h_da hochschule darmstadt fachbereich wirtschaft

member of EUT+ EUROPEAN UNIVERSITY OF TECHNOLOGY

Please note: This is a computer-assisted translation.The details of the modules may be subject to changes. For specific information please contact our international student advisors

Appendix 5

Module handbook for the

Digital Business Development

Master of Science

in the Department of Economics

at Darmstadt University of Applied Sciences

dated 06.09.2024

Underlying BBPO dated 6 September 2024 (Official Announcements for the Year 2025)

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Module overview

1	**Module name** Economic Data Science
1	**Module abbreviation** 214
1.2	**Type** Compulsory
1.3	**Course** Economic Data Science
1.4	**Semester** 1
1.5	**Module coordinator** Dr Michaela Kiermeier
1.6	**Additional teaching staff** Lecturers will be announced in the course catalogue for the respective lecture period.
1.7	**Degree programme level** Master
1.8	**Language of instruction** German/English
2	**Content** • Introduction to economic research, scientific work and scientific theory (model theory) • Data and information acquisition, data collection (including data collection from Thomson Reuters Datastream and Eikon) • Data collection through surveys, qualitative research and observation methods • Checking the plausibility of data (data collection, processing and descriptive statistics) • Statistical analysis: o Regressions: simple, multivariate, logistic and cross-sectional regressions (microeconometrics), application example: factor models in finance o Time series models (ARIMA), application example: forecasting broadband network utilisation and sales planning for mineral water, taking weather conditions into account o Variance analysis, application example: effectiveness of in-house training o Discriminant analysis, application example: scoring model for assessing creditworthiness o Factor analysis: Application example: Identification of significant factors for car purchase decisions o Hypotheses and tests for evaluating the respective models o Cross-sectional analysis and analysis of panel data • Big data and application of corresponding software (e.g. Tableau) • Target group-oriented visualisation and presentation of results, e.g. dashboards • Introduction to programming with R • Working with statistical software

	• Impact of business intelligence analytics on profitability Examples of exercises for applying statistical methods: • Formulation and empirical analysis of fundamental economic discussions (e.g. "Does monetary policy have an effect on employment?", "Fisher effect", etc.) • Creation, implementation and presentation of the results of an online survey on topics related to the design of teaching in the M.Sc. programme in Business Administration (e.g. integration of Facebook into teaching, stays abroad, library, sports facilities, travel to campus, etc.) • Identification of technical factors that play the most important role in a company's car sales when it comes to its customers' purchasing decisions, in order to optimise the sales area • Predicting production figures in correlation with internal and external factors, e.g. weather • Predicting the utilisation of a telecommunications company's broadband network in order to optimise service bundles and increase customer loyalty • Determining the effectiveness of internal training programmes on the sales figures of employees in the sales department, deriving trading recommendations for human resources • Estimating a scoring model to assess the creditworthiness of customers • Accounting and analysis of panel data for company valuation • Factor models to explain developments on important capital markets • Business intelligence analytics in finance and controlling • Current topics
3	**Objectives** Knowledge: • Ability to describe the relevant statistical methods used in economic research • Ability to explain statistical programmes for the application of various statistical methods • Ability to present the problems associated with using data for specific questions in the fields of economics, financial markets, accounting, market research, corporate management, human resources development, asset management, etc. • Knowledge of business intelligence analytics and their use in companies Skills: • Handling large amounts of data • Data collection methods, ability to carry these out independently • Ability to empirically research theories or models through the competent application of statistical methods to specific data sets. • Ability ~~to~~ apply statistical concepts to research questions in order to solve them • Understanding of issues relating to the specific use of available data for the empirical testing of theories/models and ability to apply this knowledge • Implementation of the most important methods of empirical economic research using statistical programmes such as SPSS and/or R and/or programmes for processing big data and/or other alternative programmes • Formulation of hypotheses and their testing • Assessing the quality of theories and models (diagnosis) • Data collection from ThomsonReuters Datastream, Eikon Competencies • Basic understanding of model development for the analysis of research questions and the ability to present these • Handling large amounts of data • Understanding of the challenges involved in theory and model development, and the ability to discuss these • Knowledge of the most important statistical methods used in empirical economic research. Critical assessment of their potential applications for research questions • Working with complex databases such as Thomson Reuters Datastream or Eikon • Presentation of research results in accordance with industry standards and in a form appropriate to the target group, e.g. dashboards • Use of business intelligence analytics in finance and controlling

4	**Teaching and learning methods** Lecture (L), (laboratory) exercise (E) involving databases Media used: Communication media (including electronic learning platforms), presentation media (including projectors, whiteboards, flipcharts, smartboards, Metaplan)
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance: 64 hours Self-study: 116 hours
6	**Examination format, duration and requirements** Examination in the form of a term paper (contribution to the module grade: 80%) and a presentation (20 minutes) of the results of exercises (contribution to the module grade: 20%). The examination can be retaken in the following semester.
7	**Required knowledge** None
8	**Recommended knowledge** Economic statistics, economic mathematics, economics
9	**Duration, schedule and frequency of the course** The module comprises one semester with 4 SWS and is offered every semester.
10	**Usability of the module** • The contents of the module are particularly applicable to the following degree programmes: • Master of Science in Finance, Accounting, Controlling & Taxation (FACT) • Master of Science in Digital Business Development • Master of Science in International Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing
11	**Literature** • Bleymüller / Gehlert / Gülicher: Statistics for Economists, Vahlen • Chen, Y. / Lin, Z.: Business Intelligence Capabilities and Firm Performance: A Study in China, International Journal of Information Management 57(3):102232.DOI:10.1016/j.ijinfomgt.2020.102232 • Duller: Introduction to Statistics with Excel and SPSS, Physica • Freiknecht: Big Data in Practice: Solutions with Hadoop, Hbase, Hive, Hanser • Hartung / Elpert: Multivariate Statistics, Oldenbourg • Kuß / Eisend: Market Research, Gabler • Murray: Tableau Your Data!: Fast and Easy, Wiley • Schmarzo, B., / Borne, K.: The Economics of Data, Analytics, and Digital Transformation, Packt Publishing • Sesink: Introduction to Academic Writing, latest edition, Oldenbourg • Stephenson, D.: Big Data Demystified: How to Use Big Data, Data Science and AI to Make Better Business Decisions and Gain Competitive Advantage, Pearson. • Stiefl: Economic Statistics, Oldenbourg

	• Stoetzer, M.-W. (2016): Regression Analysis in Empirical Economic and Social Research Volume 1, A Non-Mathematical Introduction with SPSS and Stata, Springer Verlag. • Stoetzer, M.-W. (2020): Regression Analysis in Empirical Economic and Social Research Volume 2, Complex Procedures, Springer Verlag. • Sweigart: Automating Routine Tasks with Python, dpunkt. • Wiley, M. / Wiley J.F. (2019): Advanced R Statistical Programming and Data Models, Analysis, Machine Learning, and Visualisation. Apress. • Wollschläger: R Kompakt, Springer • Walker, R.: From big data to big profits: Success with Data and Analytics. Oxford University Press.

1	**Module name** Business Development and Entrepreneurship
1.	**Module abbreviation** 215
1.2	**Type** Compulsory
1.3	**Course** Business Development and Entrepreneurship
1.4	**Semester** 1
1.5	**Module coordinator** Dr Matthias Vieth
1.6	**Additional lecturers** Lecturers will be announced in the course catalogue for the respective lecture period.
1.7	**Degree programme level** Master
1.	**Language of instruction** German/English
2	**Content** Students learn about the most important business concepts and theories and how these can be applied to real management situations, both for start-ups and for business development within existing companies. The course therefore focuses on the following areas: • conducting a solid and insightful market and competitive analysis • Tools for describing the innovation and value of a business concept (incubators and accelerators) and business development plans • Pitching a business idea and creating a business plan (start-up) and a business development concept (within an existing company) • Financing start-ups (business angels, venture capital) • the well-founded development and description of a business strategy (including sales, operations, etc.), assessment and evaluation of business plans and business development concepts Understanding the similarities and differences between start-ups and business development in existing companies Supplementary learning content may include the following: Business canvas methodology, design thinking, pitch deck, technology scouting Creativity methods and tools for creating innovative and value-adding products/services, such as TRIZ. Walt Disney, 635 method, brain wiring Opportunity to present results in the Innovators' Space at h_da and collaborate with external start-up centres

3	**Objectives** Knowledge Students are able to • formulate "vision, mission and goals" as strategic guidelines Skills: Students will be able to • Identify your company's relevant market, focusing on the value chain, core competencies and the use of tools to identify your company's competitive advantage. Competencies: Students will be able to • conduct an external analysis, including Porter's Five Forces model, PESTLE, scenario and strategic group analysis • present the results of the above analyses in your business plan, using tools such as portfolio analysis and SWOT analysis • ensure that primary and secondary market research are interwoven and embedded in a balanced storyline in your business plan • explain how investors such as private equity firms and other financial institutions evaluate business plans and what they look for • Pitching the start-up idea, both verbally and in writing • Demonstrate skills in solving case studies and analysing new start-up cases for their probability of success. • Successfully support C-level management/investment committees and draw up an implementation plan
4	**Teaching and learning methods** Lecture (L), exercise (E) Media used: Communication media (including electronic learning platforms), presentation media (including projectors, whiteboards, flipcharts, smartboards, Metaplan)
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance: 64 hours Self-study: 116 hours
6	**Examination format, duration and requirements** Examination in the form of a term paper. The examination can be retaken in the following semester.
7	**Required knowledge** None
8	**Recommended knowledge** Organisation and management
9	**Duration, schedule and frequency of the course** The module covers one semester with 4 SWS and is offered every semester

10	**Usability of the module** • The contents of the module are particularly suitable for the following degree programmes: • Master of Science in Finance, Accounting, Controlling & Taxation (FACT) • Master of Science in Digital Business Development • Master of Science in International Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing
11	**Literature** • Friend / Zehle: The Economist Guide to Business Planning • Abrams: Successful Business Plan: Secrets & Strategies • Wilhelms / Li: For Managers and Entrepreneurs: Strategic Management • Rothaermel: Strategic Management: Concepts • Fink / Vogelsang / Baumann: Starting a Business and Business Plan – A Guide for Successful Start-ups • Dorf / Blank: Handbook for Start-ups

1	**Module name** Research and Projects in Digital Business Development
1.1	**Module code** 233
1.2	**Type** Compulsory
1.3	**Course** Research and Projects in Digital Business Development
1.4	**Semester** 3
1.5	**Module coordinator** Dr Benjamin Engelstätter
1.6	**Additional teaching staff** Lecturers will be announced in the course catalogue for the respective lecture period.
1.7	**Degree programme level** Master
1.	**Language of instruction** German/English
2	**Content** The content of this elective module is based on current issues in the field of digital business development and can be supplemented with interdisciplinary content. The elective module can be offered in collaboration with a partner from industry. The elective module can be designed as an academic seminar or a practice-oriented project.
3	**Objectives** Knowledge: Students can describe the methods and requirements for writing an academic paper. Students are familiar with basic project management techniques and can apply them. They are also able to assess the quality of sources and information and interpret the strategic, tactical and operational impact of information systems relevant to the issue at hand on corporate management and its sub-disciplines. Skills: Students are able to develop scientific insights by addressing current issues and derive recommendations for action for the target groups involved. Students can contribute to the planning, management and control of projects in the field of digital business development and take on corresponding management tasks in order to solve business problems, taking into account the targeted integration of information systems. Competencies: Students independently develop solutions and strategies for solving the given problem, such as the design of digital business models or other digital innovations.

4	**Teaching and learning formats** Seminar (Sem) or project (Pro) Media used: Moodle learning platform with its didactic support tools, electronic script; additional tools may be used depending on the topic
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance times: 64 hours Self-study: 116 hours
6	**Examination format, duration and requirements** • The examination consists of a seminar paper. The examination may be supplemented by up to two ungraded preliminary examinations. • The examination may be taken in groups. In this case, the maximum group size is three. • Repeat opportunities for the preliminary examination(s) and examination(s) are available in the following year.
7	**Required knowledge** None
8	**Recommended knowledge** Fundamentals of scientific work and project management at bachelor's level, fundamentals of business informatics and digital economics at bachelor's level
9	**Duration, schedule and frequency of the course** The module comprises one semester with 4 SWS and is offered once a year in the winter semester.
10	**Usability of the module** The contents of the module are particularly suitable for the following degree programmes: • Master of Science in Finance, Accounting, Controlling & Taxation (FACT) • Master of Science in International Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing • Master of Science in Digital Business Development
11	**Literature** Basic literature for each type of teaching: • Seminar: Hiller, J. (2017): Working Techniques and Academic Writing: Textbook with Online Learning Environment, Kiehl Friedrich Verlag • The Project Management Institute (2021): The Project Management and A Guide to the Project Management Body of Knowledge (PMBOK Guide), Newton Square, 7th Edition Further specific topic-related literature will be announced at the beginning of the course. The following scientific journals are relevant, for example: *Business & Information Systems Engineering*, *HMD*, *Information Systems Research* or *Management Information Systems Quarterly*.

1	**Module name** Master's Thesis
1	**Module abbreviation** 241
1.2	**Type** Compulsory
1.3	**Course** Master's thesis
1.4	**Semester** 4
1.5	**Module coordinator** Dr Omid Tafreschi
1.6	**Additional teaching staff** All full-time lecturers in the department or on the degree programme
1.7	**Degree programme level** Master
1.8	**Language of instruction** German/English
2	**Content** The Master's thesis module consists of a Master's thesis and a colloquium. It involves the independent preparation of a paper on a specified topic from the field of finance, accounting, controlling & taxation (FACT), digital business development, international sustainable supply chain management or digital, social and sustainable marketing using scientific methods, and its presentation.
3	**Objectives** Knowledge Students are able to explain the requirements of academic work and describe challenges (e.g. literature research and source management, compliance with formal requirements, structuring of topics, comprehensible, balanced and error-free formulation) as well as efficient solutions. Skills: Students are able to work independently and practically on a problem in the field of business administration using scientific methods, linking and deepening specific areas of knowledge within the context of the problem and presenting them in a coherent manner. Students are also able to present the findings gained from writing their Master's thesis in a comprehensible manner tailored to the target audience. Based on a problem, they can develop a specific objective for their thesis and, by applying scientific methods, produce a comprehensible, balanced and error-free result. developing knowledge that leads to new insights.

	Competencies: Students are able to evaluate the insights gained in the course of writing their Master's thesis and draw conclusions from them.
4	**Teaching and learning methods** Final thesis Media used: Communication media (including email), presentation media for presenting the activities carried out (including projector, whiteboard, flipchart, smartboard, Metaplan)
5	**Workload and credit points** Total workload of 900 hours for 30 credit points (CP) for the preparation of the Master's thesis and for the processing, presentation and presentation of the results.
6	**Examination format, duration and requirements** Examination in the form of a Master's thesis and colloquium. The maximum time allowed for the Master's thesis is 24 weeks. The colloquium begins with a presentation by the candidate lasting at least 15 and at most 30 minutes. The total duration of the colloquium is at least 30 and at most 60 minutes. The examination can be retaken in the following semester. The requirements for participation in the module and the examination are set out in § 12 BBPO.
7	**Required knowledge** The requirements for participation in the module and the examination are set out in § 12 (4) BBPO.
8	**Recommended knowledge** Depending on the objective of the Master's thesis.
9	**Duration, schedule and frequency** The module covers a period of 6 months and is offered in both the summer and winter semesters.
10	**Usability of the module** The module cannot be used for other degree programmes.
11	**Literature** Depends on the objective of the Master's thesis.

1	**Module name** Modern Approaches in Digital Business Development
1.	**Module ID** 213
1.2	**Type** Elective
1.3	**Lecture** Modern Approaches in Digital Business Development
1.4	**Semester** 1
1.5	**Responsible for module** Dr Benjamin Engelstätter
1.6	**Additional lecturers** Lecturers are announced in the course catalogue for the respective lecture period.
1.7	**Level** Master
1.8	**Language** English
2	**Course content** The content of this elective features late-breaking issues in the field of digital business development, potentially provided in collaboration with an industry partner active in the appropriate field. The elective is offered either scientifically in the form of a seminar or practice-oriented in the form of a project.
3	**Aim of the module (expected learning outcomes and competencies to be acquired)** Expertise: Students understand the core concept of the given late-breaking issue in digital business development and can explain it in detail, focusing on its impact on processes, products and business models. They know basic project management and scientific research techniques and can utilise either of these to carry out the given project. Skills: The students are qualified to work on planning, managing and controlling projects of either scientific or managerial nature and take on management tasks. By utilising modern techniques and methods of strategy development, innovation management and business development, students are able to recommend topic-specific actions for all target groups involved. Competencies: The students independently develop solutions, research areas and strategies to solve the given problem in digital business development, e.g., by shaping, exploring or generating digital business models or other digital innovations.

4	**Course pedagogy** Seminar or project Media used: Moodle learning platform, electronic script and other tools depending on current topic
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance times: 64 hours Self-study: 116 hours
6	**Examination/Grading** • The form of examination is a term paper or presentation (based on the form of the module, see above) representing at least 60% of the grade. If the module is held in cooperation with an industry partner, the cooperation of the participants with the industry partner will also be graded, representing up to 40% of the grade. • The examination can be supplemented by up to five ungraded examination prerequisites. • The examination may be conducted in groups. In this case, the maximum group size is either six (project module, see above) or three (seminar module, see above). • There are opportunities to repeat the examination prerequisite and examination in the following semester.
7	**Required knowledge** None
8	**Recommended knowledge** Basics of scientific work and project management at bachelor's level, basics of information management and digital economics at bachelor's level
9	**Duration, time structure and frequency** The module spans a whole semester, its workload and lecture load equals 4 SWS and the module is held each semester.
10	**Module Application** The contents of the module can be used in particular for the following degree programmes: • Master of Science in Finance, Accounting, Controlling & Taxation (FACT) • Master of Science in International Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing • Master of Science in Digital Business Development
11	**Readings** • Heard, S. B. (2022): The Scientist's Guide to Writing, 2nd Edition: How to Write More Easily and Effectively throughout Your Scientific Career, Princeton University Press, 2nd Edition. • The Project Management Institute (2021): The Project Management and A Guide to the Project Management Body of Knowledge (PMBOK Guide), Newton Square, 7th Edition. Additional specific topic-related literature will be announced at the beginning of the course stemming from scientific journals such as Business & Information Systems Engineering, Information Systems Research and Management Information Systems Quarterly.

1	**Module name** International Economic Relations
1.1	**Module ID** 216
1.2	**Type** Elective
1.3	**Lecture** International Economic Relations
1.4	**Semester** 1
1.5	**Responsible for module** Stefan Puth
1.6	**Further lectures** Lecturers are announced in the course catalogue for the respective reading period.
1.7	**Level** Master
1.8	**Language** English
2	**Course content** Introduction • An overview of the world economy International trade relations • World Trade • International Trade Theory • International Trade Policy • International Factor Movements • World Trade Organisation • Economic Integration International Monetary Relations • Balance of Payments • Foreign Exchange Markets • Exchange Rate Determination • Macroeconomic Policy in an Open Economy • International Monetary System • Exchange Rate Crises

3	**Aim of the module (expected learning outcomes and competencies to be acquired)** The main aim of the module is to learn how to think as an economist, to understand the interactions between countries and economic regions and to identify the economic consequences of globalisation. Knowledge and comprehension: This module covers current developments in the global economy, including international trade, international factor movements, and international finance. The module introduces students to the logic and method of open economy model analysis and considers trade models, commercial policy, and open-economy macroeconomic policies. The module focuses on the institutions of the global economy, regional trade agreements, and discussion of the costs and benefits of such arrangements. Students will be able to explain this knowledge and comprehension. Application: Students are able to apply various strategies of economic development in terms of globalisation, assess the models of international trade, find the effective instruments of international trade policy and regional trade agreements, explain equilibrium in the foreign exchange market, measure the effects of capital flows. Analysis, synthesis and evaluation: Students are able to analyse issues relating to the development of the global economy, to reveal the differences between inter-industry trade and intra-industry trade, and to describe the effects of tariffs and non-tariff barriers to trade, how tariffs protect domestic industries from foreign competition, to understand how changes in the exchange rate affect output and the price level, and to integrate local and global perspectives into a business strategy.
4	**Course pedagogy** Lecture (L), Exercise (E) Media used: Communication media (e.g. electronic learning platforms), presentation media (e.g. digital projector, whiteboard, flip chart, smart board, metaplan)
5	**Workload and credit points** Total hours needed for 6 Credit Points (CP): 180 hours Attendance Times: 64 hours Self-study: 116 hours
6	**Examination/Grading** • Examination in the form of a written examination (can also be taken completely or partially in electronic format) (Duration: 90 minutes) covering the complete content of the course at the end of the module or term paper. • The exact form of examination will be announced at the beginning of the module. • Re-examination possible in every semester.
7	**Required knowledge** None
8	**Recommended knowledge** Introductory Microeconomics, Introductory Macroeconomics, Basics in Mathematics, Statistics
9	**Duration, time structure and frequency** The module spans a whole semester, its workload and lecture load equals 4 SWS and the module is held each semester.

10	**Module application** The contents of the module can be used in particular for the following degree programmes: • Master of Science in Finance, Accounting, Controlling & Taxation (FACT) • Master of Science in International Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing • Master of Science in Digital Business Development
11	**Readings** • Appleyard / Field: International Economics, McGraw-Hill • Baldwin / Wyplosz: The Economics of European Integration, McGraw-Hill • Beugelsdijk: International Economics and Business, Cambridge University Press • Carbaugh: International Economics, Cengage • Copeland: Exchange Rates and International Finance, Pearson • De Grauwe: Economics of Monetary Union, Oxford University Press • Feenstra / Taylor: International Economics, Worth Publishers • Gerber: International Economics, Pearson • Krugman / Obstfeld / Melitz: International Economics: Theory and Policy, Pearson • Pilbeam: International Finance, Bloomsbury Academic • Pugel: International Economics, McGraw-Hill • Reinert: An Introduction to International Economics, Cambridge University Press • Salvatore: International Economics, Wiley • Sawyer/Sprinkle: Applied International Economics, Routledge • Van Marrewijk: International Economics: Theory, Application, and Policy, Oxford University Press

1	**Module name** Digital Finance
1.1	**Module abbreviation** 212
1.2	**Type** Elective
1.3	**Course** Digital Finance
1.4	**Semester** 1
1.5	**Module coordinator** Dr Michaela Kiermeier
1.6	**Additional teaching staff** Lecturers will be announced in the course catalogue for the respective lecture period.
1.7	**Course level** Master
1.	**Language of instruction** German/English
2	**Content** Current developments on capital markets and in the financial services industry: stock markets, bond markets, credits, structured products, financial derivatives, private equity, asset management, fintechs, etc. Introduction to capital market theories, factor models, performance and ESG performance (e.g. SFDR, green bonds, etc.) Current developments in digital finance, e.g.: • Decentralised financial management • Crowd investing/crowdfunding/equity-based funding/private equity, P2P loans for companies, funding via online trading platforms, fintechs, equity financing via P2P platforms, • distributed ledger technology, • Crypto economy, tokenisation, • Digital assets, • Selected aspects of (digital) monetary policy, e.g. digital central bank money • Distributed ledger technology and UN sustainability goals, • Asset management and sustainability, • Artificial intelligence in finance, • Business intelligence in finance, • Current developments

3 Objectives

Knowledge:

- Ability to outline the most important capital market theories and related issues
- Knowledge of new technologies and decentralised financial management
- Knowledge of performance management
- Knowledge of current developments in the field of digital corporate finance
- Knowledge of current technological developments in the field of securities, securities trading and asset management
- Knowledge of current developments and their impact on monetary policy
- Knowledge of new products and trends resulting from artificial intelligence and new technological developments

Skills:

- Application of theoretical principles to solve and deal with current, practical issues in the financial services sector and controlling
- Ability to critically assess financial management instruments and their possible applications
- Ability to assess the impact of technological developments on portfolio and risk management
- Ability to respond competently to current regulatory issues
- Ability to evaluate and implement new technologies (e.g. distributed ledgers, etc.) for use in corporate management, controlling and financial management

Competencies:

- Ability to identify complex issues in portfolio and risk management in corporate management, independently assess practical issues, and identify and apply approaches to solving them
- Implement, execute and monitor modern financial management methods to achieve corporate goals
- Classifying current issues, proposing practical solutions and implementing them
- Presenting facts and research findings in accordance with industry standards

4 Teaching and learning methods

Lecture (L), exercise (E)

Media used: Communication media (including electronic learning platforms), presentation media (including projectors, whiteboards, etc.), e-lectures, surveys, case studies

5 Workload and credit points

Total workload of 180 hours for 6 credit points (CP) Attendance: 64 hours
Self-study: 116 hours

6 Examination format, duration and requirements

Examination in the form of a term paper (contribution to the module grade: 80%) or, alternatively, a written examination (duration 90 minutes, also possible electronically) (contribution to the overall module grade: 80%) and a presentation (20 minutes) of the results of exercises (contribution to the overall module grade: 20%). The exam format will be communicated to students by the examiner in writing or electronically at the beginning of the module.

Repeat opportunities for the examination are available in the following semester.

7	**Required knowledge** None
8	**Recommended knowledge** Economic statistics, economic mathematics, economics, investment and financing, controlling
9	**Duration, time structure and frequency of the course** The module comprises one semester with 4 SWS and is offered every semester.
10	**Usability of the module** The contents of the module are particularly suitable for the following degree programmes: • Master of Science in Digital Business Development • Master of Science in International Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing • Master of Science in Finance, Accounting, Controlling & Taxation (FACT)
11	**Literature** Current literature references at the start of the course on the latest developments • Birrer, T. / Amstutz, D. / Wenger, P.: Praxishandbuch Decentralized Finance, Springer Gabler (current edition) • German Private Equity and Venture Capital Association (BVK): The German Private Equity Market, (current edition) • Dietrich, F. / Kuenster, N. / Louw, L. / Palm, D. (2022): Review of Blockchain-based Tokenisation Solutions For Assets in Supply Chains, in Conference on Production Systems and Logistics, SPSL 2022. • Drescher, D.: Blockchain Basics, Apress. • Elton, E.J. / Gruber, M.J.: Modern Portfolio Theory and Investment Analysis, Wiley John+ Sons (current edition) • Günther, E. / Riethmüller, T.: Introduction to Crowdfunding, Springer Gabler (current edition) • Hull, J.C.: Options, Futures and Other Derivatives, Pearson Studium, (current edition) • Mankiew, N.G.: Macro-Economics, Schäffer-Poeschel Verlag, (current edition) • Shapiro, A.C.: Multinational Financial Management, Wiley or Shapiro, A.C., Moles, P.: International Financial Management, Wiley • Statista: Fintechs (current reports)

1	**Module name** Capital Market Reporting
1.	**Module abbreviation** 232
1.2	**Type** Elective
1.3	**Course** Capital Market Reporting
1.4	**Semester** 3
1.5	**Module coordinator** Dr Karlo Fresl
1.6	**Additional teaching staff** Lecturers will be announced in the course catalogue for the respective lecture period.
1.7	**Course level** Master
1.	**Language of instruction** German/English
2	**Content** This module focuses on the analysis and interpretation of financial reports and other information prepared for international capital markets to meet disclosure requirements. The first part examines the underlying standards of international standard setters with regard to their informational impact and their application by companies in practice. Individual aspects of financial reporting that have a particular impact on capital markets are then analysed, such as profit determination and reporting, the recognition and measurement of assets and liabilities, and other balance sheet issues to which capital market participants pay particular attention. Throughout the module, case studies and exercises are used to discuss the current accounting practices of multinational companies and their impact on capital markets and their individual players. Particular attention is paid to the discretion of reporting companies and the explicit and implicit limits of information and insight. The CMR module is designed to enable students to manage the impact on capital markets and prepare strategic decisions at the highest level for a sustainable career in finance. The CMR module can be a good basis for pursuing a PhD in FACT after completing a master's degree.

3	**Objectives** Knowledge: Students will be able to explain the objectives and purposes of financial reporting standards relevant to international capital markets and assess their significance for international capital markets. They will be able to explain the economic impact of accounting standards and their informational relevance for international capital markets, and explain the specific role that International Financial Reporting Standards (IFRS) play for international capital markets and how these standards are developed. Skills: Students will be able to • classify the objectives and principles of IFRS standards and their significance for the interpretation of individual IFRSs, • analyse a company's external reporting with regard to capital market effects, • recognise topic-specific features of individual balance sheet items or balance sheet issues and assess their significance for capital markets, and • Recognise and classify implicit and explicit information boundaries in financial reporting. Competencies: Students are able to • work on case studies and present solutions both orally and in writing, • support the orientation of a company's financial reporting with regard to capital market effects, and • critically assess the political influence on accounting standards.
4	**Teaching and learning methods** Lecture (L), exercise (E) and group work with presentation Media used: Communication media (including electronic learning platforms), presentation media (including projectors, whiteboards, flipcharts, smartboards, Metaplan)
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance times: 64 hours Self-study: 116 hours
6	**Examination format, duration and requirements** • Examination in the form of a written exam (also possible electronically), duration: 60-120 minutes • The examination may be retaken in the following year.
7	**Required knowledge** None
8	**Recommended knowledge** Individual accounting according to HGB and IFRS at bachelor's level, good English skills, controlling, international finance, investment and financing

9	**Duration, time structure and frequency of the course** The module comprises one semester with 4 SWS and is offered once a year in the winter semester.
10	**Usability of the module** The contents of the module are particularly suitable for the following degree programmes: • Master of Science in Digital Business Development • Master of Science in International Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing • Master of Science in Finance, Accounting, Controlling & Taxation (FACT)
11	**Literature** • Picker et al.: Applying International Financial Reporting Standards, Wiley • Walton / Aerts: Global Financial Accounting and Reporting, Cengage Learning • Coenenberg / Haller / Schultze: Annual Financial Statements and Annual Financial Statement Analysis, Schäffer-Poeschel Verlag, • Zülch / Hendler: Accounting in accordance with IFRS, Wiley • Pellens / Fülbier / Gassen / Sellhorn: International Accounting, Schäffer-Poeschel Verlag • Küting / Weber: Balance Sheet Analysis, Schäffer-Poeschel Verlag • Hommel / Rammelt: IFRS Balance Sheet Analysis Case by Case, Dt. Fachverl., Fachmedien Recht und Wirtschaft

1	**Module name** FACT Term Paper
1.	Module abbreviation 233
1.2	**Type** Elective
1.3	**Course** FACT Term Paper
1.4	**Semester** 3
1.5	**Module coordinator** Dr Fresl, Dr Hensberg, Dr Grisar-Klingert, Dr Kiermeier, Dr Thiele
1.6	**Additional teaching staff** Dr Almeling
1.7	**Degree programme level** Master
1.8	**Language of instruction** German/English
2	**Content** This seminar module focuses on addressing current issues in the field of FACT. On the one hand, this module serves to explore special topics such as sustainability reporting, advanced digital finance, governance & internal control, accounting law, digital controlling, sustainable entrepreneurship, applied business intelligence analytics in finance & controlling, etc. On the other hand, the seminar module teaches the special methods and formal requirements for writing academic papers in the field of FACT.
3	**Objectives** Knowledge Students are able to explain the objectives and purposes of the chosen seminar topic and apply their in-depth knowledge of financial management, accounting, controlling and taxation. Skills: Students will be able to • classify the objectives and principles of the seminar topics according to their relevance to practice and develop practice-oriented solutions to problems in the CFO field of activity • manage financial and management-related data • reconcile economically successful business models with social, environmental and governance aspects

	Competencies: Students are able to • Independently handle complex tasks in financial management, accounting, controlling and taxation • Establish FACT systems taking into account developments in digitalisation, internationalisation and sustainability • pursue a doctorate in the field of FACT following completion of their Master's degree.
4	**Teaching and learning methods** Seminar paper with presentation Media used: Communication media (including electronic learning platforms), presentation media (including projectors, whiteboards, flipcharts, smartboards, Metaplan)
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance: 64 hours Self-study: 116 hours
6	**Examination format, duration and requirements** • Examination in the form of a term paper, supplemented by a presentation • The term paper accounts for 70% of the grade and the presentation for 30%, whereby passing the term paper (grade of 4.0 or higher) is a necessary prerequisite for grading and passing the presentation • The examination can be retaken in the following year.
7	**Required knowledge** None
8	**Recommended knowledge** Successful completion of the FACT modules from semesters 1 and 2
9	**Duration, schedule and frequency of the course** The module comprises one semester with 4 SWS and is offered once a year in the winter semester.
10	**Usability of the module** The contents of the module are particularly suitable for the following degree programmes: • Master of Science in Digital Business Development • Master of Science in International Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing • Master of Science in Finance, Accounting, Controlling & Taxation (FACT)
11	**Literature** Will be announced at the beginning of the lecture

1	**Module name** Seminar module on current marketing topics
1	**Module code** 233
1.2	**Type** Elective
1.3	**Course** Seminar module on current marketing topics
1.4	**Semester** 3
1.5	**Module coordinator** Dr Matthias Neu
1.6	**Additional teaching staff** Lecturers will be announced in the course catalogue for the respective lecture period.
1.7	**Course level** Master
1.	**Language of instruction** German/English
2	**Content** The content of the seminar module is the independent, in-depth academic examination of current topics in the field of marketing. The seminar paper is intended to prepare students for the writing of a Master's thesis. Each student is responsible for their own seminar paper. The structure and content of the paper should be agreed in close consultation with the supervisor.
3	**Objectives** Knowledge • Students have in-depth, up-to-date knowledge of marketing and are able to demonstrate this knowledge. • Students are familiar with the literature research and management methods required for academic work, as well as the formal requirements for writing an academic paper, and can describe these. • Students develop an overview of the topic to be worked on and deepen their understanding of the content. Skills: • Students are able to write an academic seminar paper independently and with the help of relevant sources. • Students can develop academic insights by addressing current issues. • Students present their findings in a manner appropriate to the target audience.

	Competencies: • Students are able to meet the requirements of academic work. • Students are able to independently develop solutions and strategies for solving the given problem and to present these. • Students are able to evaluate texts from other sources with regard to their compliance with the standards of academic writing.
4	**Teaching and learning methods** Seminar (Sem) Media used: e.g. communication media, presentation media (including projector, whiteboard, flipchart)
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance times: 64 hours Self-study: 116 hours
6	**Examination format, duration and requirements** • Examination usually in the form of a written exam (also possible electronically) (duration: 60 to 90 minutes) or alternatively a written paper (length: 15-30 pages) with presentation (duration: 15-30 minutes) in individual or group work. • Preliminary examination work – also in group work – is also possible and may be graded or ungraded. In the case of graded preliminary examination work, the share of the module grade may not exceed 30%. • Duration in accordance with § 12 ABPO • Content: the entire learning content of the module • Opportunities to retake the examination and, if applicable, the preliminary examination are available in the following year. • If preliminary examination requirements are stipulated, passing the preliminary examination is a prerequisite for participation in the examination.
7	**Required knowledge** None
8	**Recommended knowledge** None
9	**Duration, time structure and frequency of the course** The module comprises one semester with 4 SWS and is offered once a year in the winter semester.
10	**Usability of the module** The contents of the module are particularly suitable for the following degree programmes: • Master of Science in Finance, Accounting, Controlling & Taxation (FACT) • Master of Science in Digital Business Development • Master of Science in Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing

11	**Literature** • Beinke et al: The Seminar Paper, utb • Book: Presenting Effectively: The New Handbook for Authentic Presentations, Rheinwerk • Homburg: Marketing Management: Strategy – Instruments – Implementation – Corporate Management, Springer • Kornmeier: Scientific Writing Made Easy: For Bachelor's and Master's Theses, utb • Renz: The basics of presentations, Springer Further literature recommendations and current research articles will be provided in the course and linked on the learning platform.

1	**Module name** Sustainable Supply Chain Management
1.	**Module code** 211
1.2	**Type** Elective
1.3	**Course** Sustainable Supply Chain Management
1.4	**Semester** 1
1.5	**Module coordinator** Dr Dirk Wollenweber
1.6	**Additional teaching staff** Lecturers will be announced in the course catalogue for the respective lecture period.
1.7	**Course level** Master
1.	**Language of instruction** German/English
2	**Content** The course covers concepts, activities and techniques related to the design, planning and execution of sustainable supply chains. This also includes new technologies and trends in supply chain management. Topics covered include: • Introduction to sustainable supply chain management • Objectives and development of supply chain management • Competition and supply chain management strategies and customer requirements • Product life cycle management in the supply chain. • Strategic performance factors in the supply chain (inventory, transport, procurement, price, facilities, information, etc.) • Supply chain processes and concepts (push, pull, postponement, speculation, etc.) • Procurement concepts & make or buy • Network design • Forecasting and demand planning in supply chains • Inventory management • Sustainable SCM & carbon footprint accounting • Trends in the circular supply chain • Technology in supply chains, e.g. blockchains

3	**Objectives** Knowledge Upon completion of this module, students will be able to describe the relevant areas of sustainable supply chain management. They will be able to present the most important principles of supply chain management, thereby improving their research and decision-making skills. They will understand the most important approaches to the design, planning and execution of supply chains and will be able to provide an overview of the latest technologies and trends. Skills: Upon completion of this module, students will be able to design a concept for a sustainable supply chain for a specific company, product and region. Competencies: After completing this module, students will be aware of the increasing importance of sustainability and the conflict of objectives between economic optimisation and sustainable improvements in supply chains. They will know how to integrate practical approaches into sustainable supply chains and will be able to assess the potential benefits and risks of new technologies in supply chains.
4	**Teaching and learning methods** Lectures with discussions, group work, case studies, exercises, presentations, excursions Media used: E-learning platform (Moodle), projector, web conferences (Zoom), PowerPoint presentations, video and audio material
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance: 64 hours Self-study: 116 hours
6	**Examination format, duration and requirements** Examination in the form of a written exam (including e-exam) lasting 60–90 minutes or a presentation – including group work – lasting 15–45 minutes. Preliminary examination work, e.g. completion of exercises in accordance with the provisions of §10 (4), is possible. The examination format and, if applicable, the form of the preliminary examination requirement will be determined by the responsible teacher at the beginning of the semester. Opportunities to retake the examination and, if applicable, the preliminary examination are available in the following semester.
7	**Required knowledge** None
8	**Recommended knowledge** Basic and advanced modules in logistics at bachelor's level Closely linked to operations management, it is recommended – but not mandatory – to complete both lectures in parallel

9	**Duration, schedule and frequency of the course** The module comprises one semester with 4 SWS and is offered every semester.
10	**Usability of the module** Operations Management, all modules related to logistics The contents of the module are particularly suitable for the following degree programmes: • Master of Science in Finance, Accounting, Controlling & Taxation (FACT) • Master of Science in Digital Business Development • Master of Science in Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing
11	**Literature** • Cetinkaya, Balkan / Ewer, Graham / Cuthbertson, Richard: Sustainable Supply Chain Management. Springer Verlag • Bouchery, Y. / Corbett, C.J. / Fransoo, J.C. / Tan, T.: Sustainable Supply Chains: A Research-Based Textbook on Operations and Strategy. Springer Verlag • Sunil Chopra / Peter Meindl: Supply Chain Management. Strategy, Planning, and Operation. Pearson • Cecil C. Bozarth: Introduction to Operations and Supply Chain Management. Pearson • Heizer, J.; Render, B.: Operations Management. Pearson • Evans, J.R. / Collier, D.A.: Operations Management. An Integrated Goods and Services Approach. Thomson/South-Western • Evans, J.R.: Production / Operations Management. West Publishing

1	**Module name** Supply Chain and Logistics Project
1.	**Module code** 233
1.	**Type** Elective
1.3	**Course** Supply Chain and Logistics Project
1.4	**Semester** 3
1.5	**Module coordinator** Dr Johanna Bucerius
1.6	**Additional teaching staff** Lecturers will be announced in the course catalogue for the respective lecture period.
1.7	**Degree programme level** Master
1.	**Language of instruction** German/English
2	**Content** In this module, students deepen their previously acquired knowledge of supply chain management and logistics by solving practical problems. The aim of this module is to apply SC and logistics concepts as well as project management methods to real problems in companies or institutions or conceptual case studies. The project can be carried out in collaboration with a company or institution. The cases must be solved according to scientific standards and usually contain empirical and theoretical components. The general structure of this project course is as follows: • Submission of study project topics and formation of student groups • Consultations during project development • Report on the progress of the study project development (delegation of responsibilities, project goals, objectives) • Report on the progress of the study project development (analysis of situations, problem definition, solutions) • Report on the progress of the study project development (evaluation and assessment of solutions, final recommendation) • Submission of the study project, preparation of the presentation • Defence of the study project Project topics will be communicated to students at the beginning of the semester.

3	**Objectives** Knowledge Upon completion of the course, students will understand logistical concepts and solutions and know how to adapt these solutions depending on the respective cause of the problem. Students will learn about different logistics concepts and economic models and how to adapt logistics models depending on the cause of the problem. Through application-oriented project work, students will be able to gather relevant information, evaluate situations and structure problems. Skills Application-oriented project work enables students to lead, manage and take responsibility together with others. Students acquire important skills for their future careers in the form of decision-making, organisational, combinatorial and conceptual abilities, as well as flexibility. Working and organising in a team strengthens social skills. Students must work together with their fellow students to solve the tasks. Competencies Students use the logistics knowledge they have acquired during their studies to carry out practical applications themselves. They are able to reflect on their own role in the team, assume this role and drive decision-making processes forward. This enables them to apply their practical and scientific knowledge. Graduates can independently plan and implement projects that are methodically supported at management level and act as consultants, project managers or executives.
4	**Teaching and learning methods** In-class lectures, discussions, group work, case studies, presentations, excursions Media used: E-learning platform (Moodle), web conferences (Zoom), projector, PowerPoint presentations, video and audio material
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance: 64 hours Self-study: 116 hours
6	**Examination format, duration and requirements** Examination in the form of a written exam (including e-exam) lasting 60–90 minutes or a presentation in combination with a term paper (also possible as group work). Preliminary examination requirements, e.g. completion of exercises in accordance with the provisions of §10 (4), are possible. The examination format and, if applicable, the form of the examination prerequisite will be determined by the responsible teacher at the beginning of the semester. Opportunities to retake the examination and, if applicable, the preliminary examination are available in the following year.
7	**Required knowledge** None
8	**Recommended knowledge** Basic and advanced modules in logistics at bachelor's level
9	**Duration, schedule and frequency of the course** The module comprises one semester with 4 SWS and is offered once a year in the winter semester.

10	**Usability of the module** The contents of the module are particularly suitable for the following degree programmes: • Master of Science in Finance, Accounting, Controlling & Taxation (FACT) • Master of Science in Digital Business Development • Master of Science in Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing
11	**Literature** The literature depends on the respective project and will be announced at the beginning of the semester.

1	**Module name** Global Logistics and Transportation
1.1	**Module ID** 213
1.2	**Type** Mandatory
1.3	**Lecture** Global Logistics and Transportation
1.4	**Semester** 1
1.5	**Responsible for module** Dr Johanna Bucerius
1.6	**Additional lecturers** Lecturers are announced in the course catalogue for the respective lecture period.
1.7	**Level** Master
1.8	**Language** English
2	**Course content** This module covers key concepts and theories within transport economics, examining the allocation of resources, pricing mechanisms, carbon footprint and market structures in the transport sector. Topics covered are: Introduction to Transport and Economics Transport and Development The Demand for Transport & Volume Forecasting The direct and external costs of transport, competition and time factor Mode of transport: air Mode of transport: sea Mode of transport: rail Mode of transport: road Sustainable modes of transport and last mile delivery solutions Logistics service providers & Specifics and peculiarities of freight forwarder operations. Transport networks & Intermediary transport activities. Methods for determining the location of distribution centres.
3	**Aim of the module (expected learning outcomes and competencies to be acquired)** Knowledge Through a blend of theoretical frameworks, case studies, and practical exercises, students will develop the analytical skills and strategic mindset necessary to navigate the complexities of global logistics and transportation. Skills After completion of this module, students are able to apply their knowledge to practical case studies in the area of global and multimodal transportation networks.

	Expertise Having followed this module, students know how to conceptualise and evaluate transport concepts in global contexts. They can adapt abstract theoretical models to real-life decision-making processes. Emphasis will be placed on critical thinking, problem-solving, and decision-making in real-world scenarios.
4	**Course pedagogy** In-class lectures, discussions, group work, case studies, exercises, presentations, excursions Media used: E-learning platform (Moodle), web conferences (Zoom), projector, PowerPoint presentations, video and audio materials
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance time: 64 hours Self-study: 116 hours
6	**Examination/grading** Examination in the form of a written examination (also e-examination) of 60 - 90 minutes or an oral examination/presentation of 15 - 45 minutes. Pre-examination work, e.g. completion of exercises in accordance with the provisions under §10 Para. 4, is possible. The form of the examination and, if applicable, the form of the preliminary examination will be determined by the responsible teacher at the beginning of the semester. It is possible to repeat the examination and, if applicable, the preliminary examination in the following semester.
7	**Required knowledge** None
8	**Recommended knowledge** Basic and specialisation modules in logistics at Bachelor level
9	**Duration, time structure and frequency** The module spans a whole semester, its work and lecture load equals 4 SWS and the module is held each semester.
10	**Module Application** Operations Management, all logistics-related modules The contents of the module can be used in particular for the following degree programmes: • Master of Science in Digital Business Development • Master of Science in Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing • Master of Science in Finance, Accounting, Controlling & Taxation (FACT)

11	**Readings** • Button: Transport Economics, Edward Elgar Publishing • Chopra/Meindl: Supply Chain Management. Strategy, Planning, and Operation, Pearson • Dorsch: Transport Economics, utb • Goldsby: The Definitive Guide to Transportation: Principles, Strategies, and Decisions for the Effective Flow of Goods and Services, Pearson • Sinha: Global Supply Chains and Multimodal Logistics, IGI Global, Hershey

1	**Module name** International FACT
1	**Module ID** 213
1.2	**Type** Compulsory elective subject
1.3	**Lecture** International FACT
1.4	**Semester** 1
1.5	**Responsible for module** Dr. Michaela Kiermeier
1.6	**Additional lecturers** Lecturers are announced in the course catalogue for the respective lecture period.
1.7	**Level** Master
1.8	**Language** English
2	**Course content** The module covers current topics in the fields of International FACT and includes working in interdisciplinary and/or international teams with emphasis on applied questions. The module can be offered as Virtual Exchange with cooperating universities from Eut+ and/or international cooperating partners Topics may include: • Quantitative analysis of ESG-related data and development of a respective management information system Artificial intelligence and its use in asset management and finance • Tokenisation and Digital Assets • Sustainable Entrepreneurship • Business and Tax Law in Practice • Digital Controlling • Sustainability Accounting

3	**Aim of the module (expected learning outcomes and competencies to be acquired)** Knowledge: • Ability to describe current challenges in the fields of International FACT • Ability to evaluate and apply diverse solution mechanisms while being in an international team to solve complex, current challenges in the fields of FACT • Ability to solve technical difficulties to interact and communicate efficiently online • Develop and name knowledge about different cultures • Develop and try out familiarity with working in international teams • Acquire and apply knowledge and tools to solve business problems in a global context • Start-up management (including current topics with regard to, for example, sustainable key performance indicators) • Ability to explain ESG ratings and ESG strategies • Ability to illustrate taxation principles and regulations applicable to businesses. • Ability to explain the role of International Financial Reporting Standards for international businesses • Awareness of and ability to name legal and tax considerations in various business contexts. • Ability to explain the aspects of digitalisation in the controlling process. E.G. Skills: • Adaptation and application of a deep understanding of cultural differences in the process of finding globally oriented solutions for current topics in the fields of FACT • Taking informed action to achieve management goals while working in international teams • Develop familiarity with analysing financial data with reference to ESG in an international context • Develop familiarity with data visualisation • Develop skills to present empirical results • Develop business plans • Use of digital capital raising • Effective communication skills for conveying legal and tax advice to stakeholders • Solve controlling problems applying digital tools. E.g. Competencies: • Application of knowledge to address contemporary challenges in FACT using interdisciplinary and culturally diverse perspectives • Apply best practice approaches and communicate skilfully in international teams • Develop skills to manage conflicts • Conduct global negotiations • Sustainable entrepreneurship • Increase stakeholder value sustainably • Critical thinking skills for assessing legal and tax implications in complex business situations • Guide enterprises through digital transformation with digital controlling
4	**Course pedagogy** Lectures, case studies, A-, synchronous online/hybrid/in-person international and intercultural communication
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance time 64 hours and self-study 116 hours.

6	**Examination/grading** • Examination in the form of a written examination (also possible electronically) (duration: 60 to 90 minutes) or alternatively a written paper with presentation in group work. The written paper and presentation may also include working on case studies. • Preliminary examinations – also in group work – are also possible and can be graded or ungraded. In the case of graded preliminary examination work, the proportion of the module grade may not exceed 30%. • If preliminary examination work is required, passing the preliminary examination work is a prerequisite for participation in the examination. • The form of the examination and, if applicable, the form of the preliminary examination will be determined by the responsible teacher at the beginning of the semester. • It is possible to repeat the examination and, if applicable, the preliminary examination in the following semester.
7	**Required knowledge** None
8	**Recommended knowledge** Foundations in finance, accounting, controlling and taxes
9	**Duration, time structure and frequency** The module spans a whole semester, its workload and lecture load equals 4 SWS and the module is held each semester.
10	**Module Application** • Solving complex tasks in financial management, asset management, sustainable corporate management • Consideration of capital market information in management decisions • Sustainable capital market investments • Compliance • Applying new technologies in the field of fintech and achieving UN sustainability goals • Following your master's degree, pursue a doctorate in the field of digital sustainable finance. • Strategy development taking into account internationality and sustainability • Sustainable Entrepreneurship The contents of the module can be used in particular for the following degree programmes: • Master of Science in Digital Business Development • Master of Science in International Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing • Master of Science in Finance, Accounting, Controlling & Taxation (FACT)
11	**Readings** • Ardia, D. / Bluteau, K. / Boudt, K. / Inghelbrecht, K. (2020): Climate change concerns and the performance of green versus brown stocks. Journal of Banking & Finance, 113, 1-14. doi: 10.1016/j.jbankfin.2020.105758 • Dietrich, F. / Kuenster, N. / Louw, L. / Palm, D. (2022): Review of Blockchain-based Tokenisation Solutions for Assets in Supply Chains, in Conference on Production Systems and Logistics, SPSL 2022. • Drescher, D.: Blockchain Basics, Apress. • Görgen, S. / Jacob, M. / Schiereck, D. (2020): Carbon risk and equity prices: Empirical evidence from a Brown-Green scoring system. Journal of Business Finance & Accounting, 47(1-2), 245-282. doi: 10.1111/jbfa.12452 • Pukthuanthong, K. / Roll, R. / Subrahmanyam, A. (2019): A common factor in liquidity and volatility. Review of Financial Studies, 32(5), 1832-1878. doi:10.1093/rfs/hhy125

1	**Module name** AI Marketing
1.1	**Module ID** 213
1.2	**Type** Compulsory elective subject
1.3	**Lecture** AI Marketing
1.4	**Semester** 1
1.5	**Responsible for module** Dr Tobias Maiberger
1.6	**Additional lecturers** Lecturers are announced in the course catalogue for the respective lecture period.
1.7	**Level** Master
1.8	**Language** English
2	**Course content** Fundamentals of AI in Marketing: • Types of AI • Technologies • Methods Analysis with AI in Marketing: • Machine learning • Deep learning • Generative AI Applications of AI in Marketing: • Marketing Strategy • Marketing Planning • Marketing Actions (4 Ps) • Industry-Specific Approaches Impact of AI in Marketing: • Opportunities of AI • Challenges of AI • Critical Reflection on AI (e.g., AI Hallucination)

3	**Aim of the module (expected learning outcomes and competencies to be acquired)** Knowledge: • Students understand the fundamentals of AI in marketing and can explain them. • Students have an overview of important applications of AI in marketing and can outline them. • Students possess knowledge of useful analyses with AI in marketing. • Students gain an overview of the impact of AI on consumers, companies and society. Skills: • Students can assess, plan, and choose applications of AI in marketing. • Students can select and plan analyses in marketing using AI. • Students are capable of considering and outlining the consequences and impacts of AI in the marketing context. Competencies: • Students master AI applications in marketing and are able to integrate, implement, and monitor AI. • Students can conduct marketing-relevant analyses using AI. • Students can select, use, and interpret current programmes/software (e.g., ChatGPT) to solve marketing-specific problems. • Students can evaluate the opportunities and risks of AI in marketing depending on the situation and adjust accordingly.
4	**Course pedagogy** Lecture (L), (Lab) exercise (E) Media used: e.g., communication media (including learning platform), presentation media (including projector, whiteboard, flipchart), statistical programmes, programming languages, if applicable, computer lab
5	**Workload and credit points** Total workload of 180 hours for 6 credit points (CP) Attendance times: 64 hours Self-study: 116 hours
6	**Examination / Grading** • Examination in the form of a written examination (also possible electronically) (duration: 60 to 90 minutes) or alternatively a written paper (length: 15-30 pages) with presentation (duration: 15-30 minutes) in group work. • Preliminary examinations – also in group work – are also possible and can be graded or ungraded. In the case of graded preliminary examination work, the proportion of the module grade may not exceed 30%. • It is possible to repeat the examination and, if applicable, the preliminary examination in the following semester. • If preliminary examination work is required, passing the preliminary examination work is a prerequisite for participation in the examination.
7	**Required knowledge** None

8	**Recommended knowledge** None
9	**Duration, time structure and frequency** The module spans a whole semester, its workload and lecture load equals 4 SWS and the module is held each semester.
10	**Module application** The contents of the module can be used in particular for the following degree programmes: • Master of Science in Finance, Accounting, Controlling & Taxation (FACT) • Master of Science in Digital Business Development • Master of Science in Sustainable Supply Chain Management • Master of Science in Digital, Social and Sustainable Marketing
11	**Readings** • Chan/Hogaboam, Cao: Applied Artificial Intelligence in Business, Springer. • Haleem/Javaid/Qadri/Singh/Suman: Artificial intelligence (AI) applications for marketing: A literature-based study, International Journal of Intelligent Networks. • Huang/Rust: A strategic framework for artificial intelligence in marketing, Journal of the Academy of Marketing Science. • Najafov: ChatGPT for Marketing. Learn Practical Applications of ChatGPT for Marketing, Apress. • Teoh/Goh: Artificial Intelligence in Business Management, Springer. Further literature recommendations and current research articles will be given in the course and linked on the learning platform.