



## **Module Guide**

## Master Business Management (M.Sc.)

**Green Energy and Climate Finance** 

2024



Module	Title	СР	Exam
1	Business Environments	5	WA
2	Business Processes, Projects and IT	5	Р
3	People and Organisations	5	А
4	Principles of Finance and Accounting	5	WE
5	Personal and Leadership Development	7	А
6	Marketing and Innovation	5	CE
7	Strategy and Entrepreneurship	5	WA
8	Financial Modeling of Green Energy Products		А
9	Due Diligence in Green Energy Projects		WA
10	International Climate Finance		А
11	International Corporate Finance and Investment		CE
12	Elective Modules**, e.g. (choose 1)* a) Sustainability & Digital Finance b) Performance & Risk Management in the Digital Era	6	CE
13	c) Research Methods	5	А
	Master's Thesis		
	• Thesis	15	
	Oral Examination	5	
	Total	90	

## Curriculum

Leger	Legend			
А	Assignment marked 'pass' or 'fail'	CE	Combined Examination	
WA	Written Assignment	WE	Written Examination	
Р	Portfolio	CP	Credit Points	
*	Subject to change	**	Electives take place when 7 or more students signed up	



Module 1 Business Environments (Core Module)		
ECTS	5	
Content	<ul> <li>Introduction to systems theory: Organisations as open systems, systems of systems</li> </ul>	
	• The political-legal, economic, social and ecological and technical business environment: Trends and drivers for the industries of the future with a particular focus on digitalization	
	Scenario workshop	
	<ul> <li>History and heuristics of utopian thinking as a way of envisioning social, political, technical and economic change</li> </ul>	

Module 2 Business Processes, Projects and IT (Core Module)		
ECTS	5	
Content	<ul> <li>Principles of Process Management:         <ul> <li>Input-Output Transformation Processes, Processes of Supply Chain Management</li> <li>Business Process Management</li> </ul> </li> <li>Principles of Project Management:         <ul> <li>Project Organization; Project Management Tools (traditional and agile)</li> <li>Agile Project Management with SCRUM</li> </ul> </li> <li>Principles of Business Information Technology (IT):         <ul> <li>IT governance, IT architecture; Business Intelligence / Management Support Systems</li> </ul> </li> </ul>	

Module 3 People and Organisations (Core Module)		
ECTS	5	
Content	Recognition of the connections between Organization, Leadership, and Motivation	
	Digitalization of HRM and Organization	
	Motivation oriented Work Design	
	Group Processes in Organisations	
	Managing Change	
	Corporate Culture	



Module 4 Principles of Finance and Accounting (Core Module)	
ECTS	5
Content	<ul> <li>Recognition and measurement of core financial statement positions and structure of financial statements</li> <li>Development and application of key financial ratios</li> <li>Process and elements of cost accounting</li> <li>Contribution margin accounting and cost-volume-profit analysis</li> <li>Integrated planning system and budgeting process</li> <li>Instruments of debt and equity financing</li> <li>Project financing and financial modelling</li> </ul>
Content	<ul> <li>and structure of financial statements</li> <li>Development and application of key financial ratios</li> <li>Process and elements of cost accounting</li> <li>Contribution margin accounting and cost-volume-profit analysis</li> <li>Integrated planning system and budgeting process</li> <li>Instruments of debt and equity financing</li> </ul>

Module 5 Personal and Leadership Development (Core Module)		
ECTS	7	
Content	<ul> <li>Foundations of Training and Development of Skills &amp; Competencies <ul> <li>Adult learning</li> <li>Learning theories</li> <li>Needs assessment</li> <li>Competence-Frameworks</li> </ul> </li> <li>Understanding and applying concepts of modern leadership <ul> <li>Empowerment</li> <li>Collegial Leadership</li> <li>Transformational Leadership</li> </ul> </li> <li>Individual Skill Assessments &amp; Coaching</li> <li>Collaborative Project / Joined Activities</li> </ul>	

Module 6 Marketing and Innovation (Core Module)		
ECTS	5	
Content	<ul> <li>Marketing Objectives, Strategies and Organization</li> <li>The Marketing Mix</li> <li>Market Analyses and Market Segmentation</li> <li>Principles of Innovation Management</li> <li>Technical and Social Innovations</li> </ul>	



Module 7 Strategy and Entrepreneurship (Core Module)		
ECTS	5	
Content	<ul> <li>The essence of strategy and paradigms of strategic management</li> <li>Analyses of the strategic position <ul> <li>Market-based view: environmental/industry analyses</li> <li>Resource-based view: core competences, dynamic capabilities, networks and ecosystems</li> </ul> </li> <li>Strategy formulation: Corporate and business strategy <ul> <li>Portfolio strategies</li> <li>Business model design</li> <li>Digital strategies</li> <li>Platform strategies</li> </ul> </li> <li>Strategic entrepreneurship <ul> <li>Startups</li> <li>Corporate entrepreneurship/corporate venturing/ intrapreneurship</li> </ul> </li> </ul>	

Module 8 Financial Modelling of Green Energy Projects (Specialization Module)		
ECTS	5	
Content	<ul> <li>Assessment of economic and financial viability of RE projects using the Excel model 'RE Project Evaluator' (practical computer-based exercise)</li> <li>Inputting of contract elements (CAPEX and OPEX, with and without indexation, fixed, floating, with and without minimum amounts)</li> <li>Inputting of loans and reserve requirements into the model</li> <li>The P-curve for energy yields and its application to run the usual scenarios (P50-P75-P90)</li> <li>CF-oriented modeling of different loan structures and their optimization</li> <li>Assessment of the relationship between available modeling tools (e.g. DSCR levels, reserve accounts, loan structures and maturities, subordination of operating costs, etc.) and their impact on bank credit ratings</li> <li>Sensitivity and scenario analyses: identification of the most relevant modeling parameters</li> </ul>	



Module 9 Due Diligence in Green Energy Projects (Specialization Module)		
ECTS	6	
Content	<ul> <li>Scope of due diligence in RE project financing</li> <li>Different types of project contracts and how to analyze them in due diligence assessments</li> <li>Assessment of economic and financial viability of RE projects using the Excel model 'RE Project Evaluator'</li> <li>Bankable project insurance programmes and their utilization for risk reduction</li> <li>Environmental and social standards in RE projects and related due diligence requirements</li> <li>Compliance of technical project standards and O&amp;M strategies with common requirements of banks and financial investors</li> <li>De-risking instruments and the advantage of standardization of contracts</li> <li>Practical due diligence group works based on case studies</li> </ul>	

Module 10 International Climate Finance (Specialization Module)		
ECTS	6	
Content	<ul> <li>Introduction to climate finance</li> <li>Sources and mechanisms of climate finance</li> <li>Approaches to deliver climate change mitigation and resilience</li> <li>Climate finance put into practice</li> <li>Green microfinance: examples</li> <li>Green microfinance: checklist for implementation</li> </ul>	

Module 11 International Corporate Finance and Investment (Specialization Module)		
ECTS	5	
Content	<ul> <li>Scope and objectives of international corporate finance</li> <li>Basic characteristics of renewable energy investments</li> <li>The international financial markets environment</li> <li>Selected aspects of foreign exchange, instruments and hedging</li> <li>The global cost of capital and investment decisions</li> <li>Portfolio theory and CAPM</li> <li>Capital budgeting concepts in the international context</li> <li>Incorporating risk into capital budgeting decisions</li> <li>Company valuation</li> </ul>	



Module 12 a Sustainability & Digital Finance (Elective Module)		
ECTS	3	
Content	This module connects two predominant areas for todays and future management. You will learn how sustainability and digitalization affect each other in all areas of the value chain. You will learn and reflect on the role of (digital) finance and finance approaches in supporting sustainability & digitalization. To achieve this, a value-based approached is used, reflecting back continuously on the 17 UN-Goals for sustainable development (SDGs).	

Module 12 b Performance & Risk Management in the Digital Era (Elective Module)		
ECTS	3	
Content	Developments in digitalization and the accompanying data explosion create significant alterations, dilemmas and possibilities for performance measurement. In this module students will learn how to use methods and tools of modern management accounting to support decision making. The content also comprises methods and processes of risk management in the digital era.	

Module 13 Research Methods (Core Module)		
ECTS	5	
Content	<ul> <li>Introduction to academic writing         <ul> <li>Properties of academic research in business and management</li> <li>How to craft a literature review</li> <li>How to properly cite and reference</li> </ul> </li> <li>Introduction to research methodology         <ul> <li>Finding a research topic</li> <li>Constructing a good research question</li> <li>Research Design: research approaches, strategies, methods</li> <li>Conceptual Modelling, Data Construction, Measurement Concepts and Data Analysis</li> </ul> </li> <li>Research proposal         <ul> <li>Presentation of planned research approach for the master thesis</li> <li>Group discussion of each presentation</li> <li>Detailed peer review (one-to-one)</li> </ul> </li> </ul>	