



# HSBA

DIE DUALE BUSINESS SCHOOL  
IN HAMBURG

## **Master Programme MSc Innovation Management Module Descriptions**

### **Handbook IVM24**

**1. Academic Year**

**2. Academic Year**

**3. Academic Year**

**Specialisations**



# HSBA

DIE DUALE BUSINESS SCHOOL  
IN HAMBURG

## Master Programme MSc Innovation Management Module Descriptions 1. Academic Year

Study Year 2024/2025

### General Modules

Negotiations & Storytelling (S1)  
Programming (S1)  
Data Analysis (S1)  
Entrepreneurial Finance (S1)  
Project Management & Business Plans (S2)  
Applied Econometrics (S2)

### Core Module

Innovation Management (S1)  
Service & Product Design (S2)  
Specialisation Part I (S2)

### Electives

Master Study Trip (S2)

# Innovation Management

## Module description

### General:

Code:	M-IVM-IM
Year of study:	2024/2025
Form of course:	Obligatory
Frequency of course offer:	In every winter semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	none
Name of lecturers:	Prof. Dr. Goetz Greve
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Final Exam (120 min)
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

Innovation leads to a process of change in organisations and their market offerings and is a key weapon that marketing strategists use to gain customers and markets, through the development of sustainable competitive advantage. Innovation uses assets and competencies of the organisation along with innovation processes to bring about new or different market offerings, which, once successful in the market, bring immense value to the firm.

Thus, understanding how innovation leads to market success is key for business development and management. As such, the course will lay the foundations of innovation management by introducing models for understanding the diffusion process of innovation within society.

### Learning Outcome:

By the end of this course, the participants are able:

- To understand what an innovation is
- To describe the process of innovation diffusion
- To understand the basic Bass model and its extension
- To remember different diffusion models incorporating marketing-mix variables
- To apply models to predict the sales takeoff of innovations
- To create the optimal marketing-mix for innovations
- To analyse the adoption and user acceptance of innovations
- To understand network effects and the consequences for innovation management

### Module Outline:

1. Diffusion of Innovation
2. Models incorporating Marketing-Mix Variables

3. **Predicting Sales Takeoff of Innovations**
4. **Optimal Marketing-Mix for Innovations**
5. **Adoption of Innovations**
6. **User Acceptance of Innovations**
7. **Network effects**

#### **Cross Sectoral Themes (Cross Module Topics):**

**Innovation:** This course provides fundamental methodological knowledge necessary for managers to forecast the success of innovations.

**Presentation skills** are practiced within the lecture by issuing individual tasks and group work to students that are subsequently presented.

**Business strategies** are discussed with a special focus on how to market innovations and though speeding up the organization's diffusion process of its innovations.

#### **Teaching and Learning methods:**

Lecture, self-study, problem based learning, case studies

#### **Preparatory Literature**

Bass, Frank M. (1969): A New Product Growth for Model Consumer Durables, *Management Science*, 15, 215-227.

Bass, Frank M., Krishnan, Trichy V. und Jain, Dipak C. (1994): Why the Bass Model fits without Decision Variables, *Marketing Science*, 13, 203-223

Rogers, Everett M. (1995): *Diffusion of Innovations*, 5<sup>th</sup> ed., New York et al.

#### **Recommended Literature:**

- Srinivasan, V. und Mason, Charlotte H. (1986): Nonlinear Least Squares Estimation of New Product Diffusion Models, *Marketing Science*, 5, 169-178.
- Easingwood, Christopher J., Mahajan, Vijay und Muller, Eitan (1983): A Nonuniform Influence Innovation Diffusion Model of New Product Acceptance, *Marketing Science*, 2, 273-295.
- Dockner, Engelbert und Jørgensen, Steffen (1988): Optimal advertising policies for diffusion models of new product innovation in monopolistic situations, *Management Science*, 34, 119-130.
- Kamakura, Wagner A. und Balasubramanian, Siva K. (1987): Long-term Forecasting with Innovation Diffusion Models: The Impact of Replacement Purchases, *Journal of Forecasting*, 6, 1-19.

- Song, Inseong und Chintagunta, Pradeep K. (2003): A Micromodel of New Product Adoption with Heterogeneous and Forward-Looking Consumers: Application to the Digital Camera Category, *Quantitative Marketing and Economics*, 1, 371-407.
- Van den Bulte, Christophe und Lilien, Gary L. (1997): Bias and Systematic Change in the Parameter Estimates of Macro-Level Diffusion Models, *Marketing Science*, 16, 338-353.
- Golder, Peter N. und Tellis, Gerard J. (1997): Will It Ever Fly? Modelling the Takeoff of Really New Consumer Durables, *Marketing Science*, 16, 256-270.
- Tellis, Gerard J., Stremersch, Stefan und Yin, Eden (2003): The International Takeoff of New Products: The Role of Economics, Culture, and Country Innovativeness, *Marketing Science*, 22, 188-208.
- Gatignon, Hubert, Eliashberg, Jehoshua und Robertson, Thomas S. (1989): Modeling Multinational Diffusion Patterns: An Efficient Methodology, *Marketing Science*, 8, 231-247.
- Bass, Frank M. und Bultez, Alain V. (1982): A Note on Optimal Strategic Pricing of Technological Innovations, *Marketing Science*, 1, 371-378.
- Dockner, Engelbert und Jørgensen, Steffen (1988): Optimal advertising policies for diffusion models of new product innovation in monopolistic situations, *Management Science*, 34, 119-130.
- Krishnan, Trichy V. und Jain, Dipak C. (2006): Optimal Dynamic Advertising Policy for New Products, *Management Science*, 52, 1957-1969.
- Van den Bulte, Christophe und Gary L. Lilien (2001): Medical Innovation Revisited: Social Contagion versus Marketing Effort, *American Journal of Sociology*, 106, 5, 1409-1435.
- Garber, Tal; Goldenberg, Jacob; Libai, Barak; Muller, Eitan (2004): From Density to Destiny: Using Spatial Dimensions of Sales Data for Early Prediction of New Product Success, *Marketing Science*, 23, 419-428.
- Jannik Meyners, Christian Barrot, Jan U. Becker, and Jacob Goldenberg (2017) The Role of Mere Closeness: How Geographic Proximity Affects Social Influence. *Journal of Marketing*: September 2017, Vol. 81, No. 5, pp. 49-66.
- Hartmann, Wesley; Puneet Manchanda; Harikesh Nair; Matthew Bothner; Peter Dodds; David Godes; Kartik Hosanagar und Catherine Tucker (2008): Modeling social interactions: Identification, empirical methods and policy implications, *Marketing Letters*, 19, 3, 287-304.
- Basu, Amiya, Mazundar, Tridib und Raj, S.P. (2003): Indirect Network Externality Effects on Product Attributes, *Marketing Science*, 22, 209-221.
- Stremersch, Stefan, Tellis, Gerard J., Franses, Philip H. und Bincken, Jeroen L.G. (2007): Indirect Network effects in New Product Growth, *Journal of Marketing*, 71 (July), 52-74.

# Negotiations & Storytelling

## Module description

### General:

Code:	M-IVM-NS
Year of study:	2024/2025
Form of course:	Obligatory
Frequency of course offer:	In every winter semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	None
Required Material/Software:	Laptop
Name of lecturers:	Prof. Dr. Max Johns (Module Head) Dr. Michael Schellenberg
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Ungraded Component
Emphasis of the grade for the final grade:	0%

### Module Outline in Brief:

Contemporary Master programmes include scientific methods, communications and other competences in their curriculum as these soft skills are necessary to succeed in the professional world. Therefore, we combine Academic Writing, Persuasive Communication, and Strategic Negotiations to an introductory module of the M.Sc. Innovation Management. These competences prepare the students for a world in which structured working as well as communication and negotiations are key to master their careers. Scientific writing is understood in the context of this module as a most focused and concise way of storytelling.

### Learning Outcome:

Students understand the link and interplay between data, theory and knowledge and are able to project this onto their own thinking, writing and research methodology. Research questions can be formulated independently and concisely. Scientific sources can be evaluated critically, and typical obstacles of research are identified and circumvented effectively. Moreover, by the end of this course, participants are able:

- To create scientific documents such as term papers and master theses
- To structure and convey a convincing argument adjusted to different types of communicative settings
- To understand their own personal strengths and challenges with respect to public communication
- To prepare themselves and others for specific communicative settings
- To master basics of storytelling and be able to deconstruct business stories
- To be able to negotiate responsibly and understand respective strategies
- To be able to set up complex negotiations and conduct them successfully

## **Module Outline:**

### **Part I: Academic Writing (6h)**

1. Introduction to Scientific Work – Philosophy, Main types of research, Main principles
2. Typical components of a research project – chapters, constituent parts, order (structure)
3. Positioning and state-of-the-art considerations
4. Dealing with theory and literature – How to conceptualise and write a literature review, positioning, Identification of research gap
5. Citations and efficient/adequate use of sources – Chicago Style of Referencing
6. Operationalisation and design of data collection– Transferring literature and theory into your empirical work

### **Part II: Persuasive Communication (10h)**

1. Structuring a persuasive argument for science and for business
2. Pitching
3. Storytelling
  - a) Common structures for stories: three act model, a hero's journey
  - b) Central story elements: character, conflict, suspense, resolution
4. Preparation for persuasive presentations
5. Video trials

### **Part III: Negotiation Skills (24h)**

1. Strategic negotiations
2. 360° negotiations
3. BATNA / ZOPA concepts
4. Creating value through negotiations
5. Negotiations and Deal Making
6. Multi-party/multi-issue negotiations
7. Labour relations and wage negotiations

## **Cross Sectoral Themes (Cross Module Topics):**

Competence and knowledge acquired by this module are

- Critical, concise and logically consistent reasoning as well as robust data analytics are key skills needed in today's business, public and academic sector.
- Persuasive Communication in a digital environment
- Storytelling & Pitching
- Presentation Skills
- Discovery and application of innovative business strategies

## **Teaching and Learning methods:**

Interactive seminar, lecture, exercises, video training, case studies

## **Essential Preparatory Literature**

- Case studies as distributed before class.

## **Recommended Literature:**

### **For Part I**

- Saunders, M, Thornhill, A., Lewis, P. (2019): Research Methods for Business Students, 8th edition, Pearson
- Source: Schellenberg, M. (2017): A human interaction approach to networking capabilities and international opportunity enactment. PhD Thesis, University of Strathclyde, UK
- Source: Clow, K.E. and James, K. E. (2014): Essentials of Marketing Research: Putting Research Into Practice

### **For Part II**

- Fog, K., Budtz, C., Munch, P., Blanchette, S: Storytelling - Branding in Practice; Second edition, Springer, Heidelberg, 2010
- Richard Perloff: the dynamics of persuasion; sixth edition, 2017
- James Stiff und Paul Mongeau: Persuasive Communication, third edition, 2016
- Richard Young: Persuasive Communication - how audiences decide, 2016

### **For Part III**

- Sebenius, James; Lax, David: 3-d Negotiation: Powerful Tools to Change the Game in Your Most Important Deals. 2006. Harvard Business Review Press.
- Ury, William: Getting Past No: Negotiating in Difficult Situations. 1992. Bantam



# Programming

## Module description

### General:

Code:	M-IVM-PR
Year of study:	2024/2025
Form of course:	Obligatory
Frequency of course offer:	In every winter semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	None
Required Material/Software:	Visual Studio Code Python & Python-Interpreter Visual Studio Code Python Extension Cursor IDE
Name of lecturers:	Prof. Dr. Andy Witt (Module Head)
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Project Work (100%)
Emphasis of the grade for the final grade:	4,12 %

### Module Outline in Brief:

This module provides a comprehensive introduction to the Python programming language, one of the most versatile and widely used languages in modern software development.

The aim of the course is to teach students the fundamentals of programming with Python and to familiarize them with the basic concepts and techniques required to develop simple to complex applications.

AI-assisted programming will then be applied and discussed.

### Learning Outcome:

At the end of this module, students will be able to:

- Understand and apply the syntax and core concepts of Python programming.
- Effectively use basic data structures such as lists, tuples, dictionaries and sets.
- Use control structures such as loops and conditional statements to control the flow of programs.
- Define and use functions to increase the modularity and reusability of code.
- Apply simple error handling and debugging techniques.
- Develop a basic understanding of object-oriented programming principles and create simple classes and objects.
- Write simple programs that solve real-world problems and increase productivity.
- Get to know Python modules and libraries
- Apply AI to assist in program development.

### Module Outline:

1. Introduction to Python and the development environment
2. Variables, data types and expressions

3. Control structures: if-statements and loops
4. Data structures: lists, tuples, dictionaries
5. Functions: Definition, parameters, return values
6. Error handling and debugging
7. Introduction to object-oriented programming
8. Python modules and libraries
9. Working with AI support tools for programming

#### **Cross Sectoral Themes (Cross Module Topics):**

The module puts in place important foundations for other core modules, especially Applied Econometrics, Data Analysis and machine learning.

#### **Teaching and Learning methods:**

The course content is taught through a combination of lectures, practical exercises, discussions, and project work. Students are encouraged to actively participate through hands-on programming assignments, both in class and as homework.

#### **Preparatory Literature**

none

#### **Recommended Literature:**

Eric Matthes: Python Crash Course. Released May 2019. Publisher(s): No Starch Press.  
ISBN: 9781593279288

Al Swigart: Automate the Boring Stuff with Python. Released November 2019. Publisher(s):  
No Starch Press. ISBN: 9781593279929

Online resources and documentations

# Data Analysis

## Module description

### General:

Code:	M-IVM-DA
Year of study:	2024/2025
Form of course:	Obligatory
Frequency of course offer:	In every winter semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	None
Required Material/Software:	MS Excel
Name of lecturers:	Prof. Dr. Sönke Hartmann (Module Head)
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Final Exam (100%) – 90 minutes open book
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

In today's world, knowledge of quantitative methods becomes more and more important. Fields like market research, finance and logistics as well as modern topics like big data, data science, or artificial intelligence require a solid foundation with regard to data handling and statistics. This module provides an introduction to relational databases and statistical concepts that prepares students for further modules in their study program and for quantitative tasks in business.

### Learning Outcome:

In the first part, students delve into databases and learn how data are structured in relational databases and how information can be retrieved using SQL. In the second part, students repeat essential elements from statistics like descriptive statistics, probability distributions, and hypothesis testing. In particular, they understand concepts like significance and sample size as well as limitations of statistical analysis.

### Module Outline:

#### Part A: Database Systems

1. Structure of relational databases
2. Queries: SQL
3. Normal forms: 1NF, 2NF, 3NF

#### Part B: Statistics

1. Descriptive statistics
  - a. Central tendency
  - b. Variation

- c. Correlation
- 2. Probability distributions
  - a. Types of probability distributions
  - b. The normal distribution and its applications
- 3. Hypothesis tests
  - a. One-sample tests (means, proportions)
  - b. Two-sample tests (means, proportions)
  - c. Further tests (correlation, non-parametric)
  - d. Error types and limitations
- 4. Case Studies

#### **Cross Sectoral Themes (Cross Module Topics):**

The module puts in place important foundations for other core modules, especially Applied Econometrics.

#### **Teaching and Learning methods:**

Interactive seminar, lecture, exercises, case studies.

#### **Preparatory Literature**

None.

#### **Recommended Literature:**

B. L. Bowerman and R. T. O'Connell: Business Statistics in Practice. McGraw-Hill.

R. Elmasri and S. B. Navathe: Fundamentals of Database Systems. Addison Wesley / Pearson.

N. Sharpe, R. D. De Veaux and P. Velleman: Business Statistics. Pearson.

# Entrepreneurial Finance

## Module description

### General:

Code:	M-IVM-EF
Year of study:	2024/2025
Form of course:	Obligatory
Frequency of course offer:	In every winter semester
Applicability of the module:	MSc innovation Management
Prerequisites:	For the preparation of the module see recommended reading list.
Name of lecturers:	Stine Bönke
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Final Exam (100%) – 120 minutes open book
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

Modern corporate strategies without finance are unthinkable. Corporations need capital and therefore a thorough understanding of financing options. This course will enable participants to take active decisions in financing a corporation based on the principles of international markets. Thereby, participants will understand the impact of different factors from the environment and strategic decisions on financing structures. This lecture will emphasize the multivariate complexity of financing and its contribution to the strategic success of the company.

### Learning Outcome:

By the end of this course, the participants are able to optimise the financing of corporations. They understand the analysis of debt and equity financing along with their cost of capital and they can determine a financing mix that best suits a specific company and minimises its cost of capital.

In addition, course participants are able to make educated investment and capital budgeting decisions and create strategies for capital use such as mergers and acquisitions, dividends, or share repurchases.

### Module Outline:

1. Foreign Exchange Markets and Risks
2. Forward Markets and Transaction Exchange Risk
3. Interest Rate Parity
4. Speculation and Risk in the Foreign Exchange Market
5. Purchasing Power Parity and Real Exchange Rates
6. Exchange Rates Determination and Forecasting

7. International Capital Market Equilibrium
8. Foreign Currency Futures and Options
9. Interest Rate and Foreign Currency Swaps
10. Risk Management and the Foreign Currency Hedging Decision

### **Cross Sectoral Themes (Cross Module Topics):**

Before attending the course, participants should have basic knowledge of financial statement analysis and accounting. Understanding valuation techniques (such as DCF method) and the weighted average cost of capital.

After finishing the module, participants will have the competence and knowledge to understand investments, analyze data efficiently, and support business strategy with financial solutions. With the help of the selected case studies and real-life examples, students will also acquire basic management skills for typical financial projects.

### **Teaching and Learning methods:**

This course's contact hours will be used to a large extent to apply theory to practice. Consequently, students will use the major part of their independent study time to understand the theoretical basics of corporate finance. These will be summarised in lecture notes.

In class, we will briefly address student questions on the theoretical background and reiterate the most relevant concepts. Then, we will deepen this understanding with course-specific exercises and case studies.

### **Preparatory Literature**

- Brealey, Richard; Myers, Stewart; Marcus, Alan: Fundamentals of Corporate Finance  
This book can be used for pre-reading before corporate finance class starts.

### **Recommended Literature:**

- Geert Bekaert and Robert Hodrick, International Financial Management, Cambridge University Press, 3rd edition, 2018. (labelled BH below)
- Hull, John: Options, Futures and Derivatives
  1. Foreign Exchange Markets and Risks
    - a. BH: Chapter 2: The Foreign Exchange Market
    - b. BH: Chapter 3: Forward Markets and Transaction Exchange Risk
    - c. BH: Chapter 5: Exchange Rate Systems
  2. International Parity Conditions and Foreign Exchange Determination
    - a. BH: Chapter 6: Interest Rate Parity
    - b. BH: Chapter 7: Speculation and Risk in the Foreign Exchange Market
    - c. BH: Chapter 8: Purchasing Power Parity and Real Exchange Rates
  3. FX Forecasting
    - a. BH: Chapter 10: Exchange Rate Determination and Forecasting
  4. International Capital Markets (Debt and Equity Financing, International Portfolio Theory)
    - a. BH: Chapter 11: International Debt Financing
    - b. BH: Chapter 12: International Equity Financing
    - c. BH: Chapter 13: International Capital Market Equilibrium
  5. Foreign Currency Derivatives (Futures, Options, Swaps)
    - a. BH: Chapter 20: Foreign Currency Futures and Options
    - b. BH: Chapter 21: Interest Rate and Foreign Currency Swaps

6. Risk Management (Real Exchange Risk, Corporate Hedging Decision)
  - a. BH: Chapter 9: Measuring and Managing Real Exchange Risk
  - b. BH: Chapter 17: Risk Management and the Foreign Currency Hedging Decision
  - c. BH: Chapter 20: Foreign Currency Futures and Options
7. International Capital Budgeting
  - a. BH: Chapter 15: International Capital Budgeting
  - b. BH: Chapter 16: Additional Topics in International Capital Budgeting

# Service & Product Design

## Module description

### General:

Code:	M-IVM-SPD
Year of study:	2024/2025
Form of course:	Obligatory
Frequency of course offer:	In every summer semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	For the preparation of the module see "Preparatory and Core Literature" below.
Required Material/Software:	None
Name of lecturers:	Ulrich Hegge
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Presentation
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

The way products and services are designed has changed radically: In the 21st century, design is moving towards a human-centred, need-focused, interdisciplinary and iterative approach.

Being able to react quickly on changing needs of the user/ customer and market conditions are of high relevance for individuals as well as corporations. New business models disrupt entire markets and change the game applying new perspectives and design approaches: Virgin, Toyota, and especially all of the digital platforms (Google, Meta, Apple, Amazon, ...) apply agile methodologies for designing user experiences of superior value – may it be products or services.

Understanding the needs of users and pivot toward well-designed solutions through different frameworks for ideation, prototyping and testing is therefore the focus of this course. The application of design challenges and product/ service designs is implemented in student projects working in a design lab setting.

One of the biggest challenges in services and product design today is the understanding of the promises and opportunities as well as the limitations of new technologies, so the application of the given means is another focus of this course. Furthermore, the conditions under which companies and product development teams work are changing due to scarce natural resources and the need for a systemic approach. Including entire life cycle perspectives and applying an ethical and sustainable mindset in design is relevant for future generations and a healthy future.



## **Learning Outcome:**

By the end of this course, the participants are able:

- to understand the relevance of product and service design before the background of a changing world with scarce resources (life-cycle approach)
- to apply an entrepreneurial mind-set to the process of product and service development in the setting of interdisciplinary teams
- to apply design principles to the process of product and service design leveraging several frameworks
- to understand and analyse user needs, context and frame problems for design challenges
- to develop and evaluate ideas, visual models and prototypes for designs
- to test and create new products and services based on relevant methods and processes
- to develop creative confidence through the application and pitch of real design challenges

## **Module Outline:**

1. Designing for a new and complex environment: megatrends shaping the context for product and service design
2. Holistic thinking applied: product and service design before the background of whole systems and life cycle thinking
3. Designing for efficiency and sustainability: cradle-to-cradle design (regenerative design)
4. A short history of industrial and interaction design: industrial revolutions 101
5. Innovation in product design: the changing role of technology and material
6. Systematic approach to design and innovation: innovation culture and interdisciplinary perspective
7. User experience design: adding value through function, aesthetics and usability
8. Basics of product and service design: processes, methods and tools
9. Human-centred design: exploring and framing user needs (Excursion: Introduction to customer journey)
10. Ideation and divergent thinking: generating ideas for innovation
11. Concept/framework selection, prototyping and product sprints: making the right experience and products visual
12. Evaluation through the user: user interaction, testing and feedback
13. Learning throughout the design process: reviews and retrospectives

## **Cross Sectoral Themes (Cross Module Topics):**

Competence and knowledge acquired in this module are relevant for all topics, projects and cases throughout the entire study course.

Furthermore, it is particularly related to Entre-/ Intrapreneurship and aspects of Entrepreneurial Mindset, Project Management, and Agile Management Principles, such as Design Thinking, Scrum, Lean Startup, Minimum Viable Product (MVP), etc. as well as methods and competences for creative (online) collaboration, visualization, pitching, etc. It is related to Sustainable Innovation and Digital Economics.

## **Teaching and Learning methods:**

Students will be instructed with focus on a student-centred approach including discussions, problem-based learning, peer reviews and group exercises. Self-study and preparation of relevant material as well as further research and reading is mandatory.

The focus is placed on a project-based, iterative learning approach: product and service design are applied in workshops, design projects and group work to experience and reflect the design process and apply relevant methods. Applied critical and creative thinking, curiosity and active participation of students is required.

## **Preparatory and Core Literature (Mandatory):**

- Chapman, J. (2017). The Routledge handbook of sustainable product design. London: Routledge.
- Ulrich, K. (2019) Product design and development (7th ed.) New York, NY, McGraw-Hill.

## **Recommended Literature:**

Aurich, J.C. & Fuchs, C. & Wagenknecht, C. (2006) Life cycle oriented design of technical Product-Service Systems. *Journal of Cleaner Production*, 14(17), pp. 1480-1494.

Benyus, J.M. (2002) *Biomimicry: Innovation inspired by nature*, William Morrow Paperbacks.

Braungart, M. & McDonough, W. (2002) *Cradle to Cradle: Remaking the way we make things*, North Point Press.

Brown, T. & Wyatt, J. (2010) Design thinking for social innovation, *Development Outreach*, 12(1), pp.29-43.

Buchanan, R. (1992) Wicked problems in design thinking, *Design Issues*, 8 (2), pp.5-21.

Dilnot, C. (2017). Sustainable product design: An oxymoron? In: *The Routledge handbook of sustainable product design*. London: Routledge.

Dorst, K. (2011) The core of design thinking and its application, *Design Studies*, 32(6), pp.521-532.

Egenhoefer, R. B. (2017) *Routledge Handbook of Sustainable Design*, Taylor & Francis

Engholm, I. (2020) *Quick guide to design thinking*, Strandberg Publishing

Herrmann, A. & Huber, F. & Braunstein, C. (2000), Market-driven product and service design: Bridging the gap between customer needs, quality management, and customer satisfaction. *International Journal of Production Economics*, 66 (1), pp. 77-96.

Maeda, J. (2006) *The laws of simplicity*, The MIT Press.

Milton, A. (2013) *Research methods for product design*, Portfolio Skills.

Norman, D. (2002) *The design of everyday things*, Basic Books.

Ramakrishnan, R. (2017). Innovation in product design: IoT objects driven new product innovation and prototyping using 3D printers. *The internet of things in the modern business environment*. Hershey, PA, USA, pp. 188-209.

Shedroff, N. (2009) *Design is the Problem: The Future of Design Must Be Sustainable*. Brooklyn: Rosenfeld Media.

Sundin E. (2009) Life-Cycle Perspectives of Product & Service-Systems: In *Design Theory*. In: Sakao T., Lindahl M. (eds) *Introduction to Product/ Service-System Design*. Springer, London.

Stickdorn, M. & Schneider, J. (2011) *This is Service Design Thinking: Basic – Tools – Cases*, Amsterdam: BIS Publishers.

# Master Study Trip

## Module description

### General:

Code:	M24-STUDY TRIP
Year of study:	2024/2025
Form of course:	Elective
Frequency of course offer:	In every summer semester
Applicability of the module:	MSc Innovation Management, MSc Digital Transformation & Sustainability
Prerequisites:	none
Name of lecturers:	Prof. Dr. Michael Höbig, Jason Harman, Prof. Dr. Max Johns (Module Heads)
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 60 hours contact, 65 hours independent study
Contact hours:	60 hours
Methods of examination:	Ungraded component (at least 2/3 presence, activity contribution and documentation)
Emphasis of the grade for the final grade:	./.

### Module Outline in Brief:

There will be different international study trips offered to all Master students. This module takes the students into a non-German environment where they will apply the insights from the modules in the first and second semester of the program in real business contexts. The visits aim to immerse the students in a different culture, challenge perceptions of innovation, sustainability and the application of digitalization and discuss them respectively.

Students themselves are in charge of the planning, organisation and implementation of their chosen study trip. The study trips have a Kick-Off event, several preparation and follow-up meetings and a one-day workshop approx. 2 weeks before the trip to intensively prepare the visits and the trip. The core of this module is the week-long trip (5 full days plus a starting meeting after arrival on Sunday). Students will be in charge of different tasks before the study trip starts and participate actively in the encounters with business leaders. During the intensive preparation phase, each student prepares a company visit with a structured briefing before departure and moderates the company visit on site. Alternatively, participants can design the schedule for the week and the final documentation or compile macroeconomics and special features of the economic area to be visited for the group and introduce them through preparatory discussions. Suggestions and requests from the student partner companies are taken into account. The experiences will be documented as reports, blogs or similar media.

The final documentation, including an "excursion guide" with dos and don'ts for the respective region, is made available to the following year.

### Profile Outlines:

The description of the individual study trips with their respective focus and organizational topics will be made available to students in a separate document, as the individual topics, destinations and thus the organizational details may vary.

### **Learning Outcome:**

By the end of this course, the participants are able:

- To apply innovation concepts to different economic environments and business cultures
- To apply business development in foreign corporate environments
- To evaluate solutions for innovation and business development in a foreign corporate culture
- To understand the challenges foreign organizational and business cultures pose to innovative ideas, processes and products.
- To apply analytical models to practical solutions.
- To work as a group to challenge existing functional approaches in a culturally sensitive way
- To work as a group and prepare the trip with project-management tools
- Create professional preparation briefings and apply business behavior in an international context
- To make use of their professional network to get into contact with business leaders and subject matter experts

### **Module Outline:**

The Master study trip(s) will put the students in a non-German environment. This will challenge cultural perceptions of innovation, business development and a permanently learning corporate culture in a new environment. The core of this module is a week-long trip and, in addition to various preparatory meetings, a one-day workshop approx. 2 weeks before the trip. Students will prepare a variety of company visits and participate actively in the encounters with business leaders.

### **Cross Sectoral Themes:**

Competence and knowledge acquired in this module are the application of a broad range of insights into the field of business development or finance from previous models within the foreign business environment. In particular, methods from project management, knowledge from data analytics, concepts of innovation and marketing driven learnings about customer insights and product design and/ or financial instruments will be rediscovered and questioned in real-life context.

### **Teaching and Learning methods:**

The preparation of the study trip will be an interactive part of the module. Students will prepare specific company visits. Abroad, students are appointed to lead discussions between the hosts and the group.

### **Preparatory Literature**

- Literature on intercultural learning will be discussed.
- A focus of the preparation will be in relation to the industries visited.

### **Recommended Literature:**

- N.a.

# Project Management & Business Plans

## Module description

### General:

Code:	M-IVM-PJM
Year of study:	2024/2025
Form of course:	Obligatory
Frequency of course offer:	Every summer semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	None
Required Material/Software:	None
Name of lecturers:	Jennifer Duseux-Brune, Jason Harman (Design Thinking Workshop)
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Project Work (60%), Presentation (40%)
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

The students will become familiar with the latest methods and developments in project management. Firstly, the course will revise the fundamental terms, criteria and phases of projects. These will be embedded in their organizational contexts. In the next step, standard instruments for project planning will be reviewed including project management control and respective reporting systems.

As a key part of the module, students will learn how to apply a strategic approach to project management in the form of Design Thinking, Kanban, Agile Scrum and other Lean methods. Effective project management goes beyond technical expertise - the course will also focus on the development of leadership and the importance of teamwork.

### Learning Outcome:

By the end of this course, participants will be able to distinguish between a variety of project management methods. They will have the capacity to apply various methods to distinctly different challenges and situational contexts. They will understand the impact the project management methods have on the outcome of project teams and business strategy. They will be able to apply methods to concrete situations and cases. The students will apply several of these methods to later modules and projects, especially in case studies and intra- and entrepreneurship projects.

### Module Outline:

The students should be able to:

- » define strategic objectives of a project
- » evaluate organisational contexts
- » understand how teamwork is key for a successful project

- » identify the project manager role regarding the completion of the project
- » know fundamental project management tools that can be applied in a target-oriented way
- » evaluate project risks
- » develop work breakdown structures
- » understand the importance of project initiation for project success
- » establish criteria for the project and to measure and interpret the findings
- » recognise the importance of templates for project completion

### **Cross Sectoral Themes (Cross Module Topics):**

Competence and knowledge acquired by this module are immediately applicable to follow-up modules. Methods will be tested in live environments and in group work, in project-oriented modules, and in case study situations.

### **Teaching and Learning methods:**

The module contains lectures leading to individual and team tasks and numerous applications to real-life contexts and cases. Preparation is expected as self-study.

### **Preparatory Literature**

- Nieto-Rodriguez A.(2021): Harvard Business Review Project Management Handbook, Harvard Business School Publishing Corporation
- Verzuh E. (2016): The Fast Forward MBA in Project Management, John Wiley & Sons, Inc.

### **Recommended Literature:**

- Schmidt T. (2021): Strategic Project Management made simple, John Wiley & Sons
- Wysocki R. (2019): Effective Project Management - Traditional, Agile, Extreme, Hybrid, John Wiley & Sons, Inc.
- Stellman, A. and Greene, J. (2013): Learning Agile: Understanding Scrum, XP, Lean and Kanban, O'Reilly Media
- Anderson, D. (2010): Kanban: Successful evolutionary change for your technology business, Blue Hole Press
- Burrows M. (2014): Kanban from the inside: Understand the Kanban Method, connect it to what you already know, introduce it with impact, Blue Hole Press
- Kerzner, H. (2017): Project Management: A Systems Approach to Planning, Scheduling, and Controlling, 12th ed., Wiley
- Kelley T., Kelley, D. (2015): Creative Confidence: Unleashing the Creative Potential within us all, HarperCollins
- Harvard Business Review (2020): HBR Guide to Managing Strategic Initiatives
- Ries E. (2017): The Lean Startup- How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses, Random House LLC US
- Lencioni P. (2002): The Five Dysfunctions of a Team – A Leadership Fable, Jossey-Bass
- Goleman D. (1998), What makes a leader, Harvard Business Review Press
- Goleman D. (2013), Primal Leadership: Unleashing the power of emotional intelligence

# Applied Econometrics

## Module description

### General:

Code:	M-IVM-AE
Year of study:	2024/2025
Form of course:	Obligatory
Frequency of course offer:	In every summer semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	None
Name of lecturers:	Prof. Dr. Peter Scholz (Modul Head)
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Project Work
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

This class will introduce you to the world of econometrics and will equip you with a sound basic knowledge in the field. Different data requires different analysis tools and limitations of your data sets need to be tested – without proper experience you run the risk of creating biased estimates, which do not deliver significant results. So, the devil is in the details – but as a trained econometrician you have better chances to manage the empirical challenges.

The course is organized like a seminar which means that your active engagement is crucial for the success of the course. During contact hours, we aim to introduce you to the general field of problem as well as to the software packages.

**Please download and install first the R base distribution and then RStudio Desktop.  
Both software packages are freeware.**

Each lesson is pre-structured and has to be prepared with the announced material—if you do not prepare, you face a risk of falling behind! Also, I am running quizzes to test your level of knowledge using the app Socrative before the course starts —so please be right on time! The app is available for iOS and Android. You can also access the quizzes by using a browser on your computer. At the end of each class, there will be an assignment which you have to solve within two weeks.

### Learning Outcome:

By the end of this course, the participants are able:

- Understand the concepts of econometric tools, i.e. know about required properties of data and limitations of models.
- Apply essential econometrics methods on real data.
- Critically reflect results from econometric analysis.
- Run statistical analysis preferably in international teams.
- Transfer formulas generally to software like Excel and R.

### **Module Outline:**

The module breaks down into 7 topics of 6 hours (first is only 4 hours) with the following indicative structure (sessions may change):

- Day 1 – Introduction to Applied Econometrics (180 min)
- Day 2 – Financial Time Series (270 min)
- Day 3 – Simulation Techniques (270 min)
- Day 4 – Simple Linear Regression (270 min)
- Day 5 – Multiple Linear Regression (270 min)
- Day 6 – Time Series Analysis (270 min)
- Day 7 – Time Series Forecasting (270min)

### **Cross Sectoral Themes (Cross Module Topics):**

The module builds upon knowledge gained in Module 2 - Data Analysis and Statistics. Students are introduced to fundamental econometric models (quantitative methods), and learn to apply them by using Excel and R (software based applications). By the end of this module the students should become proficient in digitizing a problem as well as in using basic data analytics methods.

### **Teaching and Learning methods:**

A blended approach of self-study, problem-solving, software application and lectures is considered.

### **Preparatory Literature**

Provided in each class in the syllabus – the necessary material will be provided as pdf in Teams. Please regard copyright laws!

### **Recommended Literature:**

- Damodar Gujarati. Basic Econometrics. Fifth Edition. Palgrave, 2009.
- Jeffrey M. Wooldridge. Introductory Econometrics: A Modern Approach. 7th Edition. Cengage, 2020.

These books contain most of the topics discussed. A full reference list is provided in the syllabus. The most essential text will be uploaded as pdf files in Teams. Please regard copyright laws!





# HSBA

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## **Master Programme MSc Innovation Management Module Descriptions 2. Academic Year**

Study Year 2025/2026

### **General Modules**

Strategic Digital Economics (S3)  
Sustainable Innovation Camp (S4)

### **Core Modules**

Case Studies in Innovation (S3)  
Specialisation Part II (S3)  
Future of Work & HR Trends (S4)  
Research Seminar Scientific Methods (S4)  
Specialisation Part III (S4)

### **Project Modules**

Consulting Project (S3)

# Case Studies in Innovation

## Module description

### General:

Code:	M-IVM-CSI
Year of study:	2025/2026
Form of course:	Obligatory
Frequency of course offer:	In every winter semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	For successful completion, students should have attended the modules Project Management and Innovation Management or equivalent. For the preparation of the module see recommended reading list, especially the Case Studies.
Name of lecturers:	Prof. Dr. Johns (Module Head) et.al.
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Essay (100%)
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

This module uses illustrative case studies to emphasize learnings from previous modules and introduces concepts that will be treated in depth in later modules. The case-study method will focus innovation concepts on the concrete application in companies and the wider business context. Theoretical concepts of innovation will be investigated upon their possible applicability in a real-life environment. Practical cases will illustrate managerial challenges and demand solutions from the students in group works and class discussions.

### Learning Outcome:

By the end of this course, the participants are able:

- To apply a variety of project management techniques to the context of challenging group work under time pressure.
- To apply innovation concepts in a variety of business environments.
- To understand the challenges existing organisational and business models pose to innovative ideas, processes and products.
- To work in a variety of group constellations in preparation for later modules.
- To apply analytic models to practical solutions.
- To evaluate contradicting and mutually exclusive solutions under pressure.

### Module Outline:

Students will be presented with Case Studies from different industries like

- Banking
- Media
- Consumer Products

- Industrial Products
- IT
- Transportation and Logistics
- Pharmaceuticals
- Automotive
- Food & Beverage

### **Cross Sectoral Themes (Cross Module Topics):**

Competence and knowledge acquired by this module are the application of quantitative and qualitative tools that have been acquired in previous modules, studies and through working experience. Business strategies of a diverse range of companies and protagonists will be investigated. The cases will draw on innovation and digitalization and their challenges in the business environment.

Project management and presentation skills will be tested in class and in various group constellations.

### **Teaching and Learning methods:**

Case studies will be used in the classroom. They demand extensive preparatory self-study and group work to arrive at solutions that will stand a critical assessment.

Case studies confront students with challenges from leading companies and organisations including the constraints and incomplete information found in real business issues. Students are placed in the role of the decision maker, thus making an interactive classroom debate essential. There are no simple solutions but through the dynamic process of exchanging perspectives, countering and defending points, and building on each other's ideas, students become adept at analysing issues, exercising judgment, and making the same difficult decisions they will be confronted with later in their companies.

### **Preparatory Literature**

- Case studies will be given in time to prepare for class sessions.

### **Recommended Literature:**

- To be determined by the lecturer(-s)

# Consulting Project

## Module description

### General:

Code:	M-IVM-CP
Year of study:	2025/2026
Form of course:	Obligatory
Frequency of course offer:	In every winter semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	For successful completion, students should have attended all modules of the first year, if possible.
Name of lecturers:	Prof. Dr. Johns (Module Head), Prof. Dr. Prigge et.al.
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Project Work (50%) + Pitch (50%)
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

Groups of students are assigned a project for a partner company. The company provides the real-life context which may be of a particular intrapreneurial challenge. The groups act as consultants to the company and present a consistent solution for the challenge at the end of the semester to the company. The groups are assisted by professors in their analytical, strategic and preparatory work.

Alternatively, groups of students may also develop their own start-up project without external company association. These projects need to be presented in advance to a professor and proposed jointly to the head of programme (Prof. Dr. Johns).

### Learning Outcome:

By the end of this course, the participants are able:

- To analyze the concrete problem
- To apply a broad range of tools they have acquired in previous modules
- To evaluate different solutions and select a preferred strategic path
- To propose the creation of an environment in which the proposed solution can be practically applied
- To present a solution to the company

### Module Outline:

- The group will be presented by the company with the challenge posed
- The group will structure the project, divide the work paths and define major milestones
- Regularly the group will interact with the assigned professor to monitor progress and challenge initial solutions
- Several times, the group will seek touchpoints with the company to deepen the joint understanding of the project and gain additional insights

- Finally, the group will present a written report of its work and
- Present the solution to the company

#### **Cross Sectoral Themes (Cross Module Topics):**

Competence and knowledge acquired by this module are the first holistic application of the learnings from all previous modules, especially in innovation, digitalization and a variety of business strategies. Analytical and practical knowledge is needed to jointly propose a solution in the real-world environment.

Important constraints will be a limited time-frame, limited information, numerous applicable solutions and possibly limited resources available for the implementation. Project management and presentation skills will be tested in a challenging environment.

#### **Teaching and Learning methods:**

This large real-life exercise demands intense self-study, problem-based learning, group work with solution-oriented outcome, tutor-inspired orientation.

#### **Preparatory Literature**

- N.a.

#### **Recommended Literature:**

- N.a.

# Strategic Digital Economics

## Module description

### General:

Code:	M-IVM-SDE
Year of study:	2025/2026
Form of course:	Obligatory
Frequency of course offer:	In every winter semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	For the preparation of the module see recommended reading list
Name of lecturers:	Prof. Dr. Alkis H. Otto
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Essay
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

The topic of this module is to identify the impact of digital technologies and innovation on firm behaviour, business models, and market outcomes. The module will discuss in which way and to what extent digital technologies affect cost structures and why and how this alters competition as well as pricing and competitive strategies. Special emphasis will be put on network effects, markets for digital goods and services, and platform economics. The module will also discuss the benefits and possible pitfalls of new digital technologies for the economy and will furthermore address the topic of regulation and government intervention in markets where digital transformation leads to market power of dominant firms and platforms.

### Learning Outcome:

By the end of this course, the participants are able:

- To assess the impact of digitalisation on cost structures,
- To understand business models like platforms and networks.
- To comprehend how firms compete within markets for digital goods and services.
- To understand pricing and various pricing models in markets for digital goods.
- To apprehend the effect of digitalisation on the market environment and market outcomes.
- To learn about regulation and regulatory challenges of digital markets.

### Module Outline:

1. Introduction
2. Basic Microeconomics
  - 2.1. Competitive Markets: Supply and Demand, Efficiency
  - 2.2. Optimality and the Marginal Principle
3. Technology, Firms, and Markets
  - 3.1. Digitalisation and Innovation
  - 3.2. Transaction Cost

- 3.3. Zero Marginal Cost and Economies of Scale
- 3.4. Network Effects
- 3.5. Information Asymmetries
- 4. Digitalisation and Market Power
  - 4.1. Digitalisation and Competition
  - 4.2. Game Theory: Basics
  - 4.3. Innovation and Industry Standards
  - 4.4. Competitive Strategy
  - 4.5. Pricing
- 5. Multi-Sided Markets and Networks
  - 5.1. Platforms
  - 5.2. Monetisation of Platform Services
- 6. Regulation of Digital Markets

### **Cross Sectoral Themes (Cross Module Topics):**

Students will learn to analyse the impact of digitalisation and digital innovation on competition and market dynamics. A special feature of this lecture is to show how platforms using big data and data analytics have shaped industries in recent years.

Applying theoretical models to cases and practical examples will enable students to rethink and develop business strategies in times of digital transformation.

### **Teaching and Learning methods:**

Lecture, Problem Based Learning, Case Studies, Group Discussions

### **Preparatory Literature**

- Pindyck, R.S. and D.L. Rubinfeld, Microeconomics. 9<sup>th</sup> ed., Pearson, 2018: Chapter 2 (“The Supply and Demand Framework”).

### **Recommended Literature:**

- Belleflamme, P. and M. Peitz: Industrial Organization – Markets and Strategies, 2<sup>nd</sup> ed., Cambridge University Press, 2015.
- Besen, S. M. and J. Farrell: Choosing How to Compete: Strategies and Tactics in Standardization, Journal of Economic Perspectives, Vol 8, pp. 117-131, 1994.
- Goldfarb, A. and C. Tucker: Digital Economics, Journal of Economic Literature, Vol. 57, No.1, pp. 3-43, 2019.
- Luis M. B. Cabral, Introduction to Industrial Organization, 2nd ed., MIT Press, 2017.
- Pindyck, R.S. and D.L. Rubinfeld: Microeconomics. 9<sup>th</sup> ed., Pearson, 2018.
- Rochet, J.-C. and J. Tirole: Platform Competition in Two-Sided Markets, Journal of the European Economic Association, Vol. 1, No. 4, pp. 990-1029, 2003.
- M. Rysman: The Economics of Two-Sided Markets, Journal of Economic Perspectives, Vol. 23, No. 3, Summer 2009, pp. 125-43, 2009.

# Sustainable Innovation Camp

## Module description

### General:

Code:	M-IVM-SIC
Year of study:	2025/2026
Form of course:	Obligatory
Frequency of course offer:	In every summer semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	For successful completion, students should have attended the module 'Negotiations and Storytelling'.
Name of lecturers:	Prof. Dr. Sarah Jastram (Module Head),
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Presentation
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

The Sustainable Innovation Camp takes place in a one-week sprint format taking students on a journey to discovering solutions to a sustainability focused business challenge provided by a corporate partner.

The module comprises a theoretical introduction and kickoff session as well as a moderated fulltime camp week where students will be introduced to fast and effective innovation and creativity fostering techniques which are applicable in other innovation-oriented business contexts as well.

- Kickoff Session and Theoretical Introduction (4 contact hours; Prof. Dr. Jastram)
- Innovation Camp (1 full-time week) (36 contact hours; Prof. Dr. Jastram)

### Learning Outcome:

Students will learn and experience how to find solutions for business challenges in a very short time period.

They will be challenged by this time pressure and thereby further develop related project management and teamwork skills.

Moreover, students will deepen their knowledge regarding current trends and issues in sustainable management and innovation.

Furthermore, students will

- learn about opportunities and challenges related to sustainable business approaches,
- explore and experience innovation methods and techniques,
- develop their project planning and self-governance skills,



- further improve skills in the areas of problem solving, time management, leadership, governance, dialogue, feedback and self-reflection, and
- experience to solve a complex problem under limited time

### **Module Outline:**

The module will be conducted in an innovative format allowing for both, a unique learning experience but also for student's interaction and teamwork.

Students will receive a sustainability challenge from a business partner on day one of the camp and subsequently work on an innovative solution during the camp week. At the end of the week, students will present their results to the business partner.

Specific characteristics of the module are:

- Students work on a challenge under very limited time
- The speed format supports a special energy and creativity level
- Participants work intensively in diverse teams
- Positive, collaborative, work-intensive atmosphere
- Effective, experience-based learning
- Real business challenge
- Fun

### **Cross-Sectoral Themes:**

In this module, students will develop ideas and make recommendations relating to innovative and sustainable business models and strategies. They need to take into consideration a rapidly developing business environment, especially regarding new digital technologies and their socio-economic impact on lifestyles and consumer preferences. In this sprint format, students need to apply highly focused and efficient project management skills and presentation techniques.

### **Recommended Literature:**

- Barger, Torben (2009): The Camp Model for Entrepreneurship Teaching: <http://idea-camp.eu/wp-content/uploads/2013/10/The-camp-model-for-entrepreneurship-teaching-TOB-091.pdf> (Last access, July 9<sup>th</sup>, 2020)

More task specific literature will be announced at the beginning of the camp depending on the specific challenge of the year.

# Future of Work & Human Resources (HR) Trends

## Module description

### General:

Code:	M-IVM-WHR
Year of study:	2025/2026
Form of course:	Obligatory
Frequency of course offer:	In every summer semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	None
Required Material/Software:	None
Name of lecturers:	Prof. Dr. Daniela Eisele-Wijnbergen, LL.M. Prof. Dr. Barry Friedman (hybrid)
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Termpaper (40%), Presentation (30%) and Artifact (30%)
Emphasis of the grade for the final grade:	4,12%

### Module Outline in Brief:

What work and how work is done, workers themselves and workplaces are evolving, influenced by technological, socio-economic, political, and demographic changes. This module examines how digitalization, dynamics and uncertainties of the contemporary business environment impacts and change work itself, the organization of work and workplace relationships, diversified workforces, as well as needed competencies. The course provides perspectives and insights into the future of work. Furthermore, actionable outcomes for the practice of human resource management are deduced.

### Learning Outcome:

The students should be able to:

- » Understand main elements of the concept of future of work: Work, organizations and workplace, workplace relations and workforce.
- » Define key terms within the concept of future of work, like Activity Based Working (ABW), Gig Worker, and Ghost work.
- » Know about the role, most important processes, and solutions in current human resource management.
- » Understand the role of people management in the developments.
- » Evaluate opportunities (like flexibility and well-being) as well as risks and challenges (e.g. inequality) of different future of work scenarios.

- » Identify possible solutions to seize the opportunities and mastering the challenges while minimizing the risks.
- » Develop ideas of how to deal (better) with these when it comes to people management.

### **Module Outline:**

- » Key features of the current state of work and future work concepts and scenarios: Work, workplaces and workplace relationships, workforce, and needed competencies.
- » Today's people management: Attract, recruit, manage and lead talent. Develop and reward plus retain people.
- » Challenges and opportunities of the changing world and the changing world of work: Digitalization, degradation of environment, demographics, and diversity as key drivers.
- » Solutions regarding sustainable people management and leadership in the future of work.

### **Cross Sectoral Themes (Cross Module Topics):**

### **Teaching and Learning methods:**

The module includes guided self-preparation, lectures, group discussions, case studies, and informal presentation of ideas as well as presentations of the main findings of the term papers, which will be assessed. The students will also have the opportunity to apply their learning to real-world scenarios and develop competencies that are relevant to people management in the future of work.

### **Preparatory Literature**

- Lynn, T. et al. (Ed. 2023): *The Future of Work - Challenges and Prospects for Organisations, Jobs and Workers*. Palgrave Macmillan Cham. <https://doi.org/10.1007/978-3-031-31494-0>
- Mitchell, R., Shen, Y., & Snell, L. (2022). The future of work: a systematic literature review. *Accounting & Finance*, 62(2), 2667-2686. <https://doi.org/10.1111/acfi.12878>

### **Recommended Literature:**

- Most recent list will be provided before the beginning of the course.

# Research Seminar Scientific Methods

## Module description

### General:

Code:	M-IVM-RS
Year of study:	2025/2026
Form of course:	Obligatory
Frequency of course offer:	In every summer semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	none
Name of lecturers:	Prof. Dr. Goetz Greve
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	10
Workload and its composition:	250 hours total workload 28 hours contact, 222 hours independent study
Methods of examination:	Term paper (100%)
Emphasis of the grade for the final grade:	8,24%

### Module Outline in Brief:

Entrepreneurship, Intrapreneurship, Business Development and Digitalisation are closely linked to the management of innovation within firms. Innovation research is one of the top research priorities within the field of business administration today. Thus, this research seminar is building a bridge between applied and theoretical issues treated around innovation management and will enhance the student's capabilities of conducting an academic research project within the field of innovation research on their own. The research seminar also prepares students for their master thesis.

### Learning Outcome:

By the end of this course, the participants are able:

- To understand a distinct research problem
- To describe and define relevant scientific terms
- To write a structured and critical literature review
- To derive research hypotheses
- To develop managerial as well as scientific research implications
- To discuss limitations of the own study and to sketch out further research perspectives

### Module Outline (Example):

Topic of Seminar Description	Trends and Developments in Innovation Management Research Building on the partial module to Innovation Management the students are offered a chance to delve deeper into the literature on Innovation Management.
Tentative home assignment topics	<ul style="list-style-type: none"><li>- Research on Innovation: A Review and Agenda for Marketing Science</li><li>- Innovation Management and Market Performance</li><li>- Applications of the Technological Acceptance Model for the introduction of product innovations Innovator or Imitator? Which innovation strategy leads to market success?</li></ul>

- Identifying new product ideas
- Data as a driver for innovation
- Organizational Impact of Big Data on Service Innovation
- Ideator expertise and co-creator inputs in crowdsourced product co-creation
- Business model innovation as a driver of economic growth
- Community-based innovation management
- Integrating technological, market and organisational change

### **Cross Sectoral Themes:**

Innovation, Digitalisation

### **Teaching and Learning methods:**

Self-study, presentation, discussion

### **Preparatory Literature**

- Depends on the topic chosen

### **Recommended Literature:**

- Depends on the topic chosen



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DIE DUALE BUSINESS SCHOOL  
IN HAMBURG

## **Master Programme MSc Innovation Management Module Descriptions 3. Academic Year**

Study Year 2026/2027

### **Master's Thesis**

Master's Thesis (S5)

### **General Modules**

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### **Core Modules**

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# Master's Thesis

## Module description

### General:

Code:	Master Thesis IVM
Year of study:	2026/2027
Form of course:	Mandatory
Frequency of course offer:	In every 3. Study Year
Applicability of the module:	MSc Innovation Management
Prerequisites:	60 ECTS
Name of lecturers:	Prof. Dr. Max Johns
Language of teaching:	English / German*
	*only admitted for students of Specialisation "Familienunternehmen"
Duration of module	1 semester
ECTS credits:	25
Workload and its composition:	625 hours total workload
Contact hours:	0 hours
Methods of examination:	Master Thesis (70%) + Colloquium (30%)
Emphasis of the grade for the final grade:	30%

### Module Outline in Brief:

The Master's thesis concludes the postgraduate programmes at HSBA. As such, it provides an opportunity for developing one's own research ideas as well as applying problem solving techniques that extend the contents of the postgraduate programmes and may lead into new or unfamiliar environments. Students are encouraged to formulate judgements as well as conclusions; when applicable including also reflecting on social and ethical responsibilities.

A Master's thesis embodies original work by the candidate, conducted under the supervision of members of the faculty of HSBA. It must, without fail, be clear, be grammatically correct and include a review of pertinent literature.

The master's thesis counts for 25 credits. The written part contributes 70% of the grade and the colloquium 30%. The processing time for the written part of the master's dissertation is four months. The written part of the master's thesis should comprise of a maximum of 18.000 words.

### Learning Outcome:

With the master's thesis students should demonstrate that they are in a position to independently examine an applied problem using scientific methods within a specified time limit and by using scientific methods, to justify and to defend their findings and place these in the context of the course of study. A precise description of the problem is to be investigated and the results are to be condensed into applicable conclusions.

It should become clear that the student is able to apply the knowledge acquired in the course of study, to use various sources of information and to integrate the state of the art of science and practice into the work.

The student may select a topic in consultation with the company that is of practical relevance, for which there is sufficient scientifically based literature and with which the student can promote professional development.

### **Module Outline:**

In preparation for the study programme and the thesis, the module scientific methods and competences is offered in the first semester. Additionally, two workshops for the Master's thesis are offered with these topics:

- 1 Significance and organisational procedure of the final thesis
- 2 Phases of academic work
- 3 Formal Design
- 4 Assessment criteria

### **Cross Sectoral Themes (Cross Module Topics):**

The Master's thesis is related to all project and topic modules in the course

### **Teaching and Learning methods:**

Self-study, problem-based learning, exercise

### **Preparatory/ Recommended Literature**

Teaching and learning materials and the "Guideline for Written Assignments and Theses" are compiled in a digital learning room in Microsoft Teams.





# HSBA

DIE DUALE BUSINESS SCHOOL  
IN HAMBURG

## **Master Programme MSc Innovation Management Specialisation : Finance Module Descriptions**

### **2<sup>nd</sup> Semester (SY 24/25)**

Start-Ups & Fintech Finance

### **3<sup>rd</sup> Semester (SY 25/26)**

Sustainable Finance

### **4<sup>th</sup> Semester (SY 25/26)**

Digital Finance

# Specialisation Finance & Start-Up

## Module 1: Start-Ups & Fintech Finance

### Module description

#### General:

Code:	M-IVM-FI1_SU1
Year of study:	2024/2025
Form of course:	Obligatory for Specialisation: Finance & Start-Up
Frequency of course offer:	In every summer semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	For successful completion, students should have attended the finance module in the first semester and should dispose of solid basic knowledge in finance and accounting from their Bachelor studies.
Name of lecturers:	Prof. Dr. Philipp E. Zaeh
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Final Exam (100%) – 120 minutes open book
Emphasis of the grade for the final grade:	4.12%

#### Module Outline in Brief:

The financial industry is highly influenced by FINTECH innovations. This module provides students with a comprehensive understanding of mergers and acquisitions (M&A) in the context of market developments, strategic and financial considerations, as well as in-depth insights into start-up valuation techniques. The module covers various aspects of M&A, private equity, venture capital, and also start-up financing, giving students the knowledge and skills to analyze, execute, and evaluate M&A and Venture Capital transactions and assess the value of early-stage companies.

#### Learning Outcome:

The student should get a thorough understanding about

- ⇒ The M&A Market
- ⇒ The different Groups of Investors (Strategic/Financial)
- ⇒ Venture Capital Investments in Fintechs
- ⇒ Best Practices of Fintech Companies
- ⇒ The Valuation and Financing of Start-up Companies

The students should therefore get knowledge about Special Venture Capital topics like

- ⇒ Private Equity, Venture Capital and M&A

- ⇒ Start-Up-Valuation Methods (Discounted Cash Flow, Multiples, Qualitative and Quantitative Start-Up-Valuation-Methods)
- ⇒ Start-Up Financing

In addition, course participants will be able to make educated investment and capital budgeting decisions, create strategies for capital use (Mergers & Acquisitions) and evaluate Private Equity & Venture Capital transactions such as MBO/LBO and growth financing.

### **Module Outline:**

1. The M&A market
2. The Strategic and Financial Aspects behind M&A
3. The M&A Process and Merger Tactics
4. M&A Transaction Types and Transaction Categories
5. Private Equity/Venture Capital & MBO & LBO
6. Best Practices of Fintech-Companies
7. Start-Up-Valuation Techniques (DCF-Valuation, Valuation with Multiples, Early Stage and Later Stage Valuations, qualitative and quantitative Start-Up-Valuation-Methods)
8. Start-Up Financing
9. Case Studies (Start-Up-Valuations)

### **Cross Sectoral Themes (Cross Module Topics):**

Cross-sectoral topics such as DIGITALIZATION, INTERNATIONALIZATION, ENTREPRENEURSHIP, and INNOVATION are an integral part of the content of the module on Mergers and Acquisitions (M&A) and Start-up Valuation.

DIGITALIZATION is critical in today's business landscape, impacting all sectors. In this module, students learn with reference to Best Practices how digitalization has transformed the Financial Industry.

The module also covers the global aspects of M&A and start-up valuation. Students gain an understanding of how businesses expand internationally through M&A, the challenges of dealing with cross-border transactions, and the nuances of valuing start-ups with global potential and global acting investors.

ENTREPRENEURSHIP is also a central theme, especially in the sections related to start-ups and venture capital. Students learn about the entrepreneurial mindset, the motivations of start-up founders, and the role of entrepreneurship in driving innovation. They explore how entrepreneurs approach M&A deals and how established companies may acquire start-ups to foster entrepreneurial spirit and innovation.

INNOVATION is a key driver of M&A activity and start-up success. Students examine how innovation is valued in start-up companies and how M&A can facilitate the acquisition of innovative technologies or intellectual property. The module also explores how innovation is a critical component of fintech companies and how their innovative and scalable practices disrupt traditional financial sectors.

## Teaching and Learning methods:

Preparation by means of literature, lecture and discussion in the seminar, implementation of the theoretical knowledge in practice-related tasks and case studies.

## Preparatory Literature

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## Recommended Literature:

- » Berk, J., DeMarzo, P., Corporate Finance, 4<sup>th</sup> (global) edition, Harlow 2017 (Pearson).
- » Berk, J., DeMarzo, P., Harford, J., Fundamentals of Corporate Finance, 4<sup>th</sup> th Edition, Harlow 2018 (Pearson Global Edition).
- » Brealey, R. A., Myers, S. C., Marcus, A. J., Fundamentals of Corporate Finance, 9<sup>th</sup> (international) edition, New York 2018 (McGraw-Hill).
- » Bruner, R. F., Eades, K. M., Schill, M. J., Case Studies in Finance. Managing for Corporate Value Creation, 7<sup>th</sup> (international) edition, New York 2014 (McGraw-Hill).
- » Bruner, R. F., Perella, J. R.: Applied Mergers and Acquisitions, Hoboken 2004 (Wiley).
- » Ernst, D., Häcker J., Applied International Corporate Finance, 2<sup>nd</sup> edition, Munich 2011 (Vahlen).
- » Koller T., Goedhart, M., Wessels, D., Valuation: Measuring and Managing the value of Companies, 7<sup>th</sup> Edition, Hoboken 2020 (Wiley).
- » Miller, E. L., Segall, L. N.: Mergers and Acquisitions: A Step-by-Step Legal and Practical Guide, 2<sup>nd</sup> edition, Hoboken 2017 (Wiley).
- » Pettit, B. S., Ferris, K. R., Valuation for Mergers and Acquisitions, 2<sup>nd</sup> Edition, New Jersey 2013 (Pearson).
- » Rosenbaum, J., Pearl, J., Investment Banking. Valuation, Leveraged Buyouts, and Mergers & Acquisitions, 2<sup>nd</sup> edition, Hoboken 2013 (Wiley).
- » Sadtler, D., Smith, D., Campbell, A., Smarter Acquisitions. Ten steps to successful deals, Harlow 2008 (Pearson).
- » Sudarsanam, S., Creating Value from Mergers and Acquisitions. The Challenges, 2<sup>nd</sup> edition, Harlow 2010 (Pearson).

# Specialisation Finance

## Module 2: Sustainable Finance

### Module description

#### General:

Code:	M-IVM-FI2
Year of study:	2025/2026
Form of course:	Obligatory for Specialisation: Finance
Frequency of course offer:	In every winter semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	For successful completion, students should have attended the finance module in the first semester and should dispose of solid basic knowledge in finance from their Bachelor studies.
Name of lecturers:	Prof. Dr. Stefan Prigge
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Final Exam (100%) – 120 minutes open book
Emphasis of the grade for the final grade:	4,12%

#### Module Outline in Brief:

Sustainable finance has been a major trend in recent years, and is expected to remain so for at least the medium term. The term sustainable finance itself has not yet been clearly defined, but is rather an umbrella term for many related currents in finance. As an introduction, the course therefore first deals with the terms sustainability and sustainable finance and, in an overview, with the related regulatory activities. Afterwards, the course deals in detail with the two major areas of sustainable investment and sustainable corporate finance. Possible topics in sustainable investment are ESG scores or the performance of sustainable investments. Sustainable corporate Finance covers topics such as the impact on the cost of capital or special instruments such as green bonds or sustainability-linked loans.

#### Learning Outcome:

After participating in this module, students should

- ⇒ have a clear and deeper understanding of the term sustainability, which is often used differently and inconsistently,
- ⇒ know how comprehensively and through how many channels sustainability affects the financial system,
- ⇒ be able to analyze the impact of sustainability on investors, capital seekers and intermediaries through in-depth work on selected examples.

## Module Outline:

### Part 1: Setting the Scene

- A. Defining Sustainability and Sustainable Finance
- B. A Failure-of-Allocation Perspective on Sustainability and Sustainable Finance
- C. Relevant Regulation

### Part 2: Sustainable Investment

includes topics such as

- measuring sustainability, ESG scores
- performance of sustainable investment strategies and sustainable investment funds
- impact investing

### Part 3: Sustainable Corporate Finance

includes topics such as

- effect of sustainability on the cost of capital
- sustainable financial instruments such as green bonds or sustainability-linked loans
- sustainability and corporate performance/ valuation

## Cross Sectoral Themes (Cross Module Topics):

The module has a clear *international* orientation as both financial markets and the current regulatory movement are clearly of a global nature as is sustainability as such. The module explores financial *innovations* like green bonds. Besides, the growing focus on sustainability in finance also improves access to funding for *entrepreneurial* activities in the field of sustainability.

## Teaching and Learning methods:

Lecture, group discussion, group work, case studies, guest lectures.

## Preparatory Literature

## Recommended Literature:

- » Deutsche Bundesbank: The Sustainable Finance Market: a Stocktake. In: Monthly Report, vol. 71 (2019), No. 10, p. 13-33.
- » Prigge, Stefan and Peter Scholz with Anastasija Djokic, Felix Knabe, Linus Leiendecker, Mathieu Pietz, Nico Rivinius, Julius Voigt: Zahlen, Daten und Fakten zum Sustainable-Finance-Standort Deutschland im europäischen Vergleich. Eine Studie für Germany Finance. 2023.
- » Schoenmaker, Dirk und Willem Schramade: Principles of Sustainable Finance. 2019. Oxford University Press: Oxford und London.
- » The City UK und BNP Paribas: Green Finance: A Quantitative Assessment of Market Trends. 2022.
- » Thompson, Simon: Green and Sustainable Finance. 2021. Kogan Page: London.
- » Vargas, Carlos: Sustainable Finance Fundamentals. 2023. Routledge: Milton Park and New York.

Additional literature will be announced in class.

# Specialisation Finance

## Module 3: Digital Finance

### Module description

#### General:

Code:	M-IVM-FI3
Year of study:	2025/2026
Form of course:	Obligatory for Specialisation: Finance
Frequency of course offer:	In every summer semester
Applicability of the module:	MSc Innovation Management
Prerequisites:	For successful completion, students should have attended the finance module in the first semester and should dispose of solid basic knowledge in finance from their Bachelor studies.
Name of lecturers:	Dr. Joakim Nägele
Language of teaching:	English
Duration of module	1 semester
ECTS credits:	5
Workload and its composition:	125 hours total workload 40 hours contact, 85 hours independent study
Contact hours:	40 hours
Methods of examination:	Presentation (100%)
Emphasis of the grade for the final grade:	4,12%

#### Module Outline in Brief:

The growing digitalization of our economy and businesses affects the finance function in different ways – first, business models become more digital in nature and have to be properly monitored with regard to their financial performance; second, the data to be processed by corporate functions like finance are growing in volume and are originating from more and diverse sources; more and more digital tools are being used in the finance function itself.

The term “digital finance” serves as an umbrella term for how the finance function has to adapt to the above-mentioned trends. The course aims at giving an overview of relevant theoretical basics in AI and machine learning as well teaching students how to use different tools for finance-related case studies. Above that, digital business models are analyzed from a financial performance perspective.

#### Learning Outcome:

After participating in this module, students should

- ⇒ know the basics in artificial intelligence (AI) and machine learning (ML) and have a deeper understanding of some selected ML methods relevant in finance,
- ⇒ understand the impact of digitalization on the finance function as well as the applications of AI and machine learning in different finance areas,
- ⇒ be able to apply simple programming code and software tools to analyze finance-related case studies.



## Module Outline:

### Part 1: Introduction and basics

- Digitalization of the economy and business models
- Big Data
- Overview of artificial intelligence and machine learning
- Data mining process (CRISP-DM)
- Digitalization of the finance function
- Introduction into programming (Python)
- Recap of selected statistical and mathematical concepts
- Selected machine learning models

### Part 2: Digital business model performance

includes topics such as

- types of digital business models
- performance metrics of digital business models
- comparison with “traditional” accounting and controlling

### Part 3: Practical application of AI and machine learning

includes topics such as

- Process mining in accounting (Celonis)
- Robot Process Automation in accounting (UI Path)
- Analysis of financial statements and financial KPIs (Python)
- Product performance analysis (Python)
- Analyzing credit risk using logistic regression (Python)
- Sales forecast using neural networks (Knime)
- Data storytelling and data visualization (Tableau)

## Cross Sectoral Themes (Cross Module Topics):

The module is triggered by the growing *digitalization* of business models and corporate functions such as the finance function. The module has an *international* orientation, as data-driven analytical concepts and machine learning methods are increasingly being adopted by companies on a global scale. Last, but not least, *innovation* and *entrepreneurship* in terms of new business models are often strongly data-driven nowadays.

## Teaching and Learning methods:

Lecture, group discussion, group work, programming assignments, case studies, guest lectures.

## Preparatory Literature

NA

## Recommended Literature:

- » Griffel, Mattan, Daniel Guetta: Python for MBAs, Columbia Business School Publishing, 2021.
- » Sharda, Ramesh, Dursun Delen, Efraim Turban: Analytics, Data Science, & Artificial Intelligence, Pearson, 2021, 11<sup>th</sup> edition.
- » Starmer, Josh: The StatQuest Illustrated Guide To Machine Learning, StatQuest Publications, 2022.

Additional literature will be announced in class. Students are requested to read articles in special interest online media like, for example, Towards Data Science.