research with empirical data sets • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics
Digitalization and e-learning	Teaching methods: • digitalization: content, examples, and/or perspectives • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • algebraic modeling language • data collection • empirical digital data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: mathematical/statistical (e.g., Python, R, and Matlab)

	• other: GAMS software

Module ID:	MA-BA 6(E)
Module type:	Required elective module
Title:	Advances in Business Analytics
Responsible for module:	Prof. Dr. Stefan Voß
English translation:	Advances in Business Analytics
Learning outcomes	- Students are introduced to current research topics and methods in the field of business analytics. - Students are able to independently familiarize themselves with current research topics in the field of business analytics. - Students are able to hold academic presentations and to summarize current research topics.
Module content	Changing topics from the field of business analytics will be covered which are suitable for familiarizing students with current research topics as well as current methods and tools used in this field. These can entail selected aspects of a particular area (e.g., modeling and decision-making support). Alternatively, topics addressed at recent conferences or in anthologies on the subject of business analytics can be discussed in greater depth.
Teaching format(s)	Lecture with an integrated practical course (3 credit hours)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Business Analytics within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Type, prerequisites, and language of the module examination (components)	Unless announced otherwise at the start of the course, the module examinations will take the form of a term paper and a presentation. Regularly attendance of all course components is strongly recommended. Examination language: German or English.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally to supplement the curriculum with specific current topics.
Module duration	1 semester

Module ID:	MA-BA 7(E)
Module type:	Required elective module
Title:	Seminar Business Analytics
Responsible for module:	All professorships involved in the Focus Field Business Analytics
English translation:	Seminar—Business Analytics
Learning outcomes	Scholarly thinking • Students are familiarized with and practice complex techniques for academic work. • Students learn to work independently on a set topic, drawing on the knowledge gained through one of the lectures in the required elective modules of the focus field usually taken prior to the seminar so as to provide a basis for the seminar. • Students learn to write seminar papers that meet the standards set for academic writing and practice the skills acquired by preparing a seminar paper on the topic addressed. • Students present and defend their chosen topic during the seminar and also engage in a discussion on this topic thereafter. • Students actively participate in and discuss the topics covered during the seminar sessions. • Students learn (active and passive) approaches to dealing with feedback. Analytical skills • Students learn to use methods to solve business administration problems. • Students learn to interpret findings and to use the knowledge gained. In-depth business knowledge • Students gain a business administration perspective on the business analytics topics covered. • Students learn to classify problems for business administration purposes. Management skills • Students interpret findings to determine how they can be used to support decision-making (prescriptive analytics). • Students also take a strategic perspective when solving planning problems.
Module content	The content of the seminar builds on a module from the Focus Field Business Analytics.
Teaching format(s)	Seminar (2 credit hours)
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • (computer-based) simulations/games • discussions • case studies • projects (groups) • projects (individual) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: other
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Prior attendance of at least one required elective module from the MSc program of the professorship offering the seminar is recommended.

Module applicability	This module is a required elective of the Focus Field Business Analytics within the Master of Science in Business Administration. Where places are still available and exclusively upon prior agreement with the director of the chosen degree program, this module can also be taken as part of another master's degree program offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Usually a term paper and a presentation. Further components (e.g., an oral or written examination) may be required. The examination type and, where applicable, the weighting of the examination components will be announced at the start of the seminar. Attendance of the seminar sessions is compulsory.
ECTS credits	6 ECTS credits ; The individual examination components cannot be separated.
Workload	Attendance: 21 hours; Independent study: 159 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • students present, write, and/or take exams on digitalization • students practice using software Topics: • algebraic modeling language • blockchain • data analysis and/or mining (structured data)

	• data analysis and/or mining (unstructured data) • data collection • digital or social media • digital transformation (impact and process) • digitalization is an important topic in the module • empirical digital data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-BA 8(E)
Module type:	Required elective module
Title:	Aktuelle Probleme im Bereich Business Analytics
Responsible for module:	All professorships involved in the Focus Field Business Analytics
English translation:	Current Topics in Business Analytics
Learning outcomes	Students - familiarize themselves with special and current issues in the field of business analytics from various theoretical and methodological perspectives; - gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research; - learn to reflect critically on solutions and contributions to the respective subject based on academic criteria; and - learn to develop and evaluate their own solutions to problems based on theory.
Module content	Changing current topics from all areas of the Focus Field Business Analytics
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the course
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module can be taken as part of the Focus Field Business Analytics within the Master of Science in Business Administration (MSc). Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	The module examination generally takes the form of a 60-minute written examination held at the end of the respective subject semester.
ECTS credits	6 ECTS credits ; The individual examination components cannot be separated.
Workload	Attendance: 21 hours; Independent study: 159 hours
Module frequency	Offered occasionally to supplement the curriculum with specific current topics.
Module duration	1 semester

Module ID:	MA-BA 9(E)
Module type:	Required elective module
Title:	Deep Learning – Eine Einführung
Responsible for module:	Prof. Dr. Martin Spindler
English translation:	Deep Learning—An Introduction
Learning outcomes	In-depth business knowledge • Students understand the fundamentals of neural networks. • Students learn about business administration applications for neural networks. Analytical skills • Students are able to implement and assess standard models. • Students learn to independently address application issues. • Students understand the limitations of deep learning.
Module content	• fundamentals of deep learning • principles of machine learning • optimization for deep learning • deep learning for computer vision • deep learning for sequences and time series • advanced topics (e.g., GANs)
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • (computer-based) simulations/games • digital interaction with lecturers • discussions • guest lectures • textbook/script • multimedia materials • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Basic knowledge of statistics and mathematics (linear algebra and analysis) as well as of Python and/or R (or a willingness to learn these independently)
Module applicability	This module is a required elective of the Focus Field Business Analytics within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination Or an oral examination. The exact examination requirements will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester

Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being) • transparency and corruption (SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • environmental protection (SDG 13: Climate Action)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization • course and/or reading materials on digitalization Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • empirical digital data • machine learning and artificial intelligence • software: mathematical/statistical (e.g., Python, R, and Matlab)

2.2. Focus Field Finance, Banking and Insurance (MA-FBI)

2.2.1. Module overview—Focus Field Finance, Banking and Insurance

Type	Module Code	Module Title	ECTS Credits	Semester Offered
Required elective modules	MA-FBI 1(E)	Asset Management I	6 ECTS credits	Generally every winter semester
		Lecture (3 credit hours)		
	MA-FBI 2(E)	Corporate Risk Management	6 ECTS credits	Generally every winter semester
		Lecture (3 credit hours)		
	MA-FBI 3(E)	Banking	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-FBI 4(E)	Investment Banking and Capital Markets	6 ECTS credits	Generally every summer semester
		Lecture (3 credit hours)		
	MA-FBI 5(E)	Behavioral Finance	6 ECTS credits	Generally every summer semester
		Lecture (3 credit hours)		
	MA-FBI 6(E)	Insurance Economics	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-FBI 7(E)	Asset Management II	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) with integrated coursework on empirical aspects (total of 3 credit hours)		
	MA-FBI 8(E)	Selected Topics in Risk Management and Insurance	6 ECTS credits	Offered occasionally
		Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)		
	MA-FBI 9(E)	Selected Topics in Banking and Behavioral Finance	6 ECTS credits	Offered occasionally
		Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)		
	MA-FBI 10(E)	Selected Topics in Corporate and Ship Finance	6 ECTS credits	Offered occasionally
		Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)		
	MA-FBI 11(E)	Seminar on Finance and Insurance	6 ECTS credits	Generally every winter semester
		Seminar (2 credit hours)		
	MA-FBI 12(E)	Consumer Finance	6 ECTS credits	

		Lecture (2 credit hours) + practical course (1 credit hour)		Generally every summer semester

A total of 24 ECTS credits must be completed for the Focus Field Finance and Insurance (MA-FBI). Students must attend a seminar in one of the two focus fields selected.

The following module can be taken from another focus field and credited to the Focus Field Finance and Insurance:

- MA-MiG 1 Health Insurance Management

2.2.2. Module descriptions—Focus Field Finance and Insurance

Module ID:	MA-FBI 1(E)
Module type:	Required elective module
Title:	Asset Management I
Responsible for module:	Prof. Dr. Wolfgang Drobetz
English translation:	Asset Management I
Learning outcomes	In-depth business knowledge • Students learn to critically evaluate the investment decisions made by financial intermediaries that are designed to benefit various investor groups (institutional or private investors). Analytical skills • Students gain in-depth knowledge of portfolio management. Scholarly thinking • Students learn to apply research models and methods. • Students hone their ability to reflect critically on original scholarly sources. Socially responsible decision-making • Students learn to transfer the knowledge gained to current business and socio-political issues.
Module content	This module offers a comprehensive overview of central aspects of asset management (i.e., the management of investment portfolios), taking the aspects of inherent risks and returns into account. A brief introduction is first provided to modern asset pricing before factor investing is covered in great depth, with a focus on the investment strategies of size, value, momentum, and low volatility. This is followed by an introduction to the core concepts of strategic and tactical portfolio management as well as return forecasting. The focus then shifts to evaluating the success of active investment strategies using performance measurement and attribution. Alternative asset classes (especially hedge funds and private equity) are another key component of the lecture. The module then concludes with an analysis of incentive and remuneration structures in institutional asset management.
Teaching format(s)	Lecture (3 credit hours)
Teaching methods	Prescribed teaching methods: • algebraic modeling • discussions • case studies • guest lectures • textbook/script
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The examination questions are set in the language of instruction; answers can be given in the language of instruction or in German.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization • course and/or reading materials on digitalization

	Topics: • data analysis and/or mining (structured data) • data collection • decentralized finance • empirical digital data • ethics and data • fintech • machine learning and artificial intelligence • practical or practice-like applications

Module ID:	MA-FBI 2(E)
Module type:	Required elective module
Title:	Corporate Risk Management
Responsible for module:	Prof. Dr. Petra Steinorth
English translation:	Corporate Risk Management
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge of the identification and evaluation of the risks that a company faces. • Students are familiarized with a variety of risk management tools. Analytical skills • Students acquire in-depth theoretical and conceptual knowledge of the mechanisms underlying risk management. • Students hone their ability to reflect critically on original scholarly sources. Management skills • Students acquire the skills needed for the quantitative and qualitative management of risks. Socially responsible decision-making • Students gain knowledge of the socially responsible use of risk management tools from the perspective of various stakeholders. International mindset • Students learn about the global transfer of risks and the interaction between international partners in the transfer of risks.
Module content	This module introduces the fundamental principles of risk management. The terms risk, risk management, and uncertainty are first defined, and various approaches to assessing risks, motives, and reasons for risk management in companies are then examined both theoretically and empirically. One focus of this module is the examination of risk management approaches, including the resulting advantages and disadvantages. Students gain an overview of the various sources of corporate risk to this end and learn about quantitative and qualitative tools and techniques for risk management as well as the optimal distribution of risk between different stakeholders. The economic value of risk management is moreover analyzed. The module is based on the findings of both pioneering and current international studies on corporate risk management.
Teaching format(s)	Lecture (3 credit hours)
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • digital interaction with lecturers • discussions • field trips (e.g., company visits) • case studies • guest lectures • exam training program/software • textbook/script • multimedia materials • online learning platform (e.g., Open Olat)
Language of instruction	English—unless announced otherwise at the start of the course

Prerequisites	Prior completion or parallel attendance of MA-METH 1 Decision Theory
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • course and/or reading materials on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice • ERS is an important topic in the module • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods:

	• use of applications/software from practice • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization Topics: • digital transformation (impact and process) • digitalization is an important topic in the module

Module ID:	**MA-FBI 4(E)**
Module type:	**Required elective module**
Title:	**Investment Banking und Kapitalmärkte**
Responsible for module:	**Prof. Dr. Wolfgang Drobetz**
English translation:	**Investment Banking and Capital Markets**
Learning outcomes	In-depth business knowledge • Students learn to critically evaluate companies' financing decisions and gain an understanding of the far-reaching activities of investment banks. Analytical skills • Students gain in-depth knowledge of capital markets and investment banking. Scholarly thinking • Students learn to apply research models and methods. • Students hone their ability to reflect critically on original scholarly sources. Socially responsible decision-making • Students learn to transfer the knowledge gained to current business and socio-political issues.
Module content	The module examines the various financing issues in a company's life cycle and presents solutions, including those that consider principal-agent issues and institutional constraints. The empirical methods needed to assess the valuation relevance of financing decisions are first presented (especially event studies) and the institutional bases of financial markets and characteristics of financial systems are then discussed. This is followed by an analysis of a range of financing decisions in a company's life cycle. The focus is on private equity and venture capital financing, initial public offerings, capital increases, bond issues and hybrid securities, mergers and acquisitions, restructuring, and corporate hedging decisions.
Teaching format(s)	Lecture (3 credit hours)
Teaching methods	Prescribed teaching methods: • algebraic modeling • discussions • case studies • guest lectures • textbook/script
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The examination questions are set in the language of instruction; answers can be given in the language of instruction or in German.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours

Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice • course and/or reading materials on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS is an important topic in the module • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization • course and/or reading materials on digitalization Topics: • data analysis and/or mining (structured data)

	• data collection • decentralized finance • empirical digital data • ethics and data • fintech • cryptocurrencies • machine learning and artificial intelligence • practical or practice-like applications

Module ID:	MA-FBI 3(E)
Module type:	Required elective module
Title:	Banking
Responsible for module:	Prof. Dr. Markus Nöth
English translation:	Banking
Learning outcomes	In-depth business knowledge • Students acquire sound theoretical knowledge of the function and business field of banking, the practical design of banking services, and the fundamental principles and selected aspects of banking regulation. Scholarly thinking • Students acquire the skills needed to transfer their theoretical and methodological knowledge to specific practical banking issues as well as to current sociopolitical matters, especially regulatory issues. • Students gain the ability to reflect critically on original scholarly sources and current research literature. • Students learn the skills needed to independently develop further research questions. Analytical skills • Students learn to interpret the results of econometric analyses and to recognize possible limitations.
Module content	This module begins by providing a brief overview of the institutional frameworks of the German and international banking systems. Based on theoretical approaches from information economics, the existence of banks as part of the financial system is then justified and their main functions are explained. The most important services offered by banks are examined in greater depth, and theoretical models and practical designs for the credit business compared. The trading and securitization of loans is moreover discussed and the significance of deposit business for banks and their customers analyzed. The module concludes with a look at new(er) business solutions for the digital transformation and their consequences. The lecture is complemented with presentations on various practical aspects of the banking business.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • discussions • guest lectures • textbook/script
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Familiarity with the content of the Methods module MA-METH 1 Decision Theory. This may also be acquired in parallel to the lecture.
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination with questions in the language of instruction. Answers may be given in either English or German.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • guest articles on international topics and/or in English • international content, examples, and/or perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • guest lectures on practical topics • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives Topics: • decentralized finance • digital transformation (impact and process) • fintech • cryptocurrencies

Module ID:	MA-FBI 4(E)
Module type:	Required elective module
Title:	Investment Banking und Kapitalmärkte
Responsible for module:	Prof. Dr. Wolfgang Drobetz
English translation:	Investment Banking and Capital Markets
Learning outcomes	In-depth business knowledge • Students learn to critically evaluate companies' financing decisions and gain an understanding of the far-reaching activities of investment banks. Analytical skills • Students gain in-depth knowledge of capital markets and investment banking. Scholarly thinking • Students learn to apply research models and methods. • Students hone their ability to reflect critically on original scholarly sources. Socially responsible decision-making • Students learn to transfer the knowledge gained to current business and socio-political issues.
Module content	The module examines the various financing issues in a company's life cycle and presents solutions, including those that consider principal-agent issues and institutional constraints. The empirical methods needed to assess the valuation relevance of financing decisions are first presented (especially event studies) and the institutional bases of financial markets and characteristics of financial systems then discussed. This is followed by an analysis of a range of financing decisions in a company's life cycle. The focus is on private equity and venture capital financing, initial public offerings, capital increases, bond issues and hybrid securities, mergers and acquisitions, restructuring, and corporate hedging decisions.
Teaching format(s)	Lecture (3 credit hours)
Teaching methods	Prescribed teaching methods: • algebraic modeling • discussions • case studies • guest lectures • textbook/script
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The examination questions are set in the language of instruction; answers can be given in the language of instruction or in German.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours

Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice • course and/or reading materials on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS is an important topic in the module • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization • course and/or reading materials on digitalization Topics: • data analysis and/or mining (structured data) • data collection

	• decentralized finance • empirical digital data • ethics and data • fintech • cryptocurrencies • machine learning and artificial intelligence • practical or practice-like applications

Module ID:	MA-FBI 5(E)
Module type:	Required elective module
Title:	Behavioral Finance
Responsible for module:	Prof. Dr. Markus Nöth
English translation:	Behavioral Finance
Learning outcomes	In-depth business knowledge • Students gain fundamental knowledge of experimental and empirical research in the field of behavioral finance. • Students learn to recognize systematic anomalies on financial markets, for example, to take them into account in their own decision-making. Scholarly thinking • Students acquire the skills needed to transfer theoretical and methodological knowledge to specific practical issues in investment and financing as well as to current sociopolitical matters. • Students gain the ability to reflect critically on original scholarly sources and current research literature. • Students learn the skills needed to independently develop further research questions. Analytical skills • Students learn to interpret the results of econometric analyses and to recognize possible limitations.
Module content	This module draws on rational expectations theory and practical observations of market anomalies to analyze the extent to which individual behavior can be responsible for such market anomalies. The focus is on information aggregation within markets and includes addressing the questions: What anomalies can occur and what consequences do these have for the capital market? Under what conditions can alternative market structures be used to correct these? What impact does the digital transformation and the changing role of central banks have on information aggregation? The lecture is complemented with presentations on various practical aspects of behavioral finance.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • discussions • guest lectures • other: original research papers from academic journals
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Familiarity with the content of the Methods module MA-METH 1 Decision Theory. This may also be acquired in parallel to the lecture.
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination with questions in the language of instruction. Answers may be given in either English or German.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international content, examples, and/or perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • guest lectures on practical topics • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives Topics: • digital transformation (impact and process) • fintech

Module ID:	MA-FBI 6(E)
Module type:	Required elective module
Title:	Insurance Economics
Responsible for module:	Prof. Dr. Petra Steinorth
English translation:	Insurance Economics
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge of insurance demand theory and the various insurance policies offered. Scholarly thinking • Students gain in-depth knowledge of the economic modeling of insurance contracts and the demand for insurance coverage. • Through work with research publications, students learn to take a critical approach to research findings. Analytical skills • Students practice abstracting and modeling economic questions to enable them to make economically relevant statements based on the model. Socially responsible decision-making • Students gain in-depth knowledge of the challenges of operating insurance sustainably while considering various concepts of justice. • Students gain an understanding of how insurance decisions affect the resilience of individuals and the economy as a whole.
Module content	This module explores key concepts in insurance demand theory. After a review of the main features of decision theory, the optimal design of insurance products is considered from an information economics perspective. Questions are abstracted and economics models applied accordingly. The optimal risk distribution under complete information symmetry is discussed as a reference case. The focus is on principal-agent problems arising from the information advantage of the insured parties. The lecture covers adverse selection, moral hazard, and insurance fraud, in particular, all of which strongly affect almost every real-life insurance market. The implications for product design, as well as the interaction between insurance providers and other markets are analyzed.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • digital interaction with lecturers • discussions • case studies • guest lectures • textbook/script • online learning platform (e.g., Open Olat)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Prior completion or parallel attendance of MA-METH 1 Decision Theory
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree

	programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • course and/or reading materials on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content:

	Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization

Module ID:	MA-FBI 7(E)
Module type:	Required elective module
Title:	Asset Management II
Responsible for module:	PD Dr. Hubert Dichtl
English translation:	Asset Management II
Learning outcomes	Students learn to independently address a variety of topics covered in Asset Management I using the Python programming language. Students - gain basic programming skills and are introduced to the Python programming language; - learn to independently develop empirical studies for asset management using methods from statistics, econometrics, and optimization; - further their knowledge of the technical software needed to implement research models and methods of asset management; and - acquire the skills needed to transfer the latest research findings to practical issues of institutional capital investment.
Module content	This module involves the empirical and practical implementation of the material presented in Asset Management I. Following a brief introduction to the Python programming language, selected topics from Asset Management I are addressed and quantitative methods used to conduct an empirical analysis. In addition to the technical software implementation, methodological expertise is also imparted in these fields. The module is structured according to the topics covered in Asset Management I.
Teaching format(s)	Lecture (2 credit hours) with integrated coursework on empirical aspects (total of 3 credit hours)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Successful completion of MA-FBI6 Asset Management I and familiarity with the content of the Methods module MA-METH 1 Decision Theory
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Type, prerequisites, and language of the module examination (components)	This module includes empirical coursework. Unless indicated otherwise, the module examination will take the form of a 60-minute written examination and is held at the end of the module. The examination questions are set in the language of instruction; answers can be given in the language of instruction or in German.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester

Module ID:	MA-FBI-8(E)
Module type:	Required elective module
Title:	Selected Topics in Risk Management and Insurance
Responsible for module:	Prof. Dr. Steinorth
English translation:	Selected Topics in Risk Management and Insurance
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues in the fields of risk management and insurance from various theoretical and methodological perspectives. Scholarly thinking • Students gain theoretical and methodological knowledge in their chosen subject area, also based on selected original scholarly literature and current research. Analytical skills • Students learn to reflect critically on solutions and contributions to the respective subject based on academic criteria. • Students learn to develop and evaluate their own solutions to problems based on theory.
Module content	Changing current topics from the entire field of risk management and insurance
Teaching format(s)	Lecture and practical course or interactive teaching formats such as group discussions (4 credit hours)—as announced at the start of the semester
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • digital interaction with lecturers • discussions • field trips (e.g., company visits) • case studies • guest lectures • textbook/script • online learning platform (e.g., Open Olat) • projects (individual)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The written examination is set in the language of instruction.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours

Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • students present, write, and/or take exams on ERS topics
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • projects based on research/work with companies • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization • course and/or reading materials on digitalization Topics: • empirical digital data

Module ID:	MA-FBI 9(E)
Module type:	Required elective module
Title:	Current Topics in Banking and Behavioral Finance
Responsible for module:	Prof. Dr. Markus Nöth
English translation:	Current Topics in Banking and Behavioral Finance
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues in the fields of finance, banking, and insurance from various theoretical and methodological perspectives. • Students gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research. Scholarly thinking • Students acquire the skills needed to transfer theoretical and methodological knowledge to specific practical issues in investment and financing as well as to current sociopolitical matters. • Students gain the ability to reflect critically on original scholarly sources and current research literature. • Students learn the skills needed to independently develop further research questions. Analytical skills • Students learn to interpret the results of econometric analyses and to recognize possible limitations.
Module content	Changing current topics from the entire field of banking and behavioral finance
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the semester.
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • discussions • case studies • guest lectures • multimedia materials • projects (individual) • other: original research papers from academic journals
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Familiarity with the content of the Methods module MA-METH 1 Decision Theory. This may also be acquired in parallel to the lecture.
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	The module examination generally takes the form of a 60-minute written examination at the end of the respective subject semester or an oral examination. The exact examination requirements will be announced at the start of the course. If other examination requirements or components are announced, their weighting and calculation of the module grade will be announced at the start of the course.

ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international content, examples, and/or perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS and (digital) technologies
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization Topics: • blockchain • digital transformation (impact and process) • fintech

Module ID:	MA-FBI 10(E)
Module type:	Required elective module
Title:	Selected Topics in Corporate and Ship Finance
Responsible for module:	Prof. Dr. Wolfgang Drobetz
English translation:	Selected Topics in Corporate and Ship Finance
Learning outcomes	Students • are familiar with a range of theoretical and methodological perspectives on specific current issues within the field of finance, banking, and insurance; • gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research; • learn to reflect critically on solutions and contributions to the respective subject based on academic criteria; and • learn to develop and evaluate their own solutions to problems based on theory.
Module content	Changing current topics from the entire field of corporate and ship finance
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the course
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Type, prerequisites, and language of the module examination (components)	The module examination usually takes the form of a written examination lasting 60 minutes or an oral examination and is held at the end of the subject semester. The exact examination requirements will be announced at the start of the course. If other examination requirements or components are announced, their weighting and calculation of the module grade will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester

Module ID:	MA-FBI 11(E)
Module type:	Required elective module
Title:	Seminar Schwerpunktfach Finanzierung, Banken und Versicherung
Responsible for module:	Responsibility rotates between the professorships involved in the Focus Field Finance and Insurance
English translation:	Seminar on Finance and Insurance
Learning outcomes	Sound business knowledge • Students further their ability to apply methodological concepts and theoretical knowledge to concrete problems from the fields of finance, banking, and insurance. Analytical skills • Students acquire additional skills to independently develop further research questions. • Students hone their ability to reflect critically on original scholarly sources. • Students develop and expand their skills in data analysis using statistical methods and software (e.g., R and STATA). Socially responsible decision-making • Students gain in-depth knowledge of the challenges of sustainable, equitable insurance and financing products (ESG). Scholarly thinking • Students build on in-depth knowledge to hone their ability to reflect critically on current research literature. International mindset • Students draw on international literature to reflect on issues of international relevance. • Students learn interdisciplinary, international approaches and perspectives through interactive lectures and discussions in (international) groups.
Module content	Students draw on current scholarly literature and capital market data to explore current issues in the fields of finance and insurance. Students learn a systematic, problem-solving approach and how to communicate their findings in a clear manner.
Teaching format(s)	Seminar (2 credit hours)
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • digital interaction with lecturers • discussions • case studies • projects (groups) • projects (individual) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Proof of attendance of specific courses is not required. Prior attendance of at least one required elective module from the master's degree program of the professorship offering the seminar recommended.
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration.

	Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Usually a term paper and a presentation; potentially also an oral or written examination. The examination type and, where applicable, the weighting of the individual examination components will be announced at the start of the course. Attendance of the seminar sessions is compulsory. The examinations can be taken in English.
ECTS credits	6 ECTS credits
Workload	Attendance: 21 hours; Independent study: 159 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them • students work together in international groups
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice • group work on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • accounting (SDG 9: Industry, Innovation and Infrastructure) • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being)

	• gender equality and diversity (SDG 5: Gender Equality) • social responsibility (SDG 12: Responsible Consumption and Production) • environmental protection (SDG 13: Climate Action) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digitalization: case studies • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • algebraic modeling language • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • digital transformation (impact and process) • digitalization is an important topic in the module • empirical digital data • ethics and data • fintech • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-FBI 12(E)
Module type:	Required elective module
Title:	Consumer Finance
Responsible for module:	Prof. Dr. Nöth
English translation:	Consumer Finance
Learning outcomes	In-depth business knowledge • Students gain fundamental knowledge of experimental and empirical research in the field of consumer finance. • Students learn to recognize systematic behavioral deviations in finance in order to avoid errors in decision-making. Scholarly thinking • Students acquire the skills needed to transfer theoretical and methodological knowledge to specific practical issues in investment and financing as well as to current sociopolitical matters. • Students hone their ability to reflect critically on original scholarly sources and current research literature. • Students acquire the skills needed to independently develop further research questions. Analytical skills • Students learn to interpret the results of econometric analyses and to recognize possible limitations.
Module content	Original research articles from leading journals are used to analyze various individual financial decision-making scenarios from the areas of investment, credit, and insurance. In addition to empirical studies, findings from both laboratory and field experiments are used to illustrate methodological differences and various possible applications. The module concludes with a look at new(er) business solutions for the digital transformation and their consequences. The lecture is complemented with presentations on various practical aspects of individual financial decisions.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • discussions • guest lectures • other: original research papers from academic journals
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Familiarity with the fundamental knowledge imparted during the Methods module MA-METH 1 Decision Theory. This may also be acquired in parallel to the lecture.
Module applicability	This module is a required elective of the Focus Field Finance and Insurance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination with questions in the language of instruction. Answers may be given in either English or German.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • guest lectures on practical topics • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives Topics: • digital transformation (impact and process) • fintech

2.3. Focus Field Health Care Management (MA-MiG)

2.3.1. Module overview—Focus Field Health Care Management

Type	Module Code	Module Title	ECTS Credits	Semester Offered
Required elective modules	MA-MiG 1(E)	Health Insurance Management	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-MiG 2(E)	Strategic Management in Hospitals	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-MiG 3(E)	Health Economic Evaluation	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-MiG 4(E)	Pharmaceutical Markets and Market Access	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-MiG 5(E)	Current Issues in Health Care Management	6 ECTS credits	Offered occasionally
		Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)		
	MA-MiG 6(E)	Seminar—Health Care Management	6 ECTS credits	Generally every semester with changing topics
		Seminar (2 credit hours)		

A total of 24 ECTS credits must be completed for the Focus Field Health Care Management (MA-MiG). Students must attend a seminar in one of the two focus fields selected.

A maximum of 12 ECTS credits can be credited from other focus fields. Credits can be awarded for the following modules:

- G1 Health Economics (MSc in Health Economics and Health Care Management)
- MA-METH 10 Machine Learning with Applications in Economics and Business Administration
- MA-FBI 6 Insurance Economics
- MA-UFÜ 4 Customer Centricity
- MA-MA 3 Customers and Markets
- MA-OSCM 1 Quantitative Business Process Analysis and Optimization

2.3.2. Module descriptions—Focus Field Health Care Management

Module ID:	MA-MiG 1(E)
Module type:	Required elective module
Title:	Krankenversicherungsmanagement
Responsible for module:	Prof. Dr. Jonas Schreyögg
English translation:	Health Insurance Management
Learning outcomes	In-depth business knowledge • Students are familiarized with the central issues and special features of management within health insurance companies as well as with the relationships of health insurance companies to other stakeholders in the health care sector. • Students learn selected management strategies for individual functional areas within health insurance companies.
Module content	First, the lecture examines the key legal and structural characteristics of the markets for statutory and private health insurance. While the focus is mainly on the German market, this is explicitly situated in the international context. Selected management strategies for individual functional areas of health insurance companies are then explained. The aspects of marketing, controlling, and financial management are moreover addressed, with particular attention paid to health insurance companies' service management (e.g., contract and supply management). Within service management, the focus is on new forms of care (e.g., disease management programs).
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • discussions • guest lectures • textbook/script • online learning platform (e.g., Open Olat)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Health Care Management within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The written examination is set in German. Regular attendance of the lectures and practical course and thorough review of the recommended reading and preparation of exercises is strongly recommended to prepare for the module examination.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester

Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • health (SDG 3: Good Health and Well-Being) • social responsibility (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • guest lectures on practical topics • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization Topics: • empirical digital data • practical or practice-like applications

Module ID:	MA-MiG 2(E)
Module type:	Required elective module
Title:	Strategisches Management in Krankenhäusern
Responsible for module:	Prof. Dr. Eva-Maria Wild
English translation:	Strategic Management in Hospitals
Learning outcomes	In-depth business knowledge • Students gain theoretical, conceptual, and practical knowledge in the field of strategic management in hospitals. Analytical skills • Students learn to analyze current hospital-specific characteristics and issues in the management of hospitals as well as to evaluate them, taking existing strategies into account. Management skills • Students are familiarized with a variety of tools to support decision-making that enable them to independently make management decisions in the field of strategic hospital management. Scholarly thinking • Students learn to reflect critically on issues based on research study results, to analyze empirical studies, and to interpret and critically discuss study findings. • Students practice independently developing research questions and research approaches to challenges in the field of hospital management.
Module content	The module aims to help students acquire management and research skills. Students should understand incentives, challenges, and problems in the hospital sector and be able to develop and apply solutions. The general conditions of inpatient care and hospital planning and financing are first discussed to this end. Based on this, students learn to use management tools while taking the structural characteristics of the hospital sector into account. In order to foster academic skills, students learn to compare research studies and to describe and evaluate the methodological procedure for answering potential research questions. During case studies, guest lectures, and workshops, students gain insight into the business administration processes and management challenges within hospitals and are trained to handle challenges such as cost pressure, digitalization, and staff shortages in the health care sector.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	**Prescribed teaching methods:** • assignments • digital interaction with lecturers • digital interaction between students • discussions • case studies • guest lectures • textbook/script • online learning platform (e.g., Open Olat) • projects (groups)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Basic knowledge of the German health care system, especially inpatient care, is recommended. Prior or parallel attendance of the module Quantitative Methods is also recommended.

Module applicability	This module is a required elective of the Focus Field Health Care Management within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The written examination is set in German. Regular attendance of the lecture and practical course and thorough review of the recommended reading and preparation of exercises is strongly recommended to prepare for the module examination. Further examination formats will be announced at the start of the course (depending on the number of participants): presentation (20%) + written examination (80%)
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • course and/or reading materials on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice • students work together in groups on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods:

	• digitalization: content, examples, and/or perspectives • digital project work • guest articles on digitalization • course and/or reading materials on digitalization Topics: • digital transformation (impact and process)

Module ID:	MA-MiG 3(E)
Module type:	Required elective module
Title:	Health Economic Evaluation
Responsible for module:	Prof. Dr. Tom Stargardt
English translation:	Health Economic Evaluation
Learning outcomes	In-depth business knowledge • The students acquire methods and techniques for the economic evaluation of goods and services of the health care market. • The methods presented draw on cost and activity accounting and on the empirical-social science methods of data collection. Management skills • The procedures taught serve to support management decisions in various areas, for example, when insurance companies must decide on the reimbursement of new technologies, when pharmaceutical companies launch new drugs on the market, or when hospitals purchase medical equipment. Analytical skills • Students develop the ability to apply specific methods for economic evaluation to health goods and services. • Students hone the ability to reflect critically on current research literature, especially on the modeling of disease progression. Socially responsible decision-making • Students learn to transfer the knowledge gained to current sociopolitical issues related to the value of health. Scholarly thinking • Students hone the ability to reflect critically on current research in health technology assessment.
Module content	• Theoretical knowledge on the evaluation of innovations in health care and practical application of the learned knowledge is taught. • The course covers the acquisition and evaluation of costs and clinical parameters for measuring outcome quality and introduces the measurement of quality of life. • It also teaches the use of these variables in the context of cost studies, cost-effectiveness analyses, cost-utility analyses and cost-benefit analyses • Students will also gain insight into modeling disease progression in the context of decision trees or Markov models and in risk adjustment procedures when using data from non-randomized studies.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Teaching methods may include: • assignments • (computer-based) simulations/games • digital interaction with lecturers • discussions • case studies • textbook/script • online learning platform (e.g., Open Olat) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	English—unless announced otherwise at the start of the course

Prerequisites	Prior or parallel attendance of the module Methoden der empirischen Forschung is recommended.
Module applicability	This module is a required elective course of the Focus Field Health Care Management within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination. The written examination is in English; answers can be provided in either German or English.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • transfer and practical relevance are important topics in the module

Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-MiG 4(E)
Module type:	Required elective module
Title:	Pharmabetriebslehre
Responsible for module:	Prof. Dr. Tom Stargardt
English translation:	Pharmaceutical Markets and Market Access
Learning outcomes	In-depth business knowledge • Students are familiarized with the pharmaceutical industry and develop an awareness of the complex network of relationships between the various stakeholders. • Students learn a variety of methods and strategies to successfully deal with market-specific characteristics and requirements. Management skills • Students practice using selected tools and strategies to solve industry-specific problems. • Students gain the skills needed to transfer the knowledge acquired to similar case constellations. Socially responsible decision-making • Students acquire the skills to transfer the knowledge to other topics in health economics, health care management and health policy.
Module content	The following aspects will be explored in detail: • market environment of pharmaceutical industry and management of research and development activities for pharmaceuticals; • market access, i.e., marketing, in the pharmaceutical industry (product positioning, pricing, dealing with restrictive mechanisms for the reimbursement of pharmaceuticals medication, and communication strategies); and • distribution of pharmaceuticals.
Teaching format(s)	Lecture (3 credit hours) + practical course (1 credit hour)
Teaching methods	Teaching methods may include: • assignments • discussions • case studies • textbook/script
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Health Care Management within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The written examination is in German. Additional examination components such as a case study (approx. 5 pages) and/or a presentation on the case study topic may be required and will be announced at the start of the course. If such additional examination components are required, their

	weighting as well as the calculation of the module grade will be announced at the start of the semester.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international case studies • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • health (SDG 3: Good Health and Well-Being)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • content, examples, and/or perspectives from practice • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • course and/or reading materials on digitalization Topics: • data analysis and/or mining (structured data)

Module ID:	MA-MiG 5(E)
Module type:	Required elective module
Title:	Aktuelle Probleme des Managements im Gesundheitswesen
Responsible for module:	All professorships involved in the Focus Field Health Care Management.
English translation:	Current Issues in Health Care Management
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues in the field of health care management from various theoretical and methodological perspectives. Scholarly thinking • Students gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research. • Students learn to reflect critically on solutions and contributions within each topic area based on systematic criteria. • Students learn to develop and evaluate their own solutions to problems based on theory.
Module content	Changing current topics from the entire field of health care management
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the course
Teaching methods	Prescribed teaching methods: • discussions • guest lectures
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Health Care Management within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	The module examination generally takes the form of a 60-minute written examination taken at the end of the respective subject semester or an oral examination—unless other examination formats or components are announced at the start of the course. If such additional examination components are announced, their weighting as well as the calculation of the module grade will also be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English

	• teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • health (SDG 3: Good Health and Well-Being)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • research with empirical data sets • guest lectures on practical topics

Module ID:	MA-MiG 6(E)
Module type:	Required elective module
Title:	Seminar Management im Gesundheitswesen
Responsible for module:	All professorships involved in the Focus Field Health Care Management.
English translation:	Seminar—Health Care Management
Learning outcomes	In-depth business knowledge • Building on lecture modules MA-MiG 1–4, students gain in-depth knowledge of current issues in the fields of health care management and health economics. Scholarly thinking • Students hone their analytical and reasoning skills, familiarize themselves with strategies for academic work, and apply these in the preparation and defense of their written work. • Students learn presentation techniques and use these in the oral defense of their written work.
Module content	The specific topics covered in the seminar emerge from current issues in the fields of health care management and health economics. These will be announced before the start of the semester.
Teaching format(s)	Seminar (2 credit hours)
Teaching methods	Prescribed teaching methods: • discussions • software: data analysis
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Prior completion of the module Methods of Empirical Social Research and successful completion of at least one lecture module from the Focus Field Health Care Management recommended
Module applicability	This module is a required elective of the Focus Field Health Care Management within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Attendance is compulsory and a prerequisite for admission to the module examination. Unless announced otherwise, the module examination is set in German and takes the form of a written term paper with a presentation on the topic of the term paper. Additional assessments such as written examinations may be required—these will be announced at the start of the course. If such additional examination components are announced, their weighting as well as the calculation of the module grade will also be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 21 hours; Independent study: 159 hours
Module frequency	Generally every semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	

Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • health (SDG 3: Good Health and Well-Being)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Topics: • data analysis and/or mining (structured data) • empirical digital data • software: data analysis

2.4. Focus Field Marketing (MA-MA)

2.4.1. Module overview—Focus Field Marketing

Type	Module Code	Module Title	ECTS Credits	Semester Offered
Required elective modules	MA-MA 1(E)	E-Business	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-MA 2(E)	Sales Promotion Management	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-MA 3(E)	Customers and Markets	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-MA 4(E)	Brand Policy	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-MA 5(E)	Seminar—Marketing	6 ECTS credits	Generally every semester
		Seminar (2 credit hours)		
	MA-MA 6(E)	Current Issues in Marketing A	6 ECTS credits	Offered occasionally, generally in the summer semester
		Various teaching formats (generally 3 credit hours)		
	MA-MA 7(E)	Current Issues in Marketing B	6 ECTS credits	Offered occasionally, generally in the winter semester
		Various teaching formats (generally 3 credit hours)		
	MA-MA 8(E)	Marketing Colloquium	6 ECTS credits	Generally every semester
		Colloquium (2 credit hours per week)		
	MA-MA 9(E)	Current Issues in Business Start-Ups A	6 ECTS credits	Offered occasionally, generally in the summer semester
		Various teaching formats (generally 3 credit hours)		
	MA-MA 10(E)	Current Issues in Business Start-Ups B	6 ECTS credits	Offered occasionally, generally in the winter semester
		Various teaching formats (generally 3 credit hours)		

A total of 24 ECTS credits must be completed for the Focus Field Marketing, as per students' preferences. Students must attend a seminar in one of the two focus fields selected.

A maximum of 12 ECTS credits can be credited from other focus fields. The following modules from other focus fields can be taken and credited to the Focus Field Marketing:

- MA-METH 11 Quantitative Methods for Business and Management
- MA-FBI2 Corporate Risk Management

- MA-FBI6 Insurance Economics
- Modules from the following focus fields, except seminars
    - Business Analytics (MA-BA)
    - Health Care Management (MA-MiG)
    - Operations and Supply Chain Management (MA-OSCM)
    - Management and Corporate Governance (MA-UFÜ)

2.4.2. Module descriptions—Focus Field Marketing

Module ID:	MA-MA 1(E)
Module type:	Required elective module
Title:	eBusiness
Responsible for module:	Prof. Dr. Michel Clement
English translation:	E-Business
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge of marketing management in interactive media. • Students acquire in-depth theoretical, conceptual, and technical knowledge of the specifics of e-commerce. Management skills • Students hone their in-depth theoretical and conceptual knowledge of the particularities of e-commerce. • Students develop their reasoning skills further. Analytical skills • Students develop their analytical skills further.
Module content	The lecture component consists of six parts: 1. The technical and market-specific particularities of operating in interactive media are discussed (e.g., internet and interactive television). 2. Customer benefits in e-commerce are explored. 3. The theoretical foundations are laid through discussion of the key economic theories (e.g., network effects). 4. Business models and success factors in online business are examined. 5. The focus is on customer management as a great deal of customer data can be stored systematically and analyzed in e-business thanks to the technical features. 6. Marketing tools are analyzed in terms of their suitability for e-business. Practical course: The material covered in the lecture is explored in greater depth by means of presentations on business practices on the one hand and exercises on the other.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • discussions • case studies • guest lectures • multimedia materials • projects (groups)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None. Proof of attendance of specific courses is not required. However, fundamental knowledge of marketing, statistics, and mathematics is recommended nonetheless—where necessary, gained through independent study.
Module applicability	This module is a required elective of the Focus Field Marketing within the Master of Science in Business Administration.

	Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examinationOr an oral examination.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	Teaching methods: • research on international topics and/or research in English • guest articles on international topics and/or in English • international content, examples, and/or perspectives
Ethics, responsibility, and sustainability (ERS)	Teaching methods: • ERS case studies • course and/or reading materials on ERS topics Topics: • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS and (digital) technologies • ERS in practice • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	Teaching methods: • guest lectures on topics from business practice • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization • course and/or reading materials on digitalization • students practice using software Topics: • digitalization is an important topic in the module • data analysis and/or mining (structured data) • data collection • digital or social media • software: data analysis

Module ID:	MA-MA 2(E)
Module type:	Required elective module
Title:	Verkaufsförderungsmanagement
Responsible for module:	Prof. Dr. Karen Gedenk
English translation:	Sales Promotion Management
Learning outcomes	In-depth business knowledge • Students understand the complex effects of sales promotion measures in the area of tension between the aims of manufacturers and retailers. • Students gain in-depth knowledge of theories of sales promotion. Scholarly thinking • Students hone the skills needed to reflect independently on scholarly literature on sales promotion. • Students learn to abstract and conceptualize issues in sales promotion management. Analytical skills • Students gain analytical skills to measure the success of sales promotion activities. Management skills • Students learn to transfer research findings on aspects of sales promotion to management issues. Socially responsible decision-making • Students learn to reflect on the ethical consequences of sales promotion measures. International mindset • Students train their sales promotion management skills in an international context.
Module content	Strategic and operational decisions in sales promotion management are explored during the lecture. Based on economic and behavioral theories, forms and effects of sales promotion measures are discussed and methods for measuring the success of sales promotion measures are presented. Findings on the success of price promotions (e.g., special offers and coupons) and non-price promotions (e.g., displays and product add-ons) are also explored. Exercises, practical examples, and in-depth discussions are used during the practical course to explore the material covered in the lecture in greater depth.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • discussions • guest lectures • textbook/script • other: quizzes
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Fundamental knowledge of marketing and market research recommended—where necessary, gained through independent study

Module applicability	This module is a required elective of the Focus Field Marketing within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international content, examples, and/or perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization Topics: • data analysis and/or mining (structured data) • data collection • digitalization is an important topic in the module • empirical digital data

Module ID:	MA-MA 3(E)
Module type:	Required elective module
Title:	Customers and Markets
Responsible for module:	Prof. Dr. Mark Heitmann
English translation:	Customers and Markets
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge in the field of customer behavior. • Students learn to test theoretical considerations empirically, formulate structured hypotheses, test alternative theories against each other, and link empirical findings and interpret these in an appropriate manner. Management skills • Students learn to interpret and anticipate market developments. • Students understand how entrepreneurial measures influence customer preferences and decision-making behavior. • Students develop their reasoning skills further. Analytical skills • Students acquire skills for the independent design, analysis, and appropriate interpretation of behavioral science experiments.
Module content	The lecture component consists of five parts, each of which includes both an exploration of the theory and applied experiments: 1. Fundamental theories and methods in behavioral decision theory 2. Competitive environment 3. Product presentation and decision-making 4. Emotions in decision-making 5. Sequences of purchase decisions Practical course: The material covered in the lecture is explored in greater depth by means of presentations on business practices on the one hand and exercises on the other.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • discussions • case studies • guest lectures • online experiments • group work
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None. Proof of attendance of specific courses is not required. However, fundamental knowledge of marketing, statistics, and mathematics is recommended nonetheless—where necessary, gained through independent study.
Module applicability	This module is a required elective of the Focus Field Marketing within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree

	programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination Or an oral examination.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	Teaching methods: • research on international topics and/or research in English • guest lectures and/or video presentations by international scholars • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English Topics: • international content, examples, and/or perspectives, among others on • significance and examination of cultural differences in decision-making
Ethics, responsibility, and sustainability (ERS)	Teaching methods: • evidence-based identification of possible ERS issues • course and/or reading materials on ERS topics • discussions based on case studies during the lectures • ethics in research and good scientific practice Topics: • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • social responsibility (SDG 12: Responsible Consumption and Production) • marketing between customer orientation and customer manipulation, as well as nudging of consumers • marketing sustainable concepts
Transfer and practical relevance	Teaching methods: • guest lectures on topics from business practice • content, examples, and/or perspectives from practice • case studies • application of theories from behavioral science to practical market conditions
Digitalization and e-learning	Teaching methods: • online experiments • guest articles on digitalization • course and/or reading materials on the role of digitalization • decision-oriented website analyses Topics: • digital or social media

	• decision-oriented design of mass customization • empirical digital data, in particular, A/B testing of digital or interactive programs or services

Module ID:	MA-MA 4(E)
Module type:	Required elective module
Title:	Markenpolitik
Responsible for module:	Prof. Dr. Henrik Sattler
English translation:	Brand Policy
Learning outcomes	In-depth business knowledge • Students are familiarized with the field of brand policy, that is, the systematic and value-oriented management of brands as an asset. • Students acquire in-depth theoretical, conceptual, and technical knowledge of the various brand valuation methods. Management skills • Students improve their presentation skills. • Students develop their reasoning skills further. • Students apply research methods to practical problems. Analytical skills • Students develop their analytical skills further. • Describe learning outcome [free text] Scholarly thinking • Students familiarize themselves with strategies and methods for academic work. • Students gain and hone skills to reflect critically on original scholarly literature.
Module content	The lecture component consists of four parts. (1) The special relevance of brands is considered from corporate and consumer perspectives, and the legal basics of brand policy explored. (2) Alternative brand strategies are systematized and discussed. (3) Brand policy is examined from a retail perspective. (4) The tasks, methods, and practical problems of the non-monetary and monetary valuation of brands are addressed. Practical course: repetition and consolidation of the material covered in the lecture using exercises, practical examples, and/or case studies.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • discussions • case studies • guest lectures • exam training program/software • textbook/script • multimedia materials • projects (groups)
Language of instruction	German—unless announced otherwise at the start of the course

Prerequisites	None. Proof of attendance of specific courses is not required. However, fundamental knowledge of marketing, statistics, and mathematics is recommended nonetheless—where necessary, gained through independent study.
Module applicability	This module is a required elective of the Focus Field Marketing within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice • guest lectures on ERS topics • course and/or reading materials on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice • ERS and (digital) technologies • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • social responsibility (SDG 12: Responsible Consumption and Production) • environmental protection (SDG 13: Climate Action)

	• responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization • course and/or reading materials on digitalization Topics: • data collection • digital or social media • empirical digital data

Module ID:	MA-MA 5(E)
Module type:	Required elective module
Title:	Seminar Marketing
Responsible for module:	All professorships involved in the Focus Field Marketing
English translation:	Seminar—Marketing
Learning outcomes	In-depth business knowledge • Building on the lecture modules, students gain in-depth knowledge of specialist topics from the entire breadth of marketing which can be used to analyze current issues. Management skills • Students hone their analytical and reasoning skills. • Students learn presentation techniques and use these in the oral defense of their written work. Scholarly thinking • Students familiarize themselves with strategies and methods for academic work. • Students apply strategies and methods of academic work in the preparation and defense of their written work and its presentation. • Students acquire and train the skills needed to reflect critically on original scholarly literature to develop their own research questions. Analytical skills • Students hone their analytical and reasoning skills.
Module content	Changing current topics from the entire Focus Field Marketing
Teaching format(s)	Seminar (2 credit hours)
Teaching methods	Prescribed teaching methods: • assignments • (computer-based) simulations/games • digital interaction between students • discussions • field trips (e.g., company visits) • guest lectures • multimedia materials • online learning platform (e.g., Open Olat) • projects (groups) • projects (individual) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps • software: other
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Prior attendance of at least two advanced lectures from the Focus Field Marketing recommended (modules MA-MA 1(E) to MA-MA 4(E))
Module applicability	This module can be taken as part of the Focus Field Marketing within the Master of Science in Business Administration (MSc). Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with

	the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Usually a term paper and a presentation; potentially also an oral or written examination. The examination type and, where applicable, the weighting of the individual examination components will be announced at the start of the course. Attendance of the seminar sessions is compulsory.
ECTS credits	6 ECTS credits
Workload	Attendance: 21 hours; Independent study: 159 hours
Module frequency	Generally every semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international content, examples, and/or perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ethics in research and good scientific practice • guest lectures on ERS topics • group work on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS is an important topic in the module • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • gender equality and diversity (SDG 5: Gender Equality) • social business (SDG 10: Reduced inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production) • transparency and corruption (SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production)

Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • research with empirical data sets • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digital project work • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • digital or social media • digital documentation • digital transformation (impact and process) • digitalization is an important topic in the module • empirical digital data • ethics and data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: other

Module ID:	MA-MA 6(E)
Module type:	Required elective module
Title:	Aktuelle Probleme im Marketing A
Responsible for module:	All professorships involved in the Focus Field Marketing
English translation:	Current Issues in Marketing A
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues within the Focus Field Marketing from various theoretical and methodological perspectives. • Students gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research. Management skills • Students learn to reflect critically on solutions and contributions within each topic area based on systematic criteria. • Students learn to develop and evaluate their own solutions to problems based on theory. Analytical skills • Students develop their analytical skills further.
Module content	Changing current topics from the entire Focus Field Marketing
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the course
Teaching methods	Prescribed teaching methods: • assignments • (computer-based) simulations/games • digital interaction with lecturers • digital interaction between students • discussions • field trips (e.g., company visits) • case studies • guest lectures • multimedia materials • online learning platform (e.g., Open Olat) • projects (groups) • projects (individual) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps • software: other
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Marketing within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination In German or English—as announced
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • joint module with international partner(s) • international case studies • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • module is taught by an international visiting researcher or lecturer • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice • guest lectures on ERS topics • group work on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS is an important topic in the module • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • gender equality and diversity (SDG 5: Gender Equality) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production)

	• transparency and corruption (SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • digital or social media • digital documentation • digitalization is an important topic in the module • empirical digital data • ethics and data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps

Module ID:	MA-MA 7(E)
Module type:	Required elective module
Title:	Aktuelle Probleme im Marketing B
Responsible for module:	All professorships involved in the Focus Field Marketing
English translation:	Current Issues in Marketing B
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues within the Focus Field Marketing from various theoretical and methodological perspectives. • Students gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research. Management skills • Students learn to reflect critically on solutions and contributions within each topic area based on systematic criteria. • Students learn to develop and evaluate their own solutions to problems based on theory. Analytical skills • Students develop their analytical skills further.
Module content	Changing current topics from the entire Focus Field Marketing
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the course
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • (computer-based) simulations/games • digital interaction with lecturers • digital interaction between students • discussions • field trips (e.g., company visits) • case studies • guest lectures • multimedia materials • online learning platform (e.g., Open Olat) • projects (groups) • projects (individual) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps • software: other
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Marketing within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination In German or English—as announced
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • joint module with international partner(s) • international case studies • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • module is taught by an international visiting researcher or lecturer • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice • guest lectures on ERS topics • group work on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS is an important topic in the module • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • gender equality and diversity (SDG 5: Gender Equality) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production)

	• transparency and corruption (SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • digital or social media • digital documentation • digitalization is an important topic in the module • empirical digital data • ethics and data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps

Module ID:	MA-MA 8(E)
Module type:	Required elective module
Title:	Kolloquium Marketing
Responsible for module:	All professorships involved in the Focus Field Marketing
English translation:	Marketing Colloquium
Learning outcomes	Scholarly thinking • Students prepare specifically for their master's thesis. • Students gain in-depth knowledge of theories of marketing. • Students hone the skills needed to reflect independently on scholarly literature on marketing. Analytical skills • Students gain analytical skills to measure the success of marketing activities. Management skills • Students learn to transfer research findings on aspects of marketing to management issues.
Module content	The content of the colloquium is agreed individually between the students and lecturer before the start of the course and generally confirmed in writing.
Teaching format(s)	As agreed individually
Teaching methods	Prescribed teaching methods: • assignments • discussions • guest lectures • multimedia materials • projects (individual) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps • software: other
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Prior attendance of at least two advanced lectures from the Focus Field Marketing recommended (modules MA-MA 1(E) to MA-MA 4(E))
Module applicability	This module is a required elective of the Focus Field Marketing within the Master of Science in Business Administration.
Exam type, requirements, duration/scope, and language	Both the module content and the specific examination components as well as their weighting and the examination language are usually agreed in writing at the start of the colloquium at the latest. If the participation in seminars is agreed, attendance may be deemed compulsory.
ECTS credits	6 ECTS credits
Workload	Attendance: 21 hours; Independent study: 159 hours
Module frequency	Generally every semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	

Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • joint module with international partner(s) • international case studies • international content, examples, and/or perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ethics in research and good scientific practice • guest lectures on ERS topics • course and/or reading materials on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS is an important topic in the module • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • gender equality and diversity (SDG 5: Gender Equality) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work

	• students practice using software Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • digital or social media • digital documentation • digital transformation (impact and process) • digitalization is an important topic in the module • empirical digital data • ethics and data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps • software: other

Module ID:	MA-MA 9(E)
Module type:	Required elective module
Title:	Aktuelle Probleme der Unternehmensgründung A
Responsible for module:	All professorships involved in the Focus Field Marketing
English translation:	Current Issues in Business Start-Ups A
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues of business start-ups from various theoretical and methodological perspectives. • Students gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research. Scholarly thinking • Students learn to reflect critically on solutions and contributions within each topic area based on systematic criteria. Management skills • Students learn to develop and evaluate their own solutions to problems based on theory. Analytical skills • Students develop their analytical skills further.
Module content	Changing current topics from the entire field of business start-ups
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the course
Teaching methods	Prescribed teaching methods: • assignments • (computer-based) simulations/games • digital interaction with lecturers • digital interaction between students • discussions • field trips (e.g., company visits) • case studies • guest lectures • multimedia materials • online learning platform (e.g., Open Olat) • projects (groups) • projects (individual) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps • software: other
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Marketing within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The exact examination requirements will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international content, examples, and/or perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • guest lectures on ERS topics • group work on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS is an important topic in the module • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • decent work (SDG 8: Decent Work and Economic Growth) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production) • transparency and corruption (SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • environmental protection (SDG 13: Climate Action) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)

Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • digital or social media • digital documentation • digital transformation (impact and process) • digitalization is an important topic in the module • empirical digital data • ethics and data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps • software: other

Module ID:	MA-MA 10(E)
Module type:	Required elective module
Title:	Aktuelle Probleme der Unternehmensgründung B
Responsible for module:	All professorships involved in the Focus Field Marketing
English translation:	Current Issues in Business Start-Ups B
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues of business start-ups from various theoretical and methodological perspectives. • Students gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research. Scholarly thinking • Students learn to reflect critically on solutions and contributions within each topic area based on systematic criteria. Management skills • Students learn to develop and evaluate their own solutions to problems based on theory. Analytical skills • Students develop their analytical skills further.
Module content	Changing current topics from the entire field of business start-ups
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the course
Teaching methods	Prescribed teaching methods: • assignments • (computer-based) simulations/games • digital interaction with lecturers • digital interaction between students • discussions • field trips (e.g., company visits) • case studies • guest lectures • multimedia materials • online learning platform (e.g., Open Olat) • projects (groups) • projects (individual) • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps • software: other
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Marketing within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The exact examination requirements will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international content, examples, and/or perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • guest lectures on ERS topics • group work on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS is an important topic in the module • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • decent work (SDG 8: Decent Work and Economic Growth) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production) • transparency and corruption (SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • environmental protection (SDG 13: Climate Action) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods:

	• use of applications/software from practice • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • data analysis and/or mining (structured data) • data analysis and/or mining (unstructured data) • data collection • digital or social media • digital documentation • digital transformation (impact and process) • digitalization is an important topic in the module • empirical digital data • ethics and data • machine learning and artificial intelligence • practical or practice-like applications • programming • software: data analysis • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: Shiny apps • software: other

2.5. Focus Field Operations and Supply Chain Management (MA-OSCM)

2.5.1. Module overview—Focus Field Operations and Supply Chain Management

Type	Module Code	Title	ECTS Credits	Module Frequency
Required elective modules	MA-OSCM 1(E)	Quantitative Business Process Analysis and Optimization	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-OSCM 2(E)	Matching Supply and Demand: Supply Chain Management	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-OSCM 3(E)	Advanced Topics in Operations Research	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-OSCM 4(E)	Applied Optimization	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-OSCM 5(E)	Seminar—OSCM	6 ECTS credits	Generally every summer semester
		Seminar (2 credit hours)		
	MA-OSCM 6(E)	Advanced Colloquium on OSCM	6 ECTS credits	Offered occasionally
		Colloquium (2 credit hours per week)		
	MA-OSCM 7(E)	Selected Topics in OSCM	6 ECTS credits	Offered occasionally
		Lecture or interactive teaching formats (generally 3 credit hours)		
	MA-BA 5(E)	Choice-Based Optimization	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		

A total of 24 ECTS credits must be completed for the Focus Field Operations and Supply Chain Management (MA-OSCM). Students must attend a seminar in one of the two focus fields selected.
A maximum of 6 ECTS credits can be credited for the following modules from other focus fields:

- All modules from the Methods component detailed in this module handbook
- MA-FBI 5 Behavioral Finance
- MA-MA 1 E-Business
- MA-MA 2 Sales Promotion Management
- MA-MiG 2 Strategic Management in Hospitals
- MA-METH 10 Machine Learning with Applications in Economics and Business Administration

- MA-UFÜ 1 Management of Employee Relations

Module ID:	MA-OSCM 1(E)
Module type:	Required elective module
Title:	Quantitative Analyse von Geschäftsprozessen
Responsible for module:	Prof. Dr. Malte Fliedner
English translation:	Quantitative Business Process Analysis and Optimization
Learning outcomes	Sound business knowledge • Students acquire selected in-depth knowledge of the analysis and optimization of central business processes in the fields of procurement, production, distribution, and sales. Scholarly thinking • Students understand the transfer of theoretical knowledge to operational applications based on selected examples. • Students acquire the skills needed to independently develop further research questions. Analytical skills • Students learn tools to analyze stochastic and dynamic processes. • Students acquire skills in modeling and solving advanced deterministic and stochastic decision-making problems. Management skills • Students determine recommendations for action and management implications for the design of central business processes.
Module content	The module focuses on the analysis and optimization of central business processes, taking the stocks and resources used there into account. In addition to teaching formal models (e.g., from the areas of queuing theory, statistical process control, and deterministic and stochastic optimization), management implications for the design of business processes are also determined and discussed.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • textbook/script • online learning platform (e.g., Open Olat) • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Prior completion or parallel attendance of MA-METH 2 Methods of Decision Analysis
Module applicability	This module is a required elective of the Focus Field Operations and Supply Chain Management within the Master of Science in Business Administration. The module can be taken as part of the free elective area for the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international content, examples, and/or perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS and (digital) technologies
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: Teaching methods: • use of applications/software from practice • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • students practice using software Topics: • algebraic modeling language • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-OSCM 2(E)
Module type:	Required elective module
Title:	Matching Supply and Demand: Supply Chain Management
Responsible for module:	Prof. Dr. Guido Voigt
English translation:	Matching Supply and Demand: Supply Chain Management
Learning outcomes	Management skills • Students acquire and practice in-depth theoretical and conceptual skills in the field of supply chain management. • Students recognize complex trade-off decisions and goal interdependencies in supply chain management. Analytical skills • Students learn to confidently apply methods to resolve stochastic and deterministic optimization issues using software packages. Scholarly thinking • Students hone their ability to reflect critically on original scholarly sources. • Students strengthen their skills of being able to independently reflect critically on current research literature. • Students acquire the skills needed to independently develop further research questions.
Module content	Supply network design Inventory management in supply chains
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • software: mathematical/statistical (e.g., Python, R, and Matlab) • software: other
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Prior completion of the module MA-METH 2 Methods of Decision Analysis is strongly recommended.
Module applicability	This module is a required elective of the Focus Field Operations and Supply Chain Management within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The module examination is set in the language of instruction.
ECTS credits	6 ECTS
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester

Interdisciplinary topics, content, and skills:	
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • students practice using software Topics: • algebraic modeling language • programming • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-OSCM 3(E)
Module type:	Required elective module
Title:	Advanced Topics in Operations Research
Responsible for module:	Prof. Dr. Wolfgang Brüggemann
English translation:	Advanced Topics in Operations Research
Learning outcomes	Analytical skills • Students hone their analytical and reasoning skills. Scholarly thinking • Students acquire methodological skills in the algorithmic implementation of quantitative solutions. In-depth business knowledge • Students acquire selected skills in the field of operations research.
Module content	A selection of the methodological content typical of operations research with the associated operational applications such as: • expansion of linear optimization • non-linear optimization • duality • integer optimization • complexity theory • optimization with uncertainty
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • discussions • multimedia materials • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Prior completion of the module MA-METH 2 Methods of Decision Analysis is strongly recommended. Students should be proficient in the content imparted during this module.
Module applicability	This module is a required elective of the Focus Field Operations and Supply Chain Management within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The second attempt usually involves an oral examination instead of a written examination.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours

Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • course and/or reading materials on digitalization • students practice using software Topics: • algebraic modeling language • machine learning and artificial intelligence • programming • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-OSCM 4(E)
Module type:	Required elective module
Title:	Applied Optimization
Responsible for module:	Prof. Dr. Knut Haase
English translation:	Applied Optimization
Learning outcomes	Analytical skills • Students further their ability to apply methodological concepts and theoretical knowledge to concrete problems from the fields of transport, traffic, and logistics. • Students learn to confidently use optimization software for problem-solving. In-depth business knowledge • Students learn the skills needed to transfer the knowledge gained to current business administration issues and problems. Scholarly thinking • Students hone their ability to reflect critically on current research literature. • Students acquire the skills needed to develop further research questions independently.
Module content	Some fundamental principles are first reviewed in the lecture before current problems from business practice are addressed. The focus is on the following: • graph theory • modeling of logistics networks • planning of transport and distribution networks • modeling of location and district problems • planning of transport lines, timetables, and vehicle routing • applied modeling of practical projects • application of algebraic modeling languages The practical courses run in parallel to the lecture. The material covered in the lecture is explored in greater depth and algebraic modeling language used to apply the models introduced in the lecture to practical data sets.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Teaching methods: • algebraic modeling • textbook/script • other: GAMS software
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Prior completion or at least parallel attendance of MA-METH 2(E) Methods of Decision Analysis. It will be assumed that students are familiar with the content.
Module applicability	The module is a required elective area of the Focus Field Operations and Supply Chain Management within the Master of Science in Business Administration and should be taken in Semester 3. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The written examination takes place at the end of the course in the language of instruction.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	Teaching methods and content: • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	Teaching methods: • ERS content, examples, and/or perspectives • ethics in research and good scientific practice Topics: • ERS in practice • ERS and (digital) technologies • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • decent work (SDG 8: Decent Work and Economic Growth) • environmental protection (SDG 13: Climate Action) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	Teaching methods: • use of applications/software from practice • projects based on research/work with companies • transfer and practical relevance are important topics in the module
Digitalization and e-learning	Teaching methods: • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization • students practice using software Topics: • algebraic modeling language • practical or practice-like applications • programming • other: GAMS software

Module ID:	MA-OSCM 5(E)
Module type:	Required elective module
Title:	Seminar Operations & Supply Chain Management
Responsible for module:	All professorships involved in the Focus Field Operations and Supply Chain Management
English translation:	Seminar—Operations and Supply Chain Management
Learning outcomes	In-depth business knowledge • Students learn to work independently on a set topic, drawing on the knowledge gained through one of the lectures in the required elective modules of the focus field usually taken prior to the seminar so as to provide a basis for the seminar. Scholarly thinking • Students learn and practice complex techniques for academic work. • Students learn to write seminar papers that meet the standards set for academic writing and practice the skills acquired by preparing a seminar paper on the topic addressed. • Students present and defend their chosen topic during the seminar and also engage in a discussion on this topic thereafter. Analytical skills • Students are active participants in and critical contributors to the seminar sessions. • Students learn (active and passive) approaches to dealing with feedback.
Module content	The content of the seminar builds on one of the lectures from the Focus Field Operations and Supply Chain Management. The lectures that the seminars usually offered in the following semester relate to will be announced well in advance before the lectures start.
Teaching format(s)	Seminar (2 credit hours)
Teaching methods	Prescribed teaching methods: • algebraic modeling • discussions • case studies • projects (groups) • projects (individual) • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Prior completion of the module MA-METH 2 Methods of Decision Analysis; proficiency in the corresponding content
Module applicability	This module is a required elective of the Focus Field Operations and Supply Chain Management within the Master of Science in Business Administration.
Exam type, requirements, duration/scope, and language	Usually a term paper and a presentation; potentially also an oral or written examination. The examination type and, where applicable, the weighting of the individual examination components will be announced at the start of the course. Attendance of the seminar sessions is compulsory.
ECTS credits	6 ECTS credits
Workload	Attendance: 21 hours; Independent study: 159 hours

Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • students work together in groups on practice-related topics
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • students present, write, and/or take exams on digitalization Topics: • algebraic modeling language • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-OSCM 6(E)
Module type:	Required elective module
Title:	Fortgeschrittenen-Kolloquium zum Operations & Supply Chain Management
Responsible for module:	All professorships involved in the Focus Field Operations and Supply Chain Management
English translation:	Advanced Colloquium on Operations and Supply Chain Management
Learning outcomes	Scholarly thinking • This module aims to deepen the fundamental knowledge of academic work gained during the Seminar–OSCM (MA-OSCM 5) and to enable students to conduct preliminary individual preparatory work to identify a topic for their master's thesis.
Module content	The content of the colloquium is agreed individually between the students and lecturer before the start of the course and generally confirmed in writing.
Teaching format(s)	As agreed individually
Teaching methods	Prescribed teaching methods: • discussions • projects (individual)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Prior successful completion of the seminar module on operations and supply chain management (MA-OSCM 5). As a rule, students must have obtained a supervisory confirmation from an examiner for the Focus Field OSCM of their willingness to supervise the master's thesis.
Module applicability	This module can be taken as part of the Focus Field OSCM. Where places are still available and upon prior agreement with the directors of the particular degree programs, this module can also be opened for additional master's degree programs offered at Universität Hamburg, provided a master's thesis in the Focus Field Operations and Supply Chain Management is possible.
Exam type, requirements, duration/scope, and language	Both the module content and the specific examination components as well as their weighting and the examination language are usually agreed in writing at the start of the colloquium at the latest. If the participation in seminars is agreed, attendance may be deemed compulsory.
ECTS credits	6 ECTS credits
Workload	Attendance: 21 hours; Independent study: 159 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives

Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • project work on topics from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digital project work Topics: • algebraic modeling language • software: mathematical/statistical (e.g., Python, R, and Matlab)

Module ID:	MA-OSCM 7(E)
Module type:	Required elective module
Title:	Ausgewählte Probleme des Operations & Supply Chain Management
Responsible for module:	All professorships involved in the Focus Field Operations and Supply Chain Management
English translation:	Selected Topics in Operations and Supply Chain Management
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues in the field of operations and supply chain management from various theoretical and methodological perspectives. Scholarly thinking • Students gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research. • Students learn to reflect critically on solutions and contributions to the respective subject based on systematic criteria. Analytical skills • Students learn to develop and evaluate their own solutions to problems based on theory.
Module content	Changing current topics from the entire field of operations and supply chain management
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the semester
Module applicability	This module is a required elective for the Focus Field Operations and Supply Chain Management within the Master of Science in Business Administration (MSc). Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	The module examination generally takes the form of a 60-minute written examination taken at the end of the respective subject semester or an oral examination. The exact examination formats and any other examination requirements will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	

Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international content, examples, and/or perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • content, examples, and/or perspectives from practice
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives Topics: • algebraic modeling language • software: mathematical/statistical (e.g., Python, R, and Matlab)

2.6. Focus Field Management and Corporate Governance (MA-UFÜ)

2.6.1. Module overview—Focus Field Management and Corporate Governance

Type	Module Code	Module Title	ECTS Credits	Semester Offered
Required elective modules	MA-UFÜ 1(E)	Management of Employee Relations	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-UFÜ 2(E)	Managing Skills and Competencies	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-UFÜ 3(E)	Intercultural Management	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-UFÜ 4(E)	Customer Centricity	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-UFÜ 5(E)	Technology and Innovation Management	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-UFÜ 6(E)	Advanced Topics in Technology and Innovation Management	6 ECTS credits	Generally every summer semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-UFÜ 7(E)	Current Issues in Management A	6 ECTS credits	Offered occasionally
		Lecture or interactive teaching formats (generally 3 credit hours)		
	MA-UFÜ 8 (E)	Current Issues in Management B	6 ECTS credits	Offered occasionally
		Lecture or interactive teaching formats (generally 3 credit hours)		
	MA-UFÜ 9(E)	Seminar—Management	6 ECTS credits	Generally every semester
		Seminar (2 credit hours)		
	MA-UFÜ 10(E)	Advanced Colloquium on Management	6 ECTS credits	As required
		Colloquium (generally 2 credit hours)		
A total of 24 ECTS credits must be completed for the Focus Field Management and Corporate Governance (MA-UFÜ). Students must attend a seminar in one of the two focus fields selected.				

A maximum of 12 ECTS credits can be credited from other focus fields. Credits can be awarded for the following modules:

- MA-MA 1 E-Business
- MA-MA 3 Customers and Markets
- MA-MA 5 Brand Policy
- MA-MA 8 Current Issues in Marketing B
- MA-MA 10 Current Issues in Business Start-Ups A
- MA-MA 11 Current Issues in Business Start-Ups B
- MA-MiG 1 Health Insurance Management
- MA-MiG 2 Strategic Management in Hospitals
- MA-METH 11 Qualitative Methods for Business and Management

Module ID:	MA-UFÜ 1(E)
Module type:	Required elective module
Title:	Management der Arbeitsbeziehungen
Responsible for module:	Prof. Dr. Dorothea Alewell
English translation:	Management of Employee Relations
Learning outcomes	In-depth business knowledge • Students are familiarized with employment contracts and psychological contracts in addition to implicit agreements as components of labor relations. • Students learn about structural aspects of personnel management such as incentive systems, interactive leadership, and co-determination. • Students acquire skills in the design of employment systems. Scholarly thinking • Students analyze a number of theoretical approaches to employment contracts and labor relations in general and also their comparative appraisal. • Students practice applying theoretical approaches from business administration, economics, law and psychology in an interdisciplinary context. Management skills • Students reflect critically on the alternative courses of action conceivable in various theoretical approaches and on the analysis of the options for action considered. Socially responsible decision-making • Students are encouraged and trained through in-depth consideration of the positions of stakeholders relevant to the working relationship (i.e., the employer, employees, works councils, and collective bargaining parties) as well as of the rules of co-determination as a whole. International mindset • Students consider the different positions and world views of the stakeholders in the work relations as well as the various disciplinary approaches to questions of work relations (jurisprudence, psychology, business administration, and economics).
Module content	Theoretical basics of employment contracts and the design thereof; personnel policy tools to complement employment contracts (interactive personnel management, structural personnel management, design of monetary incentive systems, co-determination); design options for internal company employment systems against the backdrop of the need for consistent personnel work.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • (computer-based) simulations/games • digital interaction with lecturers • discussions • field trips (e.g., company visits) • guest lectures • textbook/script • projects (individual)
Language of instruction	German—unless announced otherwise at the start of the course

Prerequisites	None. Basic knowledge of human resources management recommended, typically acquired during a bachelor's degree program in business administration.
Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination in the language of instruction. Regular attendance of the lectures and practical course and careful review of the recommended reading and solutions to the exercises are strongly recommended in order to prepare for the module examination.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice • group work on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS is an important topic in the module • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • decent work (SDG 8: Decent Work and Economic Growth) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • research with empirical data sets • guest lectures on practical topics

	• content, examples, and/or perspectives from practice • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • other: the positions of key institutional stakeholders in the field are discussed and debated in detail. Students are encouraged to develop their own viewpoints and to search for possible lines of compromise between conflicting positions.

Module ID:	MA-UFÜ 2(E)
Module type:	Required elective module
Title:	Management von Qualifikation und Kompetenz
Responsible for module:	Prof. Dr. Dorothea Alewell
English translation:	Managing Skills and Competencies
Learning outcomes	In-depth business knowledge • is gained of staff qualifications and competences, personnel selection and aptitude diagnostics as well as personnel assessments. • is gained of human capital investments and signaling effects in companies as well as of aspects of personnel development and further training. Scholarly thinking • is trained using various theoretical approaches to qualifications and competences in general and their comparative acknowledgment. • is also practiced in an interdisciplinary context based on theoretical approaches to aptitude diagnostics taken from psychology, to human capital and signaling approaches taken from economics, and to staff assessments and further training taken from business administration. Management skills • Students reflect critically on the alternative courses of action conceivable in various theoretical approaches and analysis of the options for action considered. Socially responsible decision-making • is encouraged and trained through in-depth consideration of the aspects of selection, diversity, and discrimination relating to personnel selection and assessment in addition to possible assessment errors. International mindset • is trained through in-depth consideration of the different disciplinary approaches to aspects of qualification and competence management (jurisprudence, psychology, business administration, and economics).
Module content	Concepts of qualification and competence; tools and procedures for measuring and evaluating existing qualifications (personnel selection and personnel assessment); basics of aptitude diagnostics and the constructs of personnel selection and assessment procedures; tools for digital selection and AI applications; economic analysis of company selection strategies; economic analysis of investments in human capital; emergence of and changes to professional qualifications in the vocational training system; legal regulation of the company training sector; knowledge management.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • discussions • field trips (e.g., company visits) • guest lectures • textbook/script • projects (individual)
Language of instruction	German—unless announced otherwise at the start of the course

Prerequisites	None. Basic knowledge of human resources management recommended, typically acquired during a bachelor's degree program in business administration.
Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination in the language of instruction. Regular attendance of the lectures and practical course and careful review of the recommended reading and solutions to the exercises are strongly recommended in order to prepare for the module examination.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ethics in research and good scientific practice • group work on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS is an important topic in the module • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • decent work (SDG 8: Decent Work and Economic Growth) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice

	• students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization Topics: • digital transformation (impact and process) • digitalization is an important topic in the module • ethics and data • machine learning and artificial intelligence • practical or practice-like applications

Module ID:	MA-UFÜ 3(E)
Module type:	Required elective module
Title:	Interkulturelles Management
Responsible for module:	Prof. Dr. Berg
English translation:	Intercultural Management
Learning outcomes	In-depth business knowledge • Students gain an understanding of various concepts for describing culture, intercultural competence, and intercultural training. Scholarly thinking • Students are trained to use various theoretical approaches to conceptual and methodological issues in intercultural management research. • Students acquire the skills needed to independently develop further research questions. Analytical skills • Students are trained based on the analysis of various theoretical and methodical issues in intercultural management research. • Students are able to analyze various concepts for describing culture, intercultural competence, and intercultural training. Management skills • Students learn how to transfer the knowledge drawn from intercultural management research to current issues with practical relevance. Socially responsible decision-making • Students learn this skill through in-depth consideration of intercultural management issues. International mindset • Students develop this through discussion and reflection in terms of one's own intercultural competence and that of others.
Module content	• importance of intercultural competence • forms and functions of culture • conceptual and methodological issues in intercultural management research • description and analysis of a number of cultural concepts • intercultural communication and negotiations • motivation, leadership, and organization in various cultures • intercultural training
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • discussions • case studies • guest lectures • textbook/script • projects (groups)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None. Basic knowledge of international management or personnel management recommended, typically acquired during a bachelor's degree program in business administration
Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration.

	Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination in the language of instruction. Regular attendance of the lectures and practical course and thorough review of the recommended reading and preparation of exercises strongly recommended to prepare for the module examination.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • module is taught by an international visiting researcher or lecturer • students present on or write about international topics, and/or are examined on them • students examine the reasons for intercultural differences and their impact on individual and organizational management approaches. In the process, they reflect on how to deal with ambiguity and complexity and are thus encouraged to think critically when it comes to intercultural relations in order to avoid ethnocentrism, stereotyping, and prejudice as well as overly simplistic solutions. By integrating insights from management as well as from the humanities, social sciences, and politics, intercultural management is understood as a phenomenon that crosses disciplinary boundaries to encompass issues of identity construction, power relations, and ethics. Students are encouraged to take an analytical approach to methodological issues in intercultural management. They therefore practice skills and knowledge using a variety of examples from various contexts and cultures. This allows for a lively and engaging transfer of research to management practice.
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • group work on ERS topics • course and/or reading materials on ERS topics

	• students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 “Socially responsible decision-making”: • ERS in practice • ERS and internationalization
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of “management skills” (ILO 4) are above all supported by the following teaching methods: • case studies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics

Module ID:	MA-UFÜ 4(E)
Module type:	Required elective module
Title:	Customer Centricity
Responsible for module:	Prof. Dr. Kay Peters
English translation:	Customer Centricity
Learning outcomes	In-depth business knowledge • Students learn the principles and acquire in-depth knowledge of customer centricity. Customer centricity is defined as a holistic customer-centric organizational orientation. • Students understand the strategic interdependencies of customer centricity within the organization and with its external stakeholders. They can apply these insights to a diverse range of settings. Scholarly thinking • Students acquire theoretical and conceptual frameworks, models, and scientific methods relevant to customer centricity. They learn to apply them to questions and challenges in customer centricity. • Students understand and learn to critically reflect important scientific contributions on customer centricity. Socially responsible decision-making • Students discuss the transfer of theoretical and scientific contributions to current social issues, such as the impact of the digital collection and processing of customer data on consumer privacy (permission) and the social consequences of applying artificial intelligence to customer data. Analytical skills • Students learn and practice the collection, structuring, assessment, and evaluation of customer-related data. • Students are able to make complex decisions based on theory, data, and models. Management skills • Students learn how operational goals of customer centricity can be derived from strategic goals. Students learn the trade-offs management needs to consider in this process. Students learn alternative organizational structures and processes (initially within the framework of change management) that mitigate certain trade-offs and disadvantages. International mindset • Students learn how algorithms may create and reinforce stereotypes that prevent a diversity orientation of the organization.
Module content	The course focuses on the overarching framework and the various subdomains of a holistic customer-centric approach. These are strategy development, organizational and process-related aspects, and the implementation of analytical strategic and operational tactical IT systems across the customer life cycle. Digital collection, processing, and application of data and the associated ethical considerations are discussed. The material covered in the course is explored in greater depth during the practical course through presentations on business practices on the one hand and exercises and case studies on the other.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments

	• digital interaction with lecturers • digital interaction between students • discussions • case studies • guest lectures • slide collections • online learning platform (e.g., Open Olat) • projects (groups) • software: data analysis
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Basic knowledge of marketing, statistics/econometrics, and mathematics—where necessary, gained through independent study. Proof of attendance of specific courses is not required.
Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them • students work together in international groups
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics

	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 “Socially responsible decision-making”: • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS is an important topic in the module • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure) • social responsibility (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of “management skills” (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module

Module ID:	MA-UFÜ 5(E)
Module type:	Required elective module
Title:	Technology and Innovation Management
Responsible for module:	Prof. Dr. Jan Recker
English translation:	Technology and Innovation Management
Learning outcomes	In-depth business knowledge • Students identify relevant technology and innovation management resources, processes, and capabilities. • Students select and evaluate various approaches to innovation management. • Students learn some leading digital business and technology management strategies. Scholarly thinking • Students apply discipline and technical knowledge and skills to analyze and evaluate technological influences on a range of managerial questions. • Students are familiarized with some of the leading issues, theories, and methodologies that characterize research in the fields of digital innovation and transformation. • Students acquaint themselves with the scholarship of a world-class research faculty in the fields of digital innovation and transformation. Analytical skills • Students critically appraise various forms of digital transformation management. • Students identify key leadership challenges in managing artificial intelligence.
Module content	• traditional technology management • the advent of the digital age • digital innovation management • digital transformation management • digital ecosystem management • management of emerging technologies Practical course: The material covered in the lecture is explored in greater depth using examples and assignments.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • digital interaction between students • discussions • case studies • guest lectures • textbook/script • multimedia materials • online learning platform (e.g., Open Olat)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None

Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Regular attendance of the lectures and practical course and careful review of the recommended reading and solutions to the exercises are strongly recommended in order to prepare for the module examination. Unless indicated otherwise, the module examination will take the form of a 60-minute written examination in English and is held at the end of the subject semester. Any alternative examination regulations will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS and (digital) technologies
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digitalization: case studies

	• guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization Topics: • digital or social media • digital transformation (impact and process) • digitalization is an important topic in the module • empirical digital data • machine learning and artificial intelligence

Module ID:	MA-UFÜ 6(E)
Module type:	Required elective module
Title:	Advanced Topics in Technology and Innovation Management
Responsible for module:	Prof. Dr. Jan Recker
English translation:	Advanced Topics in Technology and Innovation Management
Learning outcomes	Scholarly thinking • Students acquaint themselves with the scholarship of a world-class research faculty in the fields of digital innovation, transformation, and entrepreneurship. • Students learn some of the leading issues, theories, and methodologies that characterize research in the fields of digital innovation, transformation, and entrepreneurship. Analytical skills • Students learn to describe and apply fundamental theories about digital innovation, digital transformation, and digital entrepreneurship. • Students learn to analyze current issues in specific topic areas of technology and innovation management. Management skills • Students acquire new oral and written skills to approach, critique, and prepare research papers.
Module content	The course content will be decided at the start of the course based on its timeliness and relevance. Selected topics may include: • management of artificial intelligence • digital ventures and digital entrepreneurship • digital platform ecosystems • management capabilities for digital innovation and transformation • digital business model innovation • new ways of working • digital technology ethics
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • (computer-based) simulations/games • digital interaction with lecturers • discussions • case studies • guest lectures • textbook/script • online learning platform (e.g., Open Olat) • projects (groups)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Prior completion of the module Technology and Innovation Management
Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration.

	Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise, the module examination will take the form of a term paper written in English in addition to electronic examination components. Regular attendance of the lectures and practical course and thorough review of the recommended reading and preparation of exercises strongly recommended to prepare for the module examination. Deviating examination requirements and the weighting of the examination components will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS and (digital) technologies • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • research with empirical data sets • projects based on research/work with companies
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work

	• digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization Topics: • digital or social media • digital transformation (impact and process) • digitalization is an important topic in the module • ethics and data

Module ID:	MA-UFÜ 7(E)
Module type:	Required elective module
Title:	Aktuelle Probleme des Managements A
Responsible for module:	All teaching staff of the Focus Field Management and Corporate Governance, visiting professorships, and acting professorships.
English translation:	Current Issues in Management A
Learning outcomes	In-depth business knowledge • Students explore current management issues in greater depth from various theoretical, methodological, and social perspectives. • Students gain in-depth theoretical, methodological, and empirical knowledge of the respective area, also based on relevant original literature and/or current research. Scholarly thinking • Students learn to reflect critically on solutions and contributions within each topic area based on systematic criteria. Analytical skills • Students learn to analyze and evaluate their own solutions to problems based on theory.
Module content	Changing current topics from the entire management field
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the course
Teaching methods	Changing teaching methods depending on the provider and topic—as announced at the start of the course.
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless otherwise announced at the start of the course, the module examination usually takes the form of a 60-minute written examination in the language of instruction.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally to supplement the curriculum with specific current topics.
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content:

	• teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • other: changing themes, methods, and content
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • decent work (SDG 8: Decent Work and Economic Growth) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • other: changing themes, methods, and content
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • other: changing themes, methods, and content
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: • other: changing themes, methods, and content

Module ID:	MA-UFÜ 8(E)
Module type:	Required elective module
Title:	Aktuelle Probleme des Managements B
Responsible for module:	All teaching staff of the Focus Field Management and Corporate Governance, visiting professorships, and acting professorships.
English translation:	Current Issues in Management B
Learning outcomes	In-depth business knowledge • Students explore current management issues in greater depth from various theoretical, methodological, and social perspectives; • Students gain in-depth theoretical, methodological, and empirical knowledge of the respective area, also based on relevant original literature and/or current research. Scholarly thinking • Students learn to reflect critically on solutions and contributions within each topic area based on systematic criteria. Analytical skills • Students learn to analyze and evaluate their own solutions to problems based on theory.
Module content	Changing current topics from the entire management field
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)—unless announced otherwise at the start of the course
Teaching methods	Changing teaching methods depending on the provider and topic—as announced at the start of the course.
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless otherwise announced at the start of the course, the module examination usually takes the form of a 60-minute written examination in the language of instruction.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally to supplement the curriculum with specific current topics.
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content:

	• teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • other: changing themes, methods, and content
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • decent work (SDG 8: Decent Work and Economic Growth) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • other: changing themes, methods, and content
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • other: changing themes, methods, and content
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: • other: changing themes, methods, and content

Module ID:	MA-UFÜ 9(E)
Module type:	Required elective module
Title:	Seminar Management
Responsible for module:	Prof. Dr. Dorothea Alewell, Prof. Dr. Nicola Berg, and Prof. Dr. Kay Peters, Prof. Dr. Jan Recker
English translation:	Seminar—Management
Learning outcomes	Scholarly thinking • Students gain the skills needed to understand, reflect on, and work with research papers on the current state of research. • Students learn about selected current topics, theories, and methods from management research and acquire sound business knowledge. Analytical skills • Students learn to independently find, select, and analyze relevant literature on specific issues or questions. • Students acquire skills to apply theoretical concepts and empirical findings to analyze, reflect on, and solve practical problems. Management skills • Students gain skills in written communication and structured scholarly thinking and their application to determine, explain, and defend their own viewpoints and positions. • Students acquire presentation skills to present and discuss their own research, work processes, and results.
Module content	Changing current content and research problems from all management areas.
Teaching format(s)	Seminar (2 credit hours)
Teaching methods	Prescribed teaching methods: • digital interaction with lecturers • digital interaction between students • discussions • case studies • multimedia materials • online learning platform (e.g., Open Olat) • projects (groups) • projects (individual)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Knowledge from selected required elective lectures for the focus field would be helpful and is strongly recommended
Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Usually a term paper (generally 15–20 pages in length) and a presentation (lasting max. 45 minutes) as well as potentially also an oral or written examination. The specific examination components and their formats as well as their weighting will be announced at the start of the course. Attendance of the seminar sessions is compulsory. The module examination is usually set in the language of instruction.

ECTS credits	6 ECTS credits
Workload	Attendance: 21 hours; Independent study: 159 hours
Module frequency	Generally every semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • Other: varies depending on the general seminar topic
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice • Other: varies depending on the general seminar topic In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS and (digital) technologies • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • decent work (SDG 8: Decent Work and Economic Growth) • other: varies depending on the general seminar topic
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • research with empirical data sets • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • other: presentations by students and related discussions
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digitalization: case studies • course and/or reading materials on digitalization

	• students present, write, and/or take exams on digitalization • Other: varies depending on the general seminar topic Topics: • digital or social media • digital transformation (impact and process) • digitalization is an important topic in the module • ethics and data • fintech • cryptocurrencies • machine learning and artificial intelligence • practical or practice-like applications • other: varies depending on the general seminar topic

Module ID:	MA-UFÜ 10(E)
Module type:	Required elective module
Title:	Fortgeschrittenen-Kolloquium zum Management
Responsible for module:	All teaching staff of the Focus Field Management and Corporate Governance, visiting professorships, and acting professorships.
English translation:	Advanced Colloquium on Management
Learning outcomes	In-depth business knowledge • This module aims to deepen students' fundamental knowledge of academic work acquired so far during their studies in a targeted, research-based manner. Scholarly thinking • Students hone the skills and knowledge of content-related preparatory work to identify a topic for their master's thesis. Analytical skills • Students learn to analyze and evaluate their own solutions to problems based on theory.
Module content	The content of the colloquium is agreed individually between the students and lecturer before the start of the course and generally confirmed in writing.
Teaching format(s)	As agreed individually
Teaching methods	Prescribed teaching methods: Changing teaching methods depending on the provider and topic—as announced at the start of the course.
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	Usually, prior completion of the seminar module for one of the focus fields. As a rule, students must have obtained a supervisory confirmation from an examiner for the Focus Field Management and Corporate Governance of their willingness to supervise the master's thesis.
Module applicability	This module is a required elective of the Focus Field Management and Corporate Governance within the Master of Science in Business Administration. Where places are still available and upon prior agreement with the directors of the particular degree programs, this module can also be opened for additional master's degree programs offered at Universität Hamburg. However, this is only in cases where a master's thesis in the Focus Field Management and Corporate Governance is possible.
Exam type, requirements, duration/scope, and language	Both the module content and the specific examination components as well as their weighting and the examination language are usually agreed in writing at the start of the colloquium at the latest. If the participation in seminars is agreed, attendance may be deemed compulsory.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	This module is only offered on demand and when agreed individually.
Module duration	Generally 1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content:

	• changing themes, methods, and content
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • other: Changing methods In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • other: Changing topics
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are supported by changing teaching methods and content.

2.7. Focus Field Auditing and Taxation (MA-WPSTEU)

2.7.1. Module overview—Focus Field Auditing and Taxation

Type	Module Code	Module Title	ECTS Credits	Semester Offered
Required elective modules	MA-WPSTEU 1(E)	Special Issues in Auditing	6 ECTS credits	Generally every winter semester
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-WPSTEU 2(E)	Empirical Auditing and Accounting Research	6 ECTS credits	Generally every summer semester
		Lecture (3 credit hours)		
	MA-WPSTEU 3(E)	The Impact of Taxation on Investment and Finance	6 ECTS credits	Offered occasionally
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-WPSTEU 4(E)	Value Added Taxation, Inheritance, and Real Estate Transfer Taxes	6 ECTS credits	Offered occasionally
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-WPSTEU 5(E)	Occupational Retirement Provision	6 ECTS credits	Generally every winter semester
		Lecture (3 credit hours)		
	MA-WPSTEU 6(E)	International Taxation I	6 ECTS credits	Generally every summer semester
		Lecture (3 credit hours)		
	MA-WPSTEU 7(E)	International Taxation II	6 ECTS credits	Generally every winter semester
		Lecture (3 credit hours)		
	MA-WPSTEU 8(E)	Current Issues in Auditing and Taxation A	6 ECTS credits	Offered occasionally to supplement the curriculum
		Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)		
	MA-WPSTEU 9(E)	Seminar on Auditing and Taxation	6 ECTS credits	Generally every semester
		Seminar (2 credit hours)		
	MA-WPSTEU 10(E)	Current Issues in Auditing and Taxation B	6 ECTS credits	Offered occasionally to supplement the curriculum
		Lecture, interactive teaching formats, and/or case studies (generally 3 credit hours)		
	MA-WPSTEU 11(E)	Advanced Topics in Accounting	6 ECTS credits	Generally every winter semester

		Lecture (3 credit hours)		

A total of 24 ECTS credits must be completed for the Focus Field Auditing and Taxation (MA-WPSTEU). Students must attend a seminar in one of the two focus fields selected.

A maximum of 12 ECTS credits can be credited for the following modules from other focus fields, from the Methods component, or from the free elective area for the Focus Field Auditing and Taxation:
MA-FWB 1 Financial Statement Analysis and Reporting
MA-FBI 4 Investment Banking and Capital Markets
MA-BA 4 Business Process Management

2.7.2. Module descriptions—Focus Field Auditing and Taxation

Module ID:	MA-WPSTEU 1(E)
Module type:	Required elective module
Title:	Special Issues in Auditing
Responsible for module:	Prof. Dr. Nicole V. S. Ratzinger-Sakel
English translation:	Special Issues in Auditing
Learning outcomes	In-depth business knowledge • Students acquire knowledge of the natur, objective and scope of the statutory audit of annual financial statements, the audit market, and the methodology for the risk-based audit approach. • Special focus on current practice-relevant issues, particularly in connection with the digitalization of audits (Audit 4.0) and the suitability of audits for detecting fraud (in light of past company scandals). Analytical skills • Students are able to analyze issues relating to the statutory audit of annual financial statements and exercise professional skepticism, for example, through case studies and discussions with practitioners. Scholarly thinking • Students discuss current research results and are enabled to reflect on research findings that deal with topics relating to audit quality and audit market research. • Link to and comparison of research findings to audit practice. Socially responsible decision-making • In-depth examination of the professional duties of auditors, in particular, with regard to maintaining independence in mind and appearance. • Classification of auditing in the context of corporate governance.
Module content	The module focuses on the following advanced aspects of auditing: • theoretical background of auditing • auditing as an element of corporate governance • auditing market • selected aspects of the auditing process • current developments in auditing • research studies dedicated to audit quality and audit market research Practical course: Exercises are used to explore the material covered in the lecture in greater depth.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	**Prescribed teaching methods:** • digital interaction with lecturers • digital interaction between students • discussions • field trips (e.g., company visits) • case studies • guest lectures • textbook/script
Language of instruction	German—unless announced otherwise at the start of the course

Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international content, examples, and/or perspectives • international students actively contribute to the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • guest lectures on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice • ERS is an important topic in the module • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module

Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • guest articles on digitalization • course and/or reading materials on digitalization Topics: • digital transformation (impact and process) • digitalization is an important topic in the module • practical or practice-like applications

Module ID:	MA-WPSTEU 2(E)
Module type:	Required elective module
Title:	Empirical Auditing and Accounting Research
Responsible for module:	Prof. Dr. Nicole V. S. Ratzinger-Sakel
English translation:	Empirical Auditing and Accounting Research
Learning outcomes	Scholarly thinking • Reflect selected relevant issues affecting auditing and accounting by referring to empirical research in these areas. • Comprehend the main methods of empirical auditing and accounting research. • Learn how to properly use and interpret empirical research results in preparation for your master's thesis. • Get an understanding of the benefits and challenges of conducting empirical research and enrolling in a PhD program. Analytical skills • Analyze complex contemporary auditing and accounting issues, including their practical implications. In-depth business knowledge • Understand and assess the complexity of the issues affecting auditing and accounting policy as performed by standard-setters, regulators, and financial statement preparers. • Special emphasis on hot topics in both auditing and accounting research, particularly regarding the detection of fraud and use of forensics. Socially responsible decision-making • Familiarize yourself with the fundamentals and ethics of empirical research methods. International mindset • Interpret international research findings from leading academic journals.
Module content	The course deals with empirical studies that focus on selected relevant issues affecting auditing and accounting. The empirical studies are embedded in the course by a theoretical introduction into these selected fields. Students are enabled to analyze and interpret contemporary research findings from leading academic journals. As part of the course, students get to know a variety of research methods and their application to the field of auditing and accounting (e.g., regarding earnings and audit quality, fraud detection and going concern opinions). The course also particularly focuses on the relationship between academic research and practice, as well as the benefits and challenges associated with a career in the academic field.
Teaching format(s)	Lecture with an integrated practical course (3 credit hours)
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • digital interaction between students • discussions • field trips (e.g., company visits) • case studies • guest lectures • textbook/script

Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	Basic knowledge of auditing and accounting is recommended.
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 90-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest lectures on international topics and/or in English • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • international matters are significant topics in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS and internationalization
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • research with empirical data sets • guest lectures on practical topics

	• content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives Topics: • empirical digital data

Module ID:	MA-WPSTEU 3(E)
Module type:	Required elective module
Title:	Einfluss der Besteuerung auf Investitions- und Finanzierungsentscheidungen
Responsible for module:	Prof. Dr. Siegfried Grotherr
English translation:	The Impact of Taxation on Investment and Finance
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge of the reasons for considering taxes in investment and financing decisions. • Students learn to incorporate strategic tax considerations into decisions about investment and financing alternatives. Scholarly thinking • Students acquire the skills needed to develop further research questions on investment and finance theory independently, with special attention to taxation. • Students learn to independently keep abreast of new developments in investment and finance theory throughout their professional lives. Analytical skills • Students develop their methodological skills in the use of analytical investment and financing models while taking the tax burden into account. • Students are able to quantify the tax effects on investment and financing decisions. Management skills • Students acquire in-depth theoretical and conceptual knowledge of the inclusion of taxes in the various forms of internal and external financing. • Students develop their reasoning skills to illustrate the tax effects on investment and financing decisions.
Module content	The following content is covered during the lecture: • In terms of the specialist content, the reasons for including taxes in investment and financing decisions, the influence of taxation on equity and shareholder debt financing, the effects of taxation on profit utilization policy, the leasing decision under the influence of taxation, and the significance of taxation for internal financing (especially depreciation, provision and reserve financing) are explored. • In terms of the methodological approach, various analytical procedures for including taxes in theoretical models for investment and financing alternatives are examined. • In terms of business practices, guest lectures by practitioners on selected investment and financing decisions are integrated into the lecture. • An interdisciplinary approach is taken to review the effects of corporate taxation on the aspects of investment and financing as well as the effects of digitalization on analytical investment and financing calculation methods and models. Practical course: Exercises and case studies are used to illustrate and consider the material covered in the lecture in greater depth, with students' active participation.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • algebraic modeling • assignments • digital interaction with lecturers

	• digital interaction between students • discussions • field trips (e.g., company visits) • case studies • guest lectures • textbook/script
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • joint module with international partner(s) • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS case studies • guest lectures on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making":

	• ERS in practice • ERS and (digital) technologies • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization Topics: • digital transformation (impact and process) • digitalization is an important topic in the module • practical or practice-like applications

Module ID:	MA-WPSTEU 4(D)
Module type:	Required elective module
Title:	Verkehrsteuern der Unternehmen
Responsible for module:	Prof. Dr. Siegfried Grotherr
English translation:	Value Added Taxation, Inheritance, and Real Estate Transfer Taxes
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge of the business administration implications of levying various transaction taxes (sales tax, inheritance and gift tax, real estate, and transfer tax). • Students are familiarized with strategic tax considerations for inclusion of the transaction taxes levied in business decisions. Scholarly thinking • Students acquire the skills needed to independently develop further research questions in the field of transaction taxes. • Students learn to independently keep abreast of new developments in the field of transaction taxes throughout their professional lives. Analytical skills • Students expand their methodological skills in order to use analytical models to address individual issues affecting a company's transaction taxes. • Students are able to quantify the tax effects on the various types of transaction taxes. Management skills • Students acquire in-depth theoretical and conceptual knowledge to manage the various effects of transaction taxes on business decisions. • Students develop their reasoning skills to illustrate the tax effects of transaction taxes on business decisions.
Module content	The following content is covered during the lectures: • In terms of the specialist content, the burden of the companies with the transaction taxes of value-added tax, inheritance and gift tax, and real estate transfer tax are examined. In terms of the individual types of transaction taxes, tax liability, tax exemptions, tax rates, tax assessment basis and valuation law, tax procedure law as well as tax-favorable arrangements are considered. • In terms of the methodological approach, the various analytical procedures for including transaction taxes in theoretical models for certain investment and financing alternatives are explored. • In terms of business practices, guest lectures by practitioners on selected aspects of transaction tax types are integrated into the lecture. • An interdisciplinary approach is taken to examine the impact of the different types of transaction taxes on various areas of business decisions as well as the effects of digitalization on declaration and collection for the types of transaction taxes levied. Practical course: Exercises and case studies are used to illustrate and consider the material covered in the lecture in greater depth, with students' active participation.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • digital interaction between students

	• discussions • field trips (e.g., company visits) • case studies • guest lectures • textbook/script
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS case studies • guest lectures on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice • ERS and (digital) technologies • ERS and internationalization

Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization Topics: • digital transformation (impact and process) • digitalization is an important topic in the module • practical or practice-like applications

Module ID:	MA-WPSTEU 5(E)
Module type:	Required elective module
Title:	Betriebliche Altersvorsorge
Responsible for module:	Prof. Dr. Dietmar Wellisch
English translation:	Occupational Retirement Provision
Learning outcomes	In-depth business knowledge • Students are familiarized with occupational retirement provision and acquire in-depth knowledge of the special requirements in all five implementation possibilities. • Students gain in-depth knowledge of occupational retirement provision from the perspective of employees, employers, and companies. Scholarly thinking • Students acquire the skills needed to develop further research questions in the field of occupational retirement provision. • Students learn to independently keep abreast of new developments in the field of occupational retirement provision throughout their professional lives. Analytical skills • Students develop their methodological skills to include the relevant calculation principles of occupational retirement provision. • Students are able to apply legal sources and hierarchies of norms to occupational retirement provision. Management skills • Students learn fundamental regulations to manage occupational retirement provision in selected constellations. • Students hone their reasoning skills to enforce occupational retirement provision within companies and vis-à-vis the tax authorities.
Module content	The following content is covered during the lecture: • In terms of the specialist content, the fundamentals of occupational retirement provision are examined from the perspective of companies, employers, and employees, taking current case law, legal sources, and hierarchies of norms into account. • In terms of the methodological approach, the methods of implementation in Germany, framework conditions pursuant to labor law, the approach pursuant to tax and social security law, and calculation of retirement provision and entitlements are explored. • In terms of business practices, practical examples of commitments to occupational retirement provision schemes, including those for shareholder managers and employees, are integrated into the lecture. • An interdisciplinary approach is taken to examine the effects of occupational retirement provision commitments and possible outsourcing for companies and beneficiaries. Practical course: Exercises and case studies are used to illustrate and explore the material covered in the lecture in greater depth, with students' active participation.
Teaching format(s)	Lecture (3 credit hours); case studies will be integrated into the lecture
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • digital interaction between students

	• discussions • case studies • textbook/script
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination Regular participation in classes is strongly recommended.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international students actively contribute to the module
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS case studies In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following content: Topics: • data collection

	• digital documentation • practical or practice-like applications

Module ID:	MA-WPSTEU 6(E)
Module type:	Required elective module
Title:	Grundzüge der internationalen Besteuerung
Responsible for module:	Prof. Dr. Dietmar Wellisch
English translation:	International Taxation I
Learning outcomes	In-depth business knowledge • Students gain fundamental knowledge of international corporate taxation. • Students learn the regulations to avoid international double taxation. Scholarly thinking • Students acquire the skills needed to independently develop further research questions in the field of international corporate taxation. • Students learn to independently keep abreast of new developments in international corporate taxation throughout their professional lives. Analytical skills • Students develop their ability to recognize preliminary approaches for international tax structuring measures. • Students are able to quantify the tax effects when engaging in cross-border business. Management skills • Students acquire fundamental theoretical and conceptual knowledge of the taxation of cross-border matters for individuals and businesses. • Students develop their reasoning skills to illustrate the tax effects of cross-border business activities on business and individual decisions, also vis-à-vis the tax authorities.
Module content	The following content is covered during the lecture: • In terms of the specialist content, domestic income with limited tax liability, foreign income with unlimited tax liability, and the avoidance of double taxation through a double tax agreement (DTA) are examined. • In terms of the methodological approach, current case law, sources of law, and hierarchies of norms of international tax law are analyzed and discussed. • In terms of business practices, selected practical case studies are integrated into the lecture. • An interdisciplinary approach is taken to examine the effects of cross-border business and its taxation as well as a possible tax structure to avoid this. Practical course: Exercises and case studies are used to illustrate and consider the material covered in the lecture in greater depth, with students' active participation.
Teaching format(s)	Lecture (3 credit hours); case studies will be integrated into the lectures
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • digital interaction between students • discussions • case studies • textbook/script
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None

Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination Regular participation in classes is strongly recommended.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international content, examples, and/or perspectives • international students actively contribute to the module • internationalization is a significant theme in the module
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS case studies In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice • ERS and internationalization
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • content, examples, and/or perspectives from practice • students present, write, and/or take exams on practice-related topics
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives Topics: • practical or practice-like applications

Module ID:	MA-WPSTEU 7(E)
Module type:	Required elective module
Title:	Einkommensabgrenzungen international tätiger Unternehmen
Responsible for module:	Prof. Dr. Dietmar Wellisch
English translation:	International Taxation II
Learning outcomes	In-depth business knowledge • Students acquire advanced knowledge of income accrual and calculation in international business. • Students learn about regulations that can prevent a design that violates legislation. Scholarly thinking • Students acquire the skills needed to independently develop further research questions in the field of international business activities. • Students learn to independently keep abreast of new developments in international business activities throughout their professional lives. Analytical skills • Students develop their methodological skills to deal with relevant legal sources in issues relating to companies' international business activities. • Students are able to quantify tax effects in various situations related to companies' international business activities. Management skills • Students acquire in-depth theoretical and conceptual knowledge of managing the various effects of income tax and transfer pricing on business decisions. • Students develop their reasoning skills to illustrate the tax effects of income tax and transfer pricing on business decisions.
Module content	The following content is covered during the lectures: • In terms of the specialist content, the following topics are addressed: ▪ international companies' accrual of income and cross-border relations between branch offices and the parent company ▪ determination of income and taxation in cross-border relations between partnerships, their partners, and associated enterprises ▪ possibilities for structuring transfer pricing ▪ exit and inflow taxation of individuals and legal entities ▪ consequences of the abuse of double taxation agreements and possible additional CRC rules • In terms of the methodological approach, current case law, sources of law, and hierarchies of norms of international tax law are analyzed and discussed. Analytical procedures and considerations for business decisions are additionally explored. • In terms of business practices, selected practical case studies are integrated into the lecture. • An interdisciplinary approach is taken to examine the effects of cross-border business and its taxation as well as a possible tax structure to avoid this.
Teaching format(s)	Lecture (3 credit hours); case studies will be integrated into the lectures
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers

	• digital interaction between students • discussions • case studies • textbook/script
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination Regular participation in classes is strongly recommended.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS case studies In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice • ERS is an important topic in the module • ERS and internationalization

Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Topics: • digital documentation • practical or practice-like applications

Module ID:	MA-WPSTEU 8(E)
Module type:	Required elective module
Title:	Aktuelle Probleme des Schwerpunktfachs „Wirtschaftsprüfung und Steuern“ A
Responsible for module:	All professorships involved in the focus field
English translation:	Current Issues in Auditing and Taxation A
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues in the fields of auditing and taxation from various theoretical and methodological perspectives. • Students gain theoretical and methodological knowledge within each topic area, also based on selected original scholarly literature and current research. Scholarly thinking • Students learn to transfer the knowledge gained to current issues from the fields of auditing and taxation. • Students learn to reflect critically on solutions and contributions within each topic area based on systematic criteria. Analytical skills • Students practice searching for and using original literature in German and English. • Students learn to take a systematic approach to reflect on issues. Management skills • Students learn to develop and evaluate their own solutions to problems based on theory. • Students recognize the impact of digitalization on the professional fields of auditing and tax consulting.
Module content	The following content is covered during the lectures: • In terms of the specialist content, students must apply the skills acquired to current issues in auditing and tax consulting and find their own solutions to problems. • In terms of the methodological approach, current procedures for solving problems in the field of auditing and tax consulting are analyzed. • In terms of business practices, current topics from daily practice across the entire field of auditing and taxation are considered. Where appropriate, these are complemented with guest lectures held by practitioners. • An interdisciplinary approach is taken to examine the current issues with students during the lecture and develop solutions for these. Interactive platform or case studies: Exercises and group discussions are used to illustrate and explore the material covered in the lecture in greater depth, with students’ active participation.
Teaching format(s)	Lecture, interactive teaching formats, or case studies (3 credit hours)—unless announced otherwise at the start of the course
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • digital interaction between students • discussions • field trips (e.g., company visits) • case studies

	• guest lectures • textbook/script • projects (groups) • projects (individual)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The written examination is set in German or English—as announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally to supplement the curriculum with specific current topics.
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • joint module with international partner(s) • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS case studies • ethics in research and good scientific practice • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics

	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 “Socially responsible decision-making”: • accounting (SDG 9: Industry, Innovation and Infrastructure) • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS and (digital) technologies • ERS and internationalization
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of “management skills” (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of “analytical skills” (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization Topics: • data collection • digital documentation • digital transformation (impact and process) • empirical digital data • ethics and data • practical or practice-like applications

Module ID:	MA-WPSTEU 9(E)
Module type:	Required elective module
Title:	Seminar im Schwerpunktfach „Wirtschaftsprüfung und Steuern“
Responsible for module:	Responsibility rotates between the professorships involved in the Focus Field Auditing and Taxation.
English translation:	Seminar on Auditing and Taxation
Learning outcomes	In-depth business knowledge • Building on the lecture modules, students gain in-depth knowledge of specialist topics from the Focus Field Auditing and Taxation, which they subsequently use to analyze current issues. Scholarly thinking • Students acquire and train the skills needed to reflect critically on original scholarly literature and develop their own research questions. Students learn presentation techniques and use these in the oral defense of their written work. Analytical skills • Students hone their analytical and reasoning skills, familiarize themselves with strategies and methods for academic work, and apply these in the preparation and defense of their written work and presentation.
Module content	Changing current topics from the entire Focus Field Auditing and Taxation (e.g., digitalization, sustainability, and current tax issues) The following content is covered during the seminar: • In terms of the specialist content, the seminar examines current issues relating to the focus field and evaluates these based on relevant specialist literature. • In terms of the methodological approach, students practice preparing academic work and using scholarly sources. • In terms of business practices, interfaces between theory and practice are created and discussed. Presentation: Students present the knowledge gained to all course participants and discuss this with them.
Teaching format(s)	Seminar (2 credit hours)
Teaching methods	Prescribed teaching methods: • discussions • field trips (e.g., company visits) • guest lectures • projects (groups) • projects (individual)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master’s degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Usually a term paper and a presentation; potentially also an oral or written examination. The examination type and, where applicable, the weighting of the individual examination components will be announced at the start of the course. Attendance of the seminar sessions is compulsory.
ECTS credits	6 ECTS credits
Workload	Attendance: 21 hours; Independent study: 159 hours
Module frequency	Generally every semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international students actively contribute to the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ethics in research and good scientific practice • guest lectures on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • accounting (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS and (digital) technologies • ERS and internationalization
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • guest lectures on practical topics • content, examples, and/or perspectives from practice • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives

	• guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization Topics: • digital transformation (impact and process) • cryptocurrencies

Module ID:	MA-WPSTEU 10(E)
Module type:	Required elective module
Title:	Aktuelle Probleme des Schwerpunktfachs „Wirtschaftsprüfung und Steuern“ B
Responsible for module:	All professorships involved in the Focus Field Auditing and Taxation
English translation:	Current Issues in Auditing and Taxation B
Learning outcomes	In-depth business knowledge • Students are familiarized with specific current issues in the fields of auditing and taxation from various theoretical and methodological perspectives. • Students gain theoretical and methodological knowledge within each topic area, also based on selected original scholarly literature and current research. Scholarly thinking • Students learn to transfer the knowledge gained to current issues from the fields of auditing and taxation. • Students learn to reflect critically on solutions and contributions within each topic area based on systematic criteria. Analytical skills • Students practice searching for and using original literature in German and English. • Students learn to take a systematic approach to reflect on issues. Management skills • Students learn to develop and evaluate their own solutions to problems based on theory. • Students recognize the impact of digitalization on the professional fields of auditing and tax consulting.
Module content	The following content is covered during the lectures: • In terms of the specialist content, students must apply the skills acquired to current issues in auditing and tax consulting and find their own solutions to problems. • In terms of the methodological approach, current procedures for solving problems in the field of auditing and tax consulting are analyzed. • In terms of business practices, current topics from daily practice across the entire field of auditing and taxation are considered. Where appropriate, these are complemented with guest lectures held by practitioners. • An interdisciplinary approach is taken to examine the current issues with students during the lecture and develop solutions for these. Interactive platform or case studies: Exercises and group discussions are used to illustrate and explore the material covered in the lecture in greater depth, with students’ active participation.
Teaching format(s)	Lecture, interactive teaching formats, or case studies (3 credit hours)—unless announced otherwise at the start of the course
Teaching methods	Prescribed teaching methods: • assignments • digital interaction with lecturers • digital interaction between students • discussions • field trips (e.g., company visits) • case studies

	• guest lectures • textbook/script • projects (groups) • projects (individual)
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination The written examination is set in German or English—as announced at the start of the course.
ECTS credits	6 ECTS
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally to supplement the curriculum with specific current topics.
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • joint module with international partner(s) • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS case studies • ethics in research and good scientific practice • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics

	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 “Socially responsible decision-making”: • accounting (SDG 9: Industry, Innovation and Infrastructure) • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice • ERS and internationalization • ethical decision-making (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of “management skills” (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of “analytical skills” (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization Topics: • data collection • digital documentation • digital transformation (impact and process) • empirical digital data • ethics and data • practical or practice-like applications

Module ID:	MA-WPSTEU 11(E)
Module type:	Required elective module
Title:	Advanced Topics in Accounting
Responsible for module:	Dr. Jan Fürwentsches
English translation:	Advanced Topics in Accounting
Learning outcomes	In-depth business knowledge • Students acquire detailed, in-depth knowledge of accounting in accordance with the International Financial Reporting Standards (IFRS). Analytical skills • Students are able to analyze a wide variety of issues relating to international accounting taking a critical approach, for example, through case studies and discussions with practitioners. • Students are able to present these accounting standards and critically evaluate their information function. Management skills • Students are able to use IFRS to solve selected accounting issues in case studies and discuss their presentation in IFRS financial statements. • Students refer to current issues of standard setting, enforcement, and accounting practices.
Module content	In the first part of the lecture, accounting for corporate transactions is addressed. In particular, the IFRS for business mergers, impairment testing of goodwill and other intangible assets as well as consolidated financial statements are addressed. In the second part of the lecture, complex IFRS for regulating the accounting of revenue from contracts with customers, of financial instruments, and of leasing contracts are discussed. The material covered in the lecture is illustrated using published IFRS financial statements and applied in practice to case studies.
Teaching format(s)	Lecture (3 credit hours)
Teaching methods	Prescribed teaching methods: • digital interaction with lecturers • digital interaction between students • discussions • case studies • guest lectures • textbook/script
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None. However, basic knowledge of commercial and international accounting is recommended—where necessary, gained through independent study.
Module applicability	This module is a required elective of the Focus Field Auditing and Tax within the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.

Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every winter semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • guest articles on international topics and/or in English • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • accounting (SDG 9: Industry, Innovation and Infrastructure)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: case studies • guest articles on digitalization Topics: • digital transformation (impact and process)

3. Free elective area (MA-FWB)

3.1. Module overview—free elective area

Type	Module Code	Module Title	ECTS Credits	Semester Offered
Required elective modules	MA-FWB 1(E)	Financial Statement Analysis and Reporting	6 ECTS credits	Offered occasionally
		Lecture (2 credit hours) + practical course (1 credit hour)		
	MA-FWB 2(E)	Current Issues in Business Administration A	6 ECTS credits	Offered occasionally
		Lecture, interactive teaching formats, and/or case studies (3 credit hours)		
	MA-FWB 3(E)	Current Issues in Business Administration B	6 ECTS credits	Offered occasionally
		Lecture, interactive teaching formats, and/or case studies (3 credit hours)		
	MA-FWB 4(E)	Current Issues in Business Administration C	6 ECTS credits	Offered occasionally
		Lecture, interactive teaching formats, and/or case studies (3 credit hours)		
	MA-FWB 5(E)	Digital Innovation Lab	6 ECTS credits	Generally every summer semester
		Project (3 credit hours)		
	MA-FWB 6(E)-WI-ITBPS	IT and Business Process Sourcing	6 ECTS credits	Offered occasionally
		Lecture with an integrated practical course (3 credit hours)		
	MA-FWB7(E)-WI-IMTT	Information Management in Traffic and Transportation	6 ECTS credits	Offered occasionally
		Lecture (2 credit hours) + practical course (1 credit hour)		

A total of 24 ECTS credits must be completed for the free elective area, as per students' preferences.
In addition to the modules listed in the module overview for the free elective area, any of the modules in this degree program may be taken (with the exception of the seminar modules).

3.2. Module descriptions—free elective area

Module ID:	MA-FWB 1(E)
Module type:	Elective module
Title:	Bilanzanalyse und Bilanzpolitik
Responsible for module:	Prof. Dr. Siegfried Grotherr
English translation:	Financial Statement Analysis and Reporting
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge of the possibilities and limitations of obtaining information through the financial statement analysis. • Students acquire in-depth theoretical and conceptual knowledge and skills in the preparation of financial statements. Scholarly thinking • Students acquire the skills needed to independently develop further research questions in the fields of financial statement analysis and reporting. • Students learn to independently keep abreast of new developments in financial statement analysis and reporting throughout their professional lives. Analytical skills • Students expand their methodological skills to use analytical models to address individual issues affecting financial statement analyses and reporting. • Students are able to apply quantitative models for financial statement analyses and reporting. Management skills • Students acquire in-depth theoretical and conceptual knowledge of using a financial statement analysis to gather information. • Students hone their reasoning skills for implementing targeted financial reporting in a company.
Module content	The following content is covered during the lectures: • In terms of the specialist content, the fundamentals of financial statement analysis; information preparation; asset, financial, and profit analysis; indicators and indicator systems for financial statement analysis; limitations of financial statement analysis; financial reporting options in commercial and tax balance sheets as well as according to the International Financial Reporting Standards (IFRS), and the limitations of financial reporting are examined. • In terms of the methodological approach, the concepts of quantitative and qualitative financial statement analysis are analyzed. • In terms of business practices, guest lectures by practitioners on selected aspects of financial statement analysis and reporting are integrated into the lecture. • An interdisciplinary approach is taken to examine the effects of financial statement analysis on the acquisition of information by external decision-makers as well as the effects of reporting on a company's tax burden and information policy. Practical course: Exercises and case studies are used to illustrate and consider the material covered in the lecture in greater depth, with students' active participation.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments

	• digital interaction with lecturers • digital interaction between students • discussions • field trips (e.g., company visits) • case studies • guest lectures • textbook/script
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module can be taken as part of the free elective area for the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS case studies • guest lectures on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • ERS in practice • ERS and (digital) technologies • ERS and internationalization

Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • projects based on research/work with companies • students work together in groups on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization Topics: • digital transformation (impact and process) • digitalization is an important topic in the module • practical or practice-like applications

Module ID:	MA-FWB 2(E)
Module type:	Elective module
Title:	Aktuelle Probleme der Betriebswirtschaft A
Responsible for module:	Responsibility rotates between all professorships and faculty postdoctoral researchers, as announced
English translation:	Current Issues in Business Administration A
Learning outcomes	Students are familiarized with specific current issues in business administration from various theoretical and methodological perspectives. - - gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research; - Students learn to reflect critically on solutions and contributions to the respective area based on systematic criteria. - Students learn to develop and evaluate solutions to problems based on theory.
Module content	Changing current topics from the entire field of business administration
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (3 credit hours)—unless announced otherwise at the start of the course
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module can be taken as part of the free elective area for the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally to supplement the curriculum with specific current topics.
Module duration	1 semester

Module ID:	MA-FWB 3(E)
Module type:	Elective module
Title:	Aktuelle Probleme der Betriebswirtschaft B
Responsible for module:	Responsibility rotates between all professorships and faculty postdoctoral researchers, as announced
English translation:	Current Issues in Business Administration B
Learning outcomes	- Students are familiarized with specific current issues in business administration from various theoretical and methodological perspectives. - Students gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research; - Students learn to reflect critically on solutions and contributions to the respective area based on systematic criteria. - Students learn to develop and evaluate solutions to problems based on theory.
Module content	Changing current topics from the entire field of business administration
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (3 credit hours)—unless announced otherwise at the start of the course
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module can be taken as part of the free elective area for the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally to supplement the curriculum with specific current topics.
Module duration	1 semester

Module ID:	MA-FWB 4(E)
Module type:	Elective module
Title:	Aktuelle Probleme der Betriebswirtschaft C
Responsible for module:	Responsibility rotates between all professorships and faculty postdoctoral researchers, as announced
English translation:	Current Issues in Business Administration C
Learning outcomes	- Students are familiarized with specific current issues in business administration from various theoretical and methodological perspectives. - Students gain in-depth theoretical and methodological knowledge of the respective area, also based on relevant original literature and/or current research; - Students learn to reflect critically on solutions and contributions to the respective area based on systematic criteria. - Students learn to develop and evaluate solutions to problems based on theory.
Module content	Changing current topics from the entire field of business administration
Teaching format(s)	Lecture, interactive teaching formats, and/or case studies (3 credit hours)—unless announced otherwise at the start of the course
Language of instruction	German—unless announced otherwise at the start of the course
Prerequisites	None—unless announced otherwise at the start of the course
Module applicability	This module can be taken as part of the free elective area for the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 60-minute written examination
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally to supplement the curriculum with specific current topics.
Module duration	1 semester

Module ID:	MA-FWB5(E)
Module type:	Required elective module
Title:	Digital Innovation Lab
Responsible for module:	Prof. Dr. Dr. Jan Recker
English translation:	Digital Innovation Lab
Learning outcomes	In-depth business knowledge Students learn to: • understand what digital innovation means and learn about important concepts related to digital innovation development, design, and implementation. • acquaint themselves with the solution potential of emergent digital technologies. • understand challenges relating to the design and development of digital innovations. • understand challenges of sustainable development and societal grand challenges. Management skills • Students learn to organize themselves into teams and work in independent teams. Socially responsible decision-making • Students learn to develop a socio-technical artifact, which addresses a sustainable development goal and incorporates emerging digital technologies.
Module content	• introduction to digital innovation • introduction to the sustainable development goals • grand challenges and wicked problems of a sustainable society • selected emergent digital technology stacks • digital innovation and design thinking practices • project and team management • design and implementation of digital innovations • prototyping and testing
Teaching format(s)	Project (3 credit hours)
Teaching methods	Prescribed teaching methods: • assignments • (computer-based) simulations/games • digital interaction with lecturers • digital interaction between students • discussions • case studies • guest lectures • software: data analysis • other: technology development • multimedia materials • online learning platform (e.g., Open Olat) • projects (groups)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None

Module applicability	The module can be taken as part of the free elective area for the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Usually a term paper and a presentation in the language of instruction. The examination type and, where applicable, the weighting of the individual examination components will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Generally every summer semester
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	• In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • guest articles on international topics and/or in English • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them • students work together in international groups • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ERS content, examples, and/or perspectives • ERS case studies • ethics in research and good scientific practice • guest lectures on ERS topics • group work on ERS topics • course and/or reading materials on ERS topics • students collaborate in groups on ERS topics • students present, write, and/or take exams on ERS topics In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • accounting (SDG 9: Industry, Innovation and Infrastructure) • data protection (SDG 9: Industry, Innovation and Infrastructure) • ERS in practice

	• ERS is an important topic in the module • ERS and (digital) technologies • ERS and internationalization • health (SDG 3: Good Health and Well-Being) • gender equality and diversity (SDG 5: Gender Equality) • decent work (SDG 8: Decent Work and Economic Growth) • social business (SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • social responsibility (SDG 12: Responsible Consumption and Production) • transparency and corruption (SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 12: Responsible Consumption and Production) • environmental protection (SDG 13: Climate Action) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • research with empirical data sets • guest lectures on practical topics • content, examples, and/or perspectives from practice • project work on topics from practice • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives • digital project work • digitalization: case studies • guest articles on digitalization • course and/or reading materials on digitalization • students practice using software Topics: • data collection • digital transformation (impact and process) • digitalization is an important topic in the module • empirical digital data • ethics and data • practical or practice-like applications • programming • other: hardware: use and development

Module ID:	MA-FWB 6(E)-WI-ITBPS
Module type:	Required elective module
Title:	IT- und Business Process Sourcing
Responsible for module:	Prof. Dr. Markus Nüttgens
English translation:	IT and Business Process Sourcing
Learning outcomes	In-depth business knowledge • Students gain in-depth knowledge of basic concepts for the (out-)sourcing of information technologies and business processes in an international context. • Students gain in-depth knowledge of abstract concepts of sourcing typologies, global delivery models, price and operator models, benchmarking, and process models. Scholarly thinking • Students hone their skills for independent scholarly work on case studies and independent literature research. Analytical skills • Students develop their analytical skills by applying techniques, methods, and tools for (out-)sourcing. Management skills • Students acquire management competence by applying the acquired knowledge gained on IT sourcing in practice to companies. • Students develop their reasoning and presentation skills. International mindset • Students acquire knowledge about international (out-)sourcing taking various international cultures into account in particular.
Module content	Examples are provided and relevant techniques, methods, and tools used to introduce basic concepts and applications for (out-)sourcing information technologies and business processes to international service providers. More abstract concepts of sourcing typologies, global delivery models, price and operator models, benchmarking, and process models form the starting point. Central perspectives for (out-)sourcing projects include a service, competence, process, contract, and cost perspective. These perspectives are reflected in the respective phases of a concrete project, from the analysis of requirements through the invitation to tender and vendor selection to the implementation and operation. Standardization approaches are of particular importance here. Topics are examined in greater depth during the lecture and students also have the opportunity to independently work on a selected subtopic in this area (specified by the lecturer; case studies / literature research) during the practical component and to explore this subtopic in writing (term paper) and present it to fellow students (presentation).
Teaching format(s)	Lecture with an integrated practical course (3 credit hours)
Teaching methods	Prescribed teaching methods: • discussions • case studies • guest lectures • multimedia materials • online learning platform (for the exchange of documents) • literature research
Language of instruction	German—unless announced otherwise at the start of the course Materials mainly in English (especially case studies and literature).

Prerequisites	None
Module applicability	This module is a required elective within the Master of Science in Information Systems and the Master of Science in IT Management and Consulting. This module can be taken as part of the free elective area for the Master of Science in Business Administration. Where places are still available and upon prior agreement with the directors of the particular degree programs, this module can also be opened for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 90-minute written examination Or an oral examination. Coursework may be set as a prerequisite for participation in the examinations for this module. The exact type and number of coursework assignments will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • international case studies • international content, examples, and/or perspectives • internationalization is a significant theme in the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • the teaching materials and literature used for the module are in English. • students present on or write about international topics, and/or are examined on them
Ethics, responsibility, and sustainability (ERS)	**Topics:** In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • data protection (SDG 9: Industry, Innovation and Infrastructure) • compliance requirements in various industries in terms of sourcing and the drafting of contracts
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • case studies • guest lectures on practical topics • content, examples, and/or perspectives from practice • students work together in groups on practice-related topics • students present, write, and/or take exams on practice-related topics • transfer and practical relevance are important topics in the module

Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods: • digitalization: content, examples, and/or perspectives Topics: • digital transformation (impact and process)

Module ID:	**MA-FWB 7(E)-WI-IMTT**
Module type:	**Required elective module**
Title:	**Information Management in Traffic and Transportation**
Responsible for module:	**Prof. Dr. Stefan Voß**
English translation:	**Information Management in Traffic and Transportation**
Learning outcomes	In-depth business knowledge • Students are familiarized with models and applications of information management in transport. • Students acquire and deepen their knowledge of methods for analyzing and planning information systems in transport and traffic as well as their application. Analytical skills • Students further their ability to solve problems and manage information systems in transport and traffic. Scholarly thinking • Students gain the ability to independently select and develop appropriate theories, tools, and methods in the field of information management to solve real-life problems in transport and traffic. Management skills • Students practice participating in group discussions and group work on various aspects of information management in transport and traffic.
Module content	• Introduction to the tasks and solutions of information management for various applications in the transport sector. • Insights into the complex structures of passenger and freight transport and the corresponding information and communication systems. • Differentiation between (local) public passenger transport and motorized individual traffic; focus on the transport of freight goods using standardized containers. • Consideration of economic and environmental aspects of efficient information design in models and applications of information management.
Teaching format(s)	Lecture (2 credit hours) + practical course (1 credit hour)
Teaching methods	Prescribed teaching methods: • assignments • discussions • case studies • guest lectures • textbook/script • multimedia materials • online learning platform (e.g., Open Olat) • software: mathematical/statistical (e.g., Python, R, and Matlab)
Language of instruction	English—unless announced otherwise at the start of the course
Prerequisites	None
Module applicability	This module is a required elective for the specialization in computational logistics within the Master of Science in Information Systems. This module can be taken as part of the free elective area for the Master of Science in Business Administration. Where places are still available, it can also be opened for the elective area of this degree program, and upon prior agreement with the directors of the particular degree

	programs also for additional master's degree programs offered at Universität Hamburg.
Exam type, requirements, duration/scope, and language	Unless announced otherwise at the start of the course: 90-minute written examination The module examination is set in the language of instruction. Coursework may be set as a prerequisite for participation in the examinations for this module. The exact type and number of coursework assignments will be announced at the start of the course.
ECTS credits	6 ECTS credits
Workload	Attendance: 31.5 hours; Independent study: 148.5 hours
Module frequency	Offered occasionally, but at least every other year
Module duration	1 semester
Interdisciplinary topics, content, and skills:	
Internationalization	In this module, internationalization and the intended learning outcome of an "international mindset" (ILO 6) are above all supported by the following teaching methods and content: • research on international topics and/or research in English • international case studies • international content, examples, and/or perspectives • international students actively contribute to the module • teaching materials, literature, or individual sessions of the module are related to international topics, examples, and perspectives • teaching materials and literature are (at least in part) in English, and/or individual sessions take place in English • students present on or write about international topics, and/or are examined on them • students work together in international groups
Ethics, responsibility, and sustainability (ERS)	In this module, ERS and the intended learning outcome of "socially responsible decision-making" (ILO 5) are above all supported by the following teaching methods: • ethics in research and good scientific practice In this module, content on the following Sustainable Development Goals of the UN is covered, which is also particularly relevant for ILO 5 "Socially responsible decision-making": • social responsibility (SDG 12: Responsible Consumption and Production) • environmental protection (SDG 13: Climate Action) • responsible and sustainable practice and production (SDG 12: Responsible Consumption and Production)
Transfer and practical relevance	In this module, transfer and practical relevance and the intended learning outcome of "management skills" (ILO 4) are above all supported by the following teaching methods: • use of applications/software from practice • case studies • content, examples, and/or perspectives from practice • transfer and practical relevance are important topics in the module
Digitalization and e-learning	In this module, digitalization and e-learning and the intended learning outcome of "analytical skills" (ILO 3) are above all supported by the following teaching methods and content: Teaching methods:

	• digitalization: content, examples, and/or perspectives • digitalization: case studies • course and/or reading materials on digitalization • students present, write, and/or take exams on digitalization Topics: • algebraic modeling language • data collection • digital documentation • digital transformation (impact and process) • digitalization is an important topic in the module • practical or practice-like applications

4. Final module—Master's Thesis (BWL-MSc-MA)

Module ID:	BWL-MSc-MA
Module type:	Final module
Title:	Masterarbeit
Responsible for module:	All professorships of the Faculty of Business Administration (Hamburg Business School)
English translation:	Master's Thesis
Learning outcomes	Scholarly thinking • Students hone their ability to reflect critically on current research literature. • Students acquire the skills needed to develop further research questions independently In-depth business knowledge • Students gain in-depth business knowledge in the specific topic of the master's thesis. • Students further their ability to apply methodological concepts and theoretical knowledge to the specific issues of their individual master's thesis. Management skills • Students hone their skills in the completion of independent comprehensive projects to a deadline. • Students train their time management and self-management skills.
Module contents	Preparation and completion of the master's thesis. The supervisor or responsible faculty body assigns the thesis topic, which is then recorded in the student's academic file. Student are able to propose topics in their application for admission to the master's thesis.
Prerequisites	To be admitted to the master's thesis, students must have successfully obtained a total of at least 45 ECTS credits for modules completed as part of the degree program.
Module applicability	This module is a required component of the Master of Science in Business Administration.
Exam type, requirements, duration/scope, and language	Written paper. The master's thesis must be written in the Methods component or in one of the focus fields selected by the student. The master's thesis may be written in either German or English. Students are not permitted to switch between languages within the thesis. Students should discuss the scope of their master's thesis with their supervisor. As a general rule, it should be 60 pages in length (+/–10%). For more details, see the information sheet on the master's thesis for the Master of Science in Business Administration (in German only) on the website of the Business Administration Academic Office.
ECTS credits	30 ECTS credits
Workload	Independent study: 900 hours
Module frequency	Generally every semester
Module duration	6 months

The interdisciplinary topics, content, and skills relating to:

- **internationalization**
- **ethics, responsibility, and sustainability (ERS)**
- **transfer and practical relevance**
- **digitalization and e-learning**

depend on the topic agreed for the master's thesis.