

Master of Arts

Master Management (FS-MAMG-60)

60 ECTS

Distance Learning or myStudies

Classification: Non-consecutive

Contents

1. Semester

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2. Semester

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1. Semester

Managing in a Global Economy

Module Code: DLMBGE

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	5	150 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
1. Semester	Minimaldauer: 1 Semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Jürgen Matthias Seeler (Managing in a Global Economy)

Contributing Courses to Module

- Managing in a Global Economy (DLMBGE01)

Module Exam Type

Module Exam

Study Format: myStudies
Exam, 90 Minutes

Study Format: Distance Learning
Exam, 90 Minutes

Split Exam

Weight of Module

see curriculum

Module Contents

- The nature of international business and multinational enterprises
- Strategic management and globalization
- International business operations management
- Organizational structures of international business
- Cultural diversity and international business

Learning Outcomes

Managing in a Global Economy

On successful completion, students will be able to

- Recognize and explain the cultural, social, economic, historical, and political differences that affect strategic decision making on an international/global scale.
- Gather specific information and conduct reliable assessments of the opportunities and risks related to business activities in different geographical market regions and specific national markets.
- Describe the impact of culture on international business activities.
- Identify different options for market entry and market development and participate in strategic planning activities that address these issues.
- Design and evaluate different organizational structures for international businesses and design measures to optimize organizational structures for international operations.
- Design, evaluate, and optimize human resource management practices for global and multinational companies.
- Explain options for international marketing and select an appropriate marketing mix relative to specific products/services and the target market.
- Plan multinational or global supply chains.
- Oversee strategic decisions regarding international accounting practices and the remuneration of expatriate staff.
- Identify and manage challenges associated with operating in an international/global business environment, such as the procurement and coordination of resources and human resource management.
- Develop business plans that implement specific organizational, marketing, and distribution strategies in selected regions/countries.

Links to other Modules within the Study Program

This module is similar to other moduls in the field(s) of Business Administration & Management

Links to other Study Programs of the University

All Master Programmes in the Business & Management field(s)

Managing in a Global Economy

Course Code: DLMBGE01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The internationalization and globalization of product and service markets has meant that industries and economies worldwide are increasingly subject to competition and change. Nowadays, it is essential for the viability and profitability of companies that they adopt a global mindset. Establishing a business and operating in an international context offers a company many unique opportunities, but importantly, multiple diverse threats emerge in this context. An elevated level of international competition, increasing client mobility in a globalized marketplace, discriminatory practices of foreign governments, and subtle cultural differences mean that running an efficient and profitable international business is exceedingly challenging and the likelihood of failure is high. The course is designed to cover the economic, organizational, and cultural underpinnings that students need to grasp in order to better understand the managerial challenges that global organizations of all types and sizes have to cope with. Participants will gain the detailed knowledge and practical experiences they require to understand how organizations can achieve a competitive advantage in a globalized world. This course includes an optional international field trip (Note: special conditions apply - availability depends on demand, special conditions apply). This course will enable students to describe and contrast a set of sustainable corporate and functional strategies in the context of globalization. They will have a detailed understanding of the extent to which globalization and internationalization strategies affect the organizational structures and value creation of global firms.

Course Outcomes

On successful completion, students will be able to

- Recognize and explain the cultural, social, economic, historical, and political differences that affect strategic decision making on an international/global scale.
- Gather specific information and conduct reliable assessments of the opportunities and risks related to business activities in different geographical market regions and specific national markets.
- Describe the impact of culture on international business activities.
- Identify different options for market entry and market development and participate in strategic planning activities that address these issues.
- Design and evaluate different organizational structures for international businesses and design measures to optimize organizational structures for international operations.
- Design, evaluate, and optimize human resource management practices for global and multinational companies.
- Explain options for international marketing and select an appropriate marketing mix relative to specific products/services and the target market.
- Plan multinational or global supply chains.
- Oversee strategic decisions regarding international accounting practices and the remuneration of expatriate staff.
- Identify and manage challenges associated with operating in an international/global business environment, such as the procurement and coordination of resources and human resource management.
- Develop business plans that implement specific organizational, marketing, and distribution strategies in selected regions/countries.

Contents

1. Introduction to Managing in a Global Economy
 - 1.1 What is Globalization?
 - 1.2 Facts on Globalization and the Global Economy
 - 1.3 Theoretical Explanations for Globalization
2. The International Company and its Environment
 - 2.1 International Companies and their Operations
 - 2.2 Operational Patterns in International Markets
 - 2.3 Assessment of the Environment for Internationalization
3. Culture and International Business
 - 3.1 A Generic Perspective on Culture
 - 3.2 Organizational Culture
 - 3.3 Cultural Diversity and the Contemporary Manager

4. Strategy Development in International Business
 - 4.1 Strategy in Globalized Business Operations
 - 4.2 Strategy Concepts and Strategic Options
 - 4.3 Managing Strategy
5. International Human Resource Management
 - 5.1 Characteristics of International Human Resource Management
 - 5.2 The Global Manager
 - 5.3 Instruments in International Human Resource Management
6. Organization in International Business
 - 6.1 Traditional Perspectives on Business Organization
 - 6.2 Modern Views on Business Organization
 - 6.3 Coordination and Control of Intra-Organizational Collaboration
7. International Marketing
 - 7.1 Marketing in International Business
 - 7.2 Strategic Choices in International Marketing
 - 7.3 Marketing Mix Choices in International Marketing
8. Supply Chain Management and Accountancy in International Business
 - 8.1 Supply Chain Management and International Business
 - 8.2 Quality, Supplier Networks, and Inventory in Supply Chain Management
 - 8.3 Accounting in International Business

Literature

Compulsory Reading

Further Reading

- Beamish, P. W., Morrison, A., Inkpen, A., & Rosenzweig, P. (2003). *International management: Text and cases (International student ed.)*. London: McGraw-Hill Education.
- Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. (2010). *International business: Environments and operations (13th ed.)*. Essex: Pearson Education.
- Hill, C. W. L., & Hult, G. T. M. (2016). *International business: Competing in the global marketplace (11th ed.)*. New York, NY: McGraw-Hill Education.
- Johnson, G., Whittington, R., Scholes, K., Angwin, D., & Regnér, P. (2014). *Exploring strategy (10th ed.)*. Essex: Pearson Education.
- Wall, S., Minocha, S., & Rees, B. (2015). *International business (4th ed.)*. Harlow: Pearson Education.

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

DLMBGE01

Strategic Management

Module Code: DLMBSME

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	None	MBA	5	150 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
1. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Josephine Zhou-Brock (Strategic Management)

Contributing Courses to Module

- Strategic Management (DLMBSME01)

Module Exam Type

Module Exam

Study Format: myStudies
Exam, 90 Minutes

Study Format: Distance Learning
Exam, 90 Minutes

Split Exam

Weight of Module

see curriculum

Module Contents

- Foundations and concepts of strategic management
- Strategic planning process
- International challenges of strategic management

Learning Outcomes**Strategic Management**

On successful completion, students will be able to

- understand the entire process of strategic planning from the organizational planning, the implementation to the evaluation and controlling.
- apply appropriate analysis tools in order to methodically address specific business decisions in the international business environment, taking intercultural aspects into account.
- analyze the capabilities of various organizations, that operate in different fields, from a functional and resource perspective by evaluating its strengths and weaknesses.
- develop a better understanding of the wider business environment by analyzing the opportunities and threats facing their organization.
- evaluate strategies by employing appropriate controlling tools.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Business Administration & Management.

Links to other Study Programs of the University

All Master Programmes in the Business & Management field.

Strategic Management

Course Code: DLMBSME01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MBA	English		5	None

Course Description

Various methods of strategic market analysis are presented in this course so as to allow students to evaluate risks and opportunities in global markets, highlighting intercultural aspects, by looking at organizations operating in different countries. Students learn to analyze and understand strengths and weaknesses of organizations from various disciplines (products, services, NGOs etc.) that face specific market situations. Supported by new developments in the field of market research, the process for identifying and analyzing core competencies and competitive advantages in national and international environments is discussed at length. Students are supported to plan strategic alternatives and to implement and control these by taking on fictitious roles within various different organizations. Exercises and international case studies help students to identify with the role of management and participate in the strategic planning process as well as in operational management. This helps students understand the problems companies regularly face and comprehend how methods of modern management can be used in order to solve these.

Course Outcomes

On successful completion, students will be able to

- understand the entire process of strategic planning from the organizational planning, the implementation to the evaluation and controlling.
- apply appropriate analysis tools in order to methodically address specific business decisions in the international business environment, taking intercultural aspects into account.
- analyze the capabilities of various organizations, that operate in different fields, from a functional and resource perspective by evaluating its strengths and weaknesses.
- develop a better understanding of the wider business environment by analyzing the opportunities and threats facing their organization.
- evaluate strategies by employing appropriate controlling tools.

Contents

1. What is Strategy?
 - 1.1 What is a Corporate Strategy?
 - 1.2 What Has to be Taken into Consideration when Making Strategic Decisions?
 - 1.3 Who Takes Part in Developing a Strategy?
 - 1.4 What is Included in a Solid Strategic Plan?

2. The Strategic Environment
 - 2.1 Where Are We in the Market Place? The Macro Environment
 - 2.2 Where Are We in the Market Place? The Micro Environment
 - 2.3 Analysis, Strategic Capabilities, and the Five Forces Model
3. The Position in the Market
 - 3.1 Why Do We Exist?
 - 3.2 What is Our Position in the Market?
 - 3.3 What Information Does the Company Need?
 - 3.4 What Capabilities Does the Company Have?
 - 3.5 What Capabilities Do Others Have?
4. What Strategic Options Are Available to the Strategic Business Unit (SBU)?
 - 4.1 What Strategic Options Does the SBU Have?
 - 4.2 Interactive Strategies
 - 4.3 Product Life Cycle
5. What Strategic Options Are Available to the Corporation?
 - 5.1 Areas to Consider When Formulating a Strategy
 - 5.2 Strategic Options
 - 5.3 Outsourcing
 - 5.4 Product Portfolio Analysis Using the BCG Matrix
 - 5.5 Product Portfolio Analysis Using the GE-McKinsey Matrix
6. What International Strategies Are Available?
 - 6.1 Why Do Companies Go International?
 - 6.2 What Factors Contribute to the Decision About Which Country to Invest In?
 - 6.3 How Can a Company Invest Internationally?
7. Do-It-Yourself, Buy, or Ally?
 - 7.1 Do-It-Yourself
 - 7.2 Mergers and Acquisitions (M&As)
 - 7.3 Strategic Alliances
 - 7.4 How to Decide Whether to Buy, Ally, or Do-It-Yourself?
8. How to Evaluate Strategies?
 - 8.1 How to Evaluate Strategy?
 - 8.2 Implementing Strategy

Literature**Compulsory Reading****Further Reading**

- Hooley, G. J., Piercy, N., Nicoulaud, B., & Rudd, J. M. (2017). *Marketing strategy and competitive positioning* (6th ed.). Harlow: Pearson Education.
- Johnson, G., Whittington, R., Scholes, K., Angwin, D., & Regnér, P. (2017). *Exploring strategy: Text and cases* (10th ed.). Harlow: Pearson Education.
- Kotler, P. T., & Keller, K. L. (2015). *Marketing management* (15th ed.). Harlow: Pearson.
- Porter, M. (2004). *Competitive strategy: Techniques for analyzing industries and competitors*. New York, NY: Free Press.
- Porter, M. (2008). *On competition* (2nd ed.). Boston: Harvard Business Review Press.

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

DLMBSME01

Sales, Pricing and Brand Management

Module Code: DLMBSPBE

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
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Semester / Term 1. Semester	Duration Minimaldauer: 1 Semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
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Module Coordinator

Caterina Fox (Global Brand Management) / Caterina Fox (Sales and Pricing)

Contributing Courses to Module

- Global Brand Management (DLMBSPBE01)
- Sales and Pricing (DLMBSPBE02)

Module Exam Type

Module Exam

Split Exam

Global Brand Management

- Study Format "Distance Learning": Exam, 90 Minutes

Sales and Pricing

- Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents**Global Brand Management**

For most companies, a major opportunity to grow their business involves looking for possibilities outside their native country. However, taking brands beyond national boundaries presents a new set of branding issues as the global marketplace is constantly changing. At the same time, various forms of regionalization are taking place, adding another layer of complexity to managing a brand portfolio. Arguably, products, pricing and distribution are increasingly becoming commodities and the new competitive arena is brand value, creating long-term, profitable brand relationships. Ultimately, strong brands will transcend industries and provide an organization with one of its most valuable assets. This course ultimately aims to introduce students to the differentiation of products and services in a world of alternatives and the benefits/disadvantages of providing customers with the power of choice.

Sales and Pricing

Establishing and maintaining a competitive customer interface is one of the major challenges for every company to assure successful revenue- and profit-management. The course will allow students to understanding the optimization levers of the customer interface. This includes advanced methods of market- and customer segmentation, channel management including the design, setup and optimization of a customer oriented sales organization (e.g. key account management), practices for sales-force-effectiveness, sales optimization levers, e.g. for customer penetration, and methods for price-differentiation and -realization. The course incorporates case-studies and practice related data and for each optimization lever, students are introduced to a comprehensive tool-box approach. The tool box for each lever contains the required theory, a set of basic analyses and the application of best-practice examples and metrics.

Learning Outcomes

Global Brand Management

On successful completion, students will be able to

- analyze brands, brand components and brand management.
- examine how brands are positioned and re-positioned in regional, national and international markets and explore the concept of shared- and co-operative branding.
- promote the importance of brand valuation and measurement techniques within their company.
- form and apply tactics to address brand falsification and protection as well as to develop strategies to manage a brand crisis.
- analyze the main challenges facing international brands, and be able to measure their brand equity
- understand the factors that contribute to increasing or losing consumer-based brand equity.
- analyze a company's current brand strategy and propose viable alternatives as well as make informed decisions with greater probability of success.

Sales and Pricing

On successful completion, students will be able to

- identify the key-success factors for modern sales organizations.
- describe the relationship between segmentation and the design of an appropriate sales organization.
- execute respective analyses and apply improvement levers.
- demonstrate the use of the tool-boxes for the respective optimization levers.
- identify major characteristics of a high-performance sales organization.
- conduct decisive analyses to assess the strength and weaknesses of a sales organization and identify respective optimization levers.
- implement the required organizational and process-related improvement levers.
- measure the performance of a sales-organization using established methods, KPIs and metrics.
- apply fundamental concepts of international pricing.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Marketing & Sales.

Links to other Study Programs of the University

All Master Programmes in the Marketing field.

Global Brand Management

Course Code: DLMBSPBE01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

For most companies, a major opportunity to grow their business involves looking for possibilities outside their native country. However, taking brands beyond national boundaries presents a new set of branding issues as the global marketplace is constantly changing. At the same time, various forms of regionalization are taking place, adding another layer of complexity to managing a brand portfolio. Arguably, products, pricing and distribution are increasingly becoming commodities and the new competitive arena is brand value, creating long-term, profitable brand relationships. Ultimately, strong brands will transcend industries and provide an organization with one of its most valuable assets. This course ultimately aims to introduce students to the differentiation of products and services in a world of alternatives and the benefits/disadvantages of providing customers with the power of choice.

Course Outcomes

On successful completion, students will be able to

- analyze brands, brand components and brand management.
- examine how brands are positioned and re-positioned in regional, national and international markets and explore the concept of shared- and co-operative branding.
- promote the importance of brand valuation and measurement techniques within their company.
- form and apply tactics to address brand falsification and protection as well as to develop strategies to manage a brand crisis.
- analyze the main challenges facing international brands, and be able to measure their brand equity
- understand the factors that contribute to increasing or losing consumer-based brand equity.
- analyze a company's current brand strategy and propose viable alternatives as well as make informed decisions with greater probability of success.

Contents

1. Introduction to Global Brand Management
 - 1.1 Brand, Brand Equity, and Brand Value
 - 1.2 Brand Management and Brand Leadership
 - 1.3 Integrating Marketing Activities

2. Culture and Branding
 - 2.1 What is Culture?
 - 2.2 Culture and Consumer Behavior
 - 2.3 The Global-Local Dilemma of Branding
3. Creating Global Brands
 - 3.1 Brand Positioning
 - 3.2 Designing and Implementing Stages of Branding Strategies
 - 3.3 Choosing Brand Elements to Build Brand Equity
 - 3.4 Designing Marketing Programs to Build Brand Equity
4. Managing Global Brands
 - 4.1 Branding Strategy
 - 4.2 Brand Hierarchy
 - 4.3 Business-to-Business (B2B) Brand Management Strategies
5. Growing and Sustaining Brand Equity
 - 5.1 Extending the Brand
 - 5.2 Brand Alliances
 - 5.3 Green and Cause Marketing
6. Measuring Global Brand Equity and Performance
 - 6.1 Brand Equity Measurement Systems
 - 6.2 Measuring Sources of Brand Equity
 - 6.3 Measuring Outcomes of Brand Equity
7. Brand Analysis and Strategy Across Multiple Markets: A Managerial Approach
 - 7.1 Internal Analysis
 - 7.2 External Analysis
 - 7.3 Global Brand Management Scenarios
8. Managing a Brand Crisis
 - 8.1 Revitalizing a Brand
 - 8.2 Brand Falsification
 - 8.3 Brand Protection Strategies
 - 8.4 Brand Crises

Literature**Compulsory Reading****Further Reading**

- Aaker, D. A. (1991). *Managing brand equity*. New York, NY: Free Press.
- de Mooij, M. (2014). *Global marketing and advertising: Understanding cultural paradoxes* (4th ed.). Thousand Oaks, CA: Sage.
- Kapferer, J. N. (2012). *The new strategic brand management: Advanced insights and strategic thinking* (5th ed.). London: Kogan Page.
- Keller, K. L., Aperia, T., & Georgson, M. (2013). *Strategic brand management: A European perspective* (2nd ed.). Upper Saddle River, NJ: Prentice Hall. (Database: MyiLibrary).

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Sales and Pricing

Course Code: DLMBSPBE02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Establishing and maintaining a competitive customer interface is one of the major challenges for every company to assure successful revenue- and profit-management. The course will allow students to understand the optimization levers of the customer interface. This includes advanced methods of market- and customer segmentation, channel management including the design, setup and optimization of a customer oriented sales organization (e.g. key account management), practices for sales-force-effectiveness, sales optimization levers, e.g. for customer penetration, and methods for price-differentiation and -realization. The course incorporates case-studies and practice related data and for each optimization lever, students are introduced to a comprehensive tool-box approach. The tool box for each lever contains the required theory, a set of basic analyses and the application of best-practice examples and metrics.

Course Outcomes

On successful completion, students will be able to

- identify the key-success factors for modern sales organizations.
- describe the relationship between segmentation and the design of an appropriate sales organization.
- execute respective analyses and apply improvement levers.
- demonstrate the use of the tool-boxes for the respective optimization levers.
- identify major characteristics of a high-performance sales organization.
- conduct decisive analyses to assess the strength and weaknesses of a sales organization and identify respective optimization levers.
- implement the required organizational and process-related improvement levers.
- measure the performance of a sales-organization using established methods, KPIs and metrics.
- apply fundamental concepts of international pricing.

Contents

1. Segmentation
 - 1.1 Customer Segmentation
 - 1.2 Selection of Market Segments for Market Entry
 - 1.3 Development of Market Segments

2. Channel Management
 - 2.1 Distribution System as a Function of the Products Sold
 - 2.2 Selection of Distribution Partners
 - 2.3 Professionalization and Mobilization of Distribution Partners
 - 2.4 Control of Distribution Partners
3. Sales Force Effectiveness
 - 3.1 Sales Strategy
 - 3.2 Sales Process
 - 3.3 Sales Organization
 - 3.4 Sales Information and Management Systems
 - 3.5 Sales Controlling
4. Sales Optimization Levers
 - 4.1 Key Account Management
 - 4.2 Proactive Sales
 - 4.3 Value-Based Selling
 - 4.4 Online Sales Tools
5. Fundamentals of International Pricing
 - 5.1 Pricing Strategies
 - 5.2 Pricing for Market Segments
 - 5.3 Transaction Pricing and Managing the Price Waterfall
 - 5.4 Price Differentiation and Standardization in an International Context
6. Special Topics in International Pricing
 - 6.1 Gray Markets
 - 6.2 Transfer Pricing
 - 6.3 Price Wars
 - 6.4 Innovative Pricing Methods
 - 6.5 Risks in International Business

Literature**Compulsory Reading****Further Reading**

- Dibb, S., & Simkin, L. (2010). *The market segmentation workbook: Target marketing for marketing managers*. Boston, MA: Cengage Learning.
- Kotler, P., Keller, K., Brady, M., Goodman, M., & Hansen, T. (2016). *Marketing management* (3rd ed.) (pp. 331–420). Harlow: Pearson Education. (Database: Mylibrary).
- Nagle, T. T., Zale, J., & Hogan, J. (2016). *The strategy and tactics of pricing* (5th ed.). Abingdon: Routledge. (Database: EBSCO).
- Zoltners, A. A., Sinha, P., & Zoltners, G. A. (2001). *The complete guide to accelerating sales force performance: How to get more sales from your sales force*. New York, NY: Amacom. (Database: EBSCO).

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

DLMBSPBE02

Corporate Finance and Investment

Module Code: DLMBCFIE

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
1. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Andreas Simon (Advanced Corporate Finance) / Prof. Dr. Andreas Simon (Investment Analysis & Portfolio Management)

Contributing Courses to Module

- Advanced Corporate Finance (DLMBCFIE01)
- Investment Analysis & Portfolio Management (DLMBCFIE02)

Module Exam Type

Module Exam	Split Exam
	<p><u>Advanced Corporate Finance</u></p> <ul style="list-style-type: none"> • Study Format "Distance Learning": Exam, 90 Minutes <p><u>Investment Analysis & Portfolio Management</u></p> <ul style="list-style-type: none"> • Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents**Advanced Corporate Finance**

- Financing decisions and issuing securities
- Debt financing and leasing
- Options and futures
- Takeovers, corporate control, and governance
- Unsolved issues and the future of finance

Investment Analysis & Portfolio Management

- Introduction to investment analysis and portfolio management
- Portfolio selection and the optimum portfolio
- The equilibrium in capital markets and asset pricing models
- Analysis and management of securities
- Evaluation of the investment performance

Learning Outcomes**Advanced Corporate Finance**

On successful completion, students will be able to

- identify methods of issuing corporate debt and equity securities, and understand the role of financial intermediaries.
- discuss dividend policy and corporate capital structure in perfect markets vis-à-vis imperfect markets.
- utilize a range of tools for valuing different kinds of debt.
- describe various financing options and their different forms of application in the context of corporate finance.
- discuss mergers and takeovers and the role of different parties involved in the transaction process.

Investment Analysis & Portfolio Management

On successful completion, students will be able to

- describe the theoretical constructs of investments and portfolio analysis.
- apply the modern portfolio theory and the theory of capital markets to practical questions of investment decisions.
- discuss the conflicting priorities between the normative theoretical approach of portfolio selection and equilibrium asset pricing on the one hand, and the practical application of investment decisions such as stock picking and technical analysis on the other hand.
- utilize various tools for researching and analyzing investment vehicles used in the context of asset pricing and asset allocation decisions.
- identify main features and practices of the global investment advisory industry.
- describe warrants and convertibles, options and futures and discuss the application of these vehicles in a portfolio investment context.

<p>Links to other Modules within the Study Program</p> <p>This module is similar to other modules in the field of Finance & Tax Accounting</p>	<p>Links to other Study Programs of the University</p> <p>All Master Programmes in the Business & Management field</p>
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Advanced Corporate Finance

Course Code: DLMBCFIE01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The last decade has seen fundamental changes in financial markets and financial instruments. Both the theory and practice of corporate finance have been moving ahead with uncommon speed. Participants will be guided through the main areas of modern financial theory, including the pricing of assets and derivatives, corporate financial policy, and corporate control. The course emphasizes the modern fundamentals of the theory of finance and brings the theory to life with contemporary examples.

Course Outcomes

On successful completion, students will be able to

- identify methods of issuing corporate debt and equity securities, and understand the role of financial intermediaries.
- discuss dividend policy and corporate capital structure in perfect markets vis-à-vis imperfect markets.
- utilize a range of tools for valuing different kinds of debt.
- describe various financing options and their different forms of application in the context of corporate finance.
- discuss mergers and takeovers and the role of different parties involved in the transaction process.

Contents

1. Financing Decisions and Issuing Securities
 - 1.1 Types of Corporate Financing
 - 1.2 Corporations and Issuing Shares
 - 1.3 Corporations and Issuing Debt Securities
2. Dividend Policy and Capital Structure
 - 2.1 What's Your Dividend Policy?
 - 2.2 What's Your Debt Policy?
 - 2.3 Weighted Average Cost of Capital (WACC)
 - 2.4 Corporate and Personal Taxes
 - 2.5 Capital Structure and Related Theories

3. Debt Financing and Leasing
 - 3.1 Debt Valuation
 - 3.2 Rating Debt
 - 3.3 Different Kinds of Debt and Hybrid Securities
 - 3.4 Leasing as a Form of Corporate Finance
4. Options and Futures
 - 4.1 Derivative Financial Instruments, Options and Futures
 - 4.2 Valuing Options, the Binomial Model, the Black-Scholes Formula
 - 4.3 Real Options
5. Takeovers, Corporate Control, and Governance
 - 5.1 Mergers and Acquisitions
 - 5.2 LBOs, Management Buyouts, and Going Private
 - 5.3 Private Equity and the Venture Capitalist
 - 5.4 Empirical Testing of Takeover Success
 - 5.5 Corporate Governance and Corporate Control
6. Unsolved Issues and the Future of Finance
 - 6.1 What Do We Know and What Do We Not Know About Finance?
 - 6.2 The Future of Finance

Literature**Compulsory Reading****Further Reading**

- Brealey, R., Myers, S. C., & Allen, F. (2016). Principles of corporate finance (12th ed.). New York, NY: McGraw-Hill Education.
- Vernimmen, P., Quiry, P., Dallochio, M., Le Fur, Y., & Salvi, A. (2014). Corporate finance: Theory and practice (4th ed.). Hoboken, NJ: John Wiley & Sons. (Database: EBSCO).

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Investment Analysis & Portfolio Management

Course Code: DLMBCFIE02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Security analysis, asset allocation strategies, and the optimal composition of portfolios of financial assets are some of the most important fields of advanced financial management. This course is designed to bring together investment analysis and portfolio theory and their implementation with regard to portfolio management. Topics to be covered are the theory of portfolio selection and the theory's application, the hypotheses of efficient capital markets and the capital market equilibrium, analysis of investments and the evaluation of portfolios (or mutual funds) of common stocks, bonds, international assets, and other asset classes. Students will be directed through a broad and critical evaluation of the various investment strategies for maximizing returns and minimizing risk on portfolios. Investment analysis and portfolio management is a truly global topic. As a consequence, the course will take an international perspective, provide an insight into the global investment advisory industry, and discuss best-practice approaches around the globe.

Course Outcomes

On successful completion, students will be able to

- describe the theoretical constructs of investments and portfolio analysis.
- apply the modern portfolio theory and the theory of capital markets to practical questions of investment decisions.
- discuss the conflicting priorities between the normative theoretical approach of portfolio selection and equilibrium asset pricing on the one hand, and the practical application of investment decisions such as stock picking and technical analysis on the other hand.
- utilize various tools for researching and analyzing investment vehicles used in the context of asset pricing and asset allocation decisions.
- identify main features and practices of the global investment advisory industry.
- describe warrants and convertibles, options and futures and discuss the application of these vehicles in a portfolio investment context.

Contents

1. Introduction to Investment Analysis and Portfolio Management
 - 1.1 The Asset Management and Investment Advisory Industry
 - 1.2 Financial Instruments, Derivatives, and Organization of Securities Markets
 - 1.3 The History of Investment Analysis

2. Portfolio Selection and the Optimum Portfolio
 - 2.1 Mean Variance Portfolio Theory
 - 2.2 The Calculation of Risk and Return
 - 2.3 Efficient Portfolios and Techniques for Calculating the Efficient Frontier
 - 2.4 Single-Index Models and Multi-Index Models
 - 2.5 International Diversification
3. Equilibrium in Capital Markets and Asset Pricing Models
 - 3.1 Equilibrium in Capital Markets and the Standard Capital Asset Pricing Model
 - 3.2 Empirical Tests of Equilibrium Models
 - 3.3 Extensions to the Single-Factor Capital Asset Pricing Model
 - 3.4 Multifactor Asset Pricing Models: Arbitrage Pricing Theory and the Fama-French Model
4. Analysis of Securities
 - 4.1 Macro- and Microanalyses of Industries and Companies
 - 4.2 Stock Valuation, Intrinsic Value and Market Value Determinants, and Valuation Techniques
 - 4.3 The Analysis and Valuation of Bonds
 - 4.4 Technical Analysis and Behavioral Finance
5. Management of Securities
 - 5.1 The Efficient Market Hypothesis
 - 5.2 Stock and Bond Portfolio Management Strategies Using Active vs Passive Strategies
 - 5.3 Asset Allocation Strategies
6. Investment Vehicles
 - 6.1 Mutual Funds: Types, Industry, and Participants
 - 6.2 Hedge Funds
 - 6.3 Private Equity Funds
7. Evaluation of Investment Performance
 - 7.1 Globalization and International Investing
 - 7.2 Investment Process
 - 7.3 Evaluation of Portfolio Performance Using the Sharpe Ratio, Jensen Measure, Treynor Measure, and Other Measures
 - 7.4 Evaluation of Security Analysis

Literature**Compulsory Reading****Further Reading**

- Bodie, Z., Kane, A., & Marcus, A. J. (2017). Essentials of investments (10th ed.). New York, NY: McGraw-Hill Education.
- Fabozzi, F. J., & Modigliani, F. (2009). Capital markets: Institutions and instruments (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Reilly, F. K., & Brown, K. C. (2012). Investment analysis and portfolio management (10th ed.). Boston, MA: Cengage Learning.
- Smart, S., Gitman, L. J., & Joehnk, M. D. (2017). Fundamentals of investing (13th ed.). Upper Saddle River, NJ: Pearson. (Database: EBSCO).

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

IT Project and Architecture Management

Module Code: DLMBITPAM

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
1. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Carsten Skerra (IT Project Management) / Prof. Dr. Carsten Skerra (IT Architecture Management)

Contributing Courses to Module

- IT Project Management (DLMBITPAM01)
- IT Architecture Management (DLMBITPAM02)

Module Exam Type

Module Exam	Split Exam
	<p><u>IT Project Management</u></p> <ul style="list-style-type: none"> • Study Format "Distance Learning": Exam, 90 Minutes <p><u>IT Architecture Management</u></p> <ul style="list-style-type: none"> • Study Format "Distance Learning": Written Assessment: Case Study

Weight of Module

see curriculum

Module Contents**IT Project Management**

- Organizing the work
- Cost estimation and controlling
- The human factor
- Organizing small and medium projects
- Organizing large projects

IT Architecture Management

- Architecture documentation
- Architecture governance
- Enterprise architecture management (EAM)
- IT application portfolio management
- Enterprise architecture patterns
- Architecture framework: TOGAF

Learning Outcomes**IT Project Management**

On successful completion, students will be able to

- critically reflect the status of knowledge on IT project management.
- set up different IT project management formats (small, medium and large projects) and know the methods for managing these different IT projects professionally.
- develop an IT management proposal as the fundament of a professional IT project management concept.
- understand and integrate different IT management project plans (e.g., time plan, cost plan, resources plan, risk plan) and use those plans in an integrative IT project planning and controlling scheme.
- organize and to lead an IT project team and its core and/or extended team members.

IT Architecture Management

On successful completion, students will be able to

- understand that having a well-defined IT architecture blueprint in place is key to success for IT organizations.
- analyze the constraints of existing application, infrastructure and information/ data architectures.
- know different types of IT application portfolio management.
- manage enterprise architecture patterns proactively.
- understand how to initiate change requests in order to modify or extend the IT architecture if the introduction or modification of a service is not possible within a given framework.

<p>Links to other Modules within the Study Program</p> <p>This module is similar to other modules in the field(s) of Computer Science & Software Development</p>	<p>Links to other Study Programs of the University</p> <p>All Master Programmes in the IT & Technology field(s)</p>
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IT Project Management

Course Code: DLMBITPAM01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The purpose of this course is to introduce students to the concepts involved in IT project management. This is achieved through the development of an understanding of the fundamental tenets of project management enhancing the students' ability to apply their knowledge, skills and competencies in analyzing and solving IT project management problems. A special focus is put on the specifics of IT project organization, cost management and the human factor within IT projects.

Course Outcomes

On successful completion, students will be able to

- critically reflect the status of knowledge on IT project management.
- set up different IT project management formats (small, medium and large projects) and know the methods for managing these different IT projects professionally.
- develop an IT management proposal as the fundament of a professional IT project management concept.
- understand and integrate different IT management project plans (e.g., time plan, cost plan, resources plan, risk plan) and use those plans in an integrative IT project planning and controlling scheme.
- organize and to lead an IT project team and its core and/or extended team members.

Contents

1. Introduction: Characteristics of IT Projects
 - 1.1 Defining IT Projects
 - 1.2 Overview on Typical Roles and Phases of IT Projects
 - 1.3 Risks and Challenges of IT Projects
 - 1.4 Role of an IT Project Manager
2. Organizing the Work
 - 2.1 Project Breakdown Structure, Work Packages
 - 2.2 Prioritization
 - 2.3 Time Planning, Milestones, Gantt-Diagram
 - 2.4 Definition of Done

3. Cost Estimation and Controlling
 - 3.1 Challenges of Cost Estimation in IT Projects
 - 3.2 Estimation Techniques: 3-Point Estimation, Double Blind Expert Estimation, Function Points
 - 3.3 Cost Controlling Using Earned Value Analysis
 - 3.4 Risk Management
4. The Human Factor
 - 4.1 Vision Keeping
 - 4.2 Stakeholder Management
 - 4.3 Conflict Management
5. Organizing Small and Medium Projects
 - 5.1 Rational Unified Process (RUP)
 - 5.2 Agile Software Processes
 - 5.3 Scrum
 - 5.4 Plan-driven Project Management in Small Projects
6. Organizing Large Projects
 - 6.1 PMBOK Guide
 - 6.2 Prince2
 - 6.3 Multi Project Management
 - 6.4 Agile Software Processes in Large Projects
 - 6.5 Selection of the Appropriate Project Management Method

Literature**Compulsory Reading****Further Reading**

- Stephens, R. (2015). Beginning software engineering. Chichester: John Wiley & Sons. (Database: ProQuest).
- Hans, R. T. (2013). Work breakdown structure: A tool for software project scope verification. Pretoria: Tshwane University of Technology.

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

IT Architecture Management

Course Code: DLMBITPAM02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The course IT Architecture Management aims to enable students to define a blueprint for the future development of a particular IT landscape, taking into account service strategies and available technologies given to an IT service provider.

Course Outcomes

On successful completion, students will be able to

- understand that having a well-defined IT architecture blueprint in place is key to success for IT organizations.
- analyze the constraints of existing application, infrastructure and information/ data architectures.
- know different types of IT application portfolio management.
- manage enterprise architecture patterns proactively.
- understand how to initiate change requests in order to modify or extend the IT architecture if the introduction or modification of a service is not possible within a given framework.

Contents

1. Introduction to IT Architectures
 - 1.1 The Term "Architecture" in the Context of IT
 - 1.2 Use Cases and Levels of IT Architectures
 - 1.3 Overview on IT Architecture Management
2. Enterprise Architecture Management (EAM)
 - 2.1 IT-Strategy
 - 2.2 Enterprise Architecture
 - 2.3 Roles and Activities in EAM
3. IT Application Portfolio Management
 - 3.1 Application Handbook
 - 3.2 Portfolio Analyses
 - 3.3 Planning the Application Landscape

4. Architecture Framework: TOGAF
 - 4.1 Purpose and Overview on TOGAF
 - 4.2 Architecture Development Method (ADM)
 - 4.3 Guidelines & Techniques
 - 4.4 Architecture Content Framework
 - 4.5 Architecture Capability Framework
5. Architecture Documentation
 - 5.1 Structures, Components, and Interfaces
 - 5.2 Processes and Applications
 - 5.3 Domain Architecture
6. Architecture Governance
 - 6.1 Roles and Committees
 - 6.2 Processes and Decisions
 - 6.3 Management of Architectural Policies
7. Enterprise Architecture Patterns
 - 7.1 Structures, Components, and Interfaces
 - 7.2 Processes and Applications
 - 7.3 Domain Architecture

Literature

Compulsory Reading

Further Reading

- Hanschke, I. (2009). Strategic IT management: A toolkit for enterprise architecture management. Berlin, Heidelberg: Springer. (Database: ProQuest).
- Perroud, T., & Inversini, R. (2013). Enterprise architecture patterns: Practical solutions for recurring IT-architecture problems (Chs. 1-5). Berlin: Springer Berlin Heidelberg. (Database: ProQuest).
- The Open Group Architecture Framework. (2018). TOGAF 9.2 (Chs. 2, 4, 17, 29, 35, scan Chs. 5-16, scan Ch. 18-28, scan Chs. 36-38). (Available on the internet).

Study Format Distance Learning

Study Format Distance Learning	Course Type Case Study
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

DLMBITPAM02

Manufacturing Methods Industry 4.0 and Internet of Things

Module Code: DLMBMMIIT

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
1. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Dr. Sebastian Lempert (Internet of Things) / Prof. Dr. Veronica Mas (Manufacturing Methods Industry 4.0)

Contributing Courses to Module

- Internet of Things (DLMBMMIIT01)
- Manufacturing Methods Industry 4.0 (DLMBMMIIT02)

Module Exam Type

Module Exam

Split Exam

Internet of Things

- Study Format "Distance Learning": Exam, 90 Minutes
- Study Format "myStudies": Exam, 90 Minutes

Manufacturing Methods Industry 4.0

- Study Format "myStudies": Exam, 90 Minutes
- Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents

Internet of Things

- Consumer use cases and risks
- Business use cases and risks
- Social-economic issues
- Enabling technologies and networking fundamentals

Manufacturing Methods Industry 4.0

- Forming
- Cutting
- Rapid prototyping
- Rapid tooling
- Direct manufacturing

Learning Outcomes

Internet of Things

On successful completion, students will be able to

- distinguish and discuss a broad range of use cases for the internet of things (IoT).
- understand and reflect upon the different perspectives on IoT.
- apply distinct techniques to engineer internet-of-things products.
- evaluate and identify appropriate IoT communication technology and standards according to given IoT product requirements.
- reflect on the respective theoretical foundation, evaluate different approaches, and apply appropriate approaches to practical questions and cases.

Manufacturing Methods Industry 4.0

On successful completion, students will be able to

- evaluate different manufacturing methods against given product and process requirements.
- define and design modern additive techniques in contrast to traditional manufacturing.
- assess and estimate the impact of current trends on manufacturing like cyber-physical systems to given manufacturing challenges and practical problems.
- apply modern processes like rapid prototyping, rapid tooling, and direct manufacturing.

Links to other Modules within the Study Program

This module is similar to other modules in the field(s) of Computer Science & Software Development

Links to other Study Programs of the University

All Master Programmes in the IT & Technology field(s)

Internet of Things

Course Code: DLMBMMIT01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The Internet of Things (IoT), once a rough vision, has become reality today in a broad manner. There is a plethora of devices and services available to both consumers and businesses. From smart homes to smart cities, from smart devices to smart factories – internet-of-things technologies impact on our lives and environments. This course follows a top-down approach, discussing a broad set of aspects connected with the internet of things. It starts with use cases and risks from the perspectives of customers and businesses and winds up with a technical foundation of the internet of things. To address the engineering perspective, a set of techniques is proposed.

Course Outcomes

On successful completion, students will be able to

- distinguish and discuss a broad range of use cases for the internet of things (IoT).
- understand and reflect upon the different perspectives on IoT.
- apply distinct techniques to engineer internet-of-things products.
- evaluate and identify appropriate IoT communication technology and standards according to given IoT product requirements.
- reflect on the respective theoretical foundation, evaluate different approaches, and apply appropriate approaches to practical questions and cases.

Contents

1. Introduction into the Internet of Things
 - 1.1 Foundations and Motivations
 - 1.2 Potential and Challenges
2. Social and Business Relevance
 - 2.1 Innovations for Consumers and Industry
 - 2.2 Impact on Human and Work Environment
 - 2.3 Privacy and Security

3. Architectures of Internet of Things and Industrial Internet of Things
 - 3.1 Elements of IoTs and IIoTs
 - 3.2 Sensors and Nodes
 - 3.3 Power Systems
 - 3.4 Fog Processors
 - 3.5 Platforms
4. Communication Standards and Technologies
 - 4.1 Network Topologies
 - 4.2 Network Protocols
 - 4.3 Communication Technologies
5. Data Storage and Processing
 - 5.1 NoSQL and MapReduce
 - 5.2 Linked Data and RDF(S)
 - 5.3 Semantic Reasoning
 - 5.4 Complex Event Processing
 - 5.5 Machine Learning
 - 5.6 Overview of Existing Data Storage and Processing Platforms
6. Fields of Application
 - 6.1 Smart Home/Living
 - 6.2 Smart Buildings
 - 6.3 Ambient Assisted Living
 - 6.4 Smart Energy/Grid
 - 6.5 Smart Factory
 - 6.6 Smart Logistics
 - 6.7 Smart Healthcare
 - 6.8 Smart Agriculture

Literature**Compulsory Reading****Further Reading**

- Lea, P. (2018). Internet of things for architects: Architecting IoT solutions by implementing sensors, communication infrastructure, edge computing, analytics, and security. Birmingham: Packt Publishing Ltd. (Database: Dawson).
- McEwen, A., & Cassimally, H. (2013). Designing the internet of things. Chichester: John Wiley & Sons. (Database: ProQuest).
- Raj, P., & Raman, A. C. (2017). The Internet of Things: Enabling technologies, platforms, and use cases. Boca Raton, FL: Auerbach Publications. (Database: ProQuest).
- Weber, R. H., & Weber, R. (2010). Internet of Things. Heidelberg: Springer. (Database: Dawson).

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Manufacturing Methods Industry 4.0

Course Code: DLMBMMIT02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The aim of the course is to enable students to evaluate and identify appropriate manufacturing methods in the context of Industry 4.0. For that purpose, the course provides a comprehensive introduction of such processes based on traditional, standardized manufacturing techniques that have influenced and are still influencing production processes through technological developments under the generic term Industry 4.0. These include technological advances in additive manufacturing processes that enable applications such as rapid prototyping, rapid tooling, and direct manufacturing. Finally, the course deals with the consequences of the digitization and networking of production facilities and their elements in terms of a cyber-physical system.

Course Outcomes

On successful completion, students will be able to

- evaluate different manufacturing methods against given product and process requirements.
- define and design modern additive techniques in contrast to traditional manufacturing.
- assess and estimate the impact of current trends on manufacturing like cyber-physical systems to given manufacturing challenges and practical problems.
- apply modern processes like rapid prototyping, rapid tooling, and direct manufacturing.

Contents

1. Introduction to Manufacturing Methods
 - 1.1 Basic Concepts
 - 1.2 Historical Development of Manufacturing
 - 1.3 About the Long Tail
2. Manufacturing Methods
 - 2.1 Casting and Molding
 - 2.2 Shaping
 - 2.3 Machining
 - 2.4 Joining
 - 2.5 Coating

3. Additive Manufacturing and 3D printing
 - 3.1 Basics and Legal Aspects
 - 3.2 Material Extrusion
 - 3.3 Vat Polymerization
 - 3.4 Powder Bed Fusion
 - 3.5 Material Jetting
 - 3.6 Binder Jetting
 - 3.7 Direct Energy Deposition
 - 3.8 Sheet Lamination
4. Rapid Prototyping
 - 4.1 Definitions
 - 4.2 Strategical and Operative Aspects
 - 4.3 Application Scenarios
5. Rapid Tooling
 - 5.1 Definitions
 - 5.2 Direct and Indirect Methods
 - 5.3 Application Scenarios
6. Direct/Rapid Manufacturing
 - 6.1 Potentials and Requirements
 - 6.2 Implementation Examples
7. Cyber-Physical Production Systems
 - 7.1 Introduction
 - 7.2 Cyber-Physical Production Systems
 - 7.3 Impact on Design and Maintenance of Plants
 - 7.4 Dynamic Reconfiguration of Plants
 - 7.5 Application Examples

Literature**Compulsory Reading****Further Reading**

- Anderson, C. (2012). Makers. The new industrial revolution. New York, NY: Crown Business.
- Gebhardt, A. (2012). Understanding additive manufacturing. Rapid prototyping – Rapid tooling – Rapid manufacturing. Munich: Hanser.
- Groover, Mikell P. (2012). Fundamentals of modern manufacturing: Materials, processes, and systems. Hoboken, NJ: John Wiley & Sons Inc.

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Data Science and Analytics

Module Code: DLMBDSA

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
1. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Thomas Zöller (Data Science) / Prof. Dr. Jöran Pieper (Analytical Software and Frameworks)

Contributing Courses to Module

- Data Science (DLMBDSA01)
- Analytical Software and Frameworks (DLMBDSA02)

Module Exam Type

Module Exam	Split Exam
	<p><u>Data Science</u></p> <ul style="list-style-type: none"> • Study Format "myStudies": Exam, 90 Minutes • Study Format "Distance Learning": Exam, 90 Minutes <p><u>Analytical Software and Frameworks</u></p> <ul style="list-style-type: none"> • Study Format "Distance Learning": Written Assessment: Written Assignment

Weight of Module

see curriculum

Module Contents**Data Science**

- Introduction to data science
- Use cases and performance evaluation
- Pre-processing of data
- Processing of data
- Selected mathematical techniques
- Selected artificial intelligence techniques

Analytical Software and Frameworks

- Introduction to analytical software and frameworks
- Data storage
- Statistical modeling
- Machine learning
- Cloud computing platforms
- Distributed computing
- Database technologies

Learning Outcomes**Data Science**

On successful completion, students will be able to

- identify use cases and evaluate the performance of data-driven approaches.
- understand how domain specific knowledge for a particular application context is required to identify objectives and value propositions for data science use cases.
- appreciate the role and necessity for business-centric model evaluation apposite to the respective area of application.
- comprehend how data are pre-processed in preparation for analysis.
- develop typologies for data and ontologies for knowledge representation.
- decide for appropriate mathematical algorithms to utilize data analysis for a given task.
- understand the value, applicability, and limitations of artificial intelligence for data analysis.

Analytical Software and Frameworks

On successful completion, students will be able to

- comprehend how cloud computing and distributed computing support the field of data analytics.
- understand in-memory database technologies for real-time analytics.
- apply advanced statistics and machine learning solutions to solve data analysis problems.
- compare the capabilities and limitations of the presented software solutions.
- understand how to identify the right technological solution for a specific application domain.

Links to other Modules within the Study Program

This module is similar to other modules in the field(s) of Data Science & Artificial Intelligence

Links to other Study Programs of the University

All Master Programmes in the IT & Technology field(s)

Data Science

Course Code: DLMBDSA01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The course provides the framework to create value from data. After an introduction the course covers how to identify suitable use cases and evaluate the performance of data-driven methods. In an interdisciplinary approach, the requirements from a specific application domain need to be understood and transferred to the technological understanding to identify the objectives and value proposition of a Data Science project. The course covers techniques for the technical processing of data and then introduces advanced mathematical techniques and selected methods from artificial intelligence that are used to analyze data and make predictions.

Course Outcomes

On successful completion, students will be able to

- identify use cases and evaluate the performance of data-driven approaches.
- understand how domain specific knowledge for a particular application context is required to identify objectives and value propositions for data science use cases.
- appreciate the role and necessity for business-centric model evaluation apposite to the respective area of application.
- comprehend how data are pre-processed in preparation for analysis.
- develop typologies for data and ontologies for knowledge representation.
- decide for appropriate mathematical algorithms to utilize data analysis for a given task.
- understand the value, applicability, and limitations of artificial intelligence for data analysis.

Contents

1. Introduction to Data Science
 - 1.1 Overview of Data Science
 - 1.2 Terms and Definitions
 - 1.3 Applications & Notable Examples
 - 1.4 Sources of Data
 - 1.5 Structured, Unstructured, Streaming
 - 1.6 Typical Data Sources and their Data Type
 - 1.7 The 4 V's of Data: Volume, Variety, Velocity, Veracity
 - 1.8 Introduction to Probability Theory
 - 1.9 What Are Probabilities and Probability Distributions
 - 1.10 Introduction to Bayesian Statistics
 - 1.11 Relation to Data Science: Prediction as a Probability
2. Use Cases and Performance Evaluation
 - 2.1 Identification of Use Cases for Data Science
 - 2.2 Identifying Data Science Use Cases
 - 2.3 From Prediction to Decision: Generating Value from Data Science
 - 2.4 Evaluation of Predictions
 - 2.5 Overview of Relevant Metrics
 - 2.6 Business-centric Evaluation: the Role of KPIs
 - 2.7 Cognitive Biases and Decision-making Fallacies
3. Pre-Processing of Data
 - 3.1 Transmission of Data
 - 3.2 Data Quality and Cleansing of Data
 - 3.3 Transformation of Data (Normalization, Aggregation)
 - 3.4 Reduction of Data Dimensionality
 - 3.5 Data Visualisation
4. Processing of Data
 - 4.1 Stages of Data Processing
 - 4.2 Methods and Types of Data Processing
 - 4.3 Output Formats of Processed Data

5. Selected Mathematical Techniques
 - 5.1 Linear Regression
 - 5.2 Principal Component Analysis
 - 5.3 Clustering
 - 5.4 Time-series Forecasting
 - 5.5 Overview of Further Approaches

6. Selected Artificial Intelligence Techniques
 - 6.1 Support Vector Machines
 - 6.2 Neural Networks and Deep Learning
 - 6.3 Feed-forward Networks
 - 6.4 Recurrent Networks and Memory Cells
 - 6.5 Convolutional Networks
 - 6.6 Reinforcement Learning
 - 6.7 Overview of Further Approaches

Literature

Compulsory Reading

Further Reading

- Akerar, R., & Sajja, P.S. (2016). Intelligent techniques for data science. Cham: Springer.
- Bruce, A., & Bruce, P. (2017). Practical statistics for data scientists: 50 essential concepts. Newton, MA: O'Reilly Publishers.
- Fawcett, T. & Provost, F. (2013). Data science for business: What you need to know about data mining and data-analytic thinking. Newton, MA: O'Reilly Media.
- Hodeghatta, U. R., & Nayak, U. (2017). Business analytics using R – A practical approach. Berkeley, CA: Apress Publishing. (Database: ProQuest).
- Liebowitz, J. (2014). Business analytics: An introduction. Boca Raton, FL: Auerbach Publications. (Available online).
- Runkler, T. A. (2012). Data analytics: Models and algorithms for intelligent data analysis. Wiesbaden: Springer Vieweg.
- Skiena, S. S. (2017). The data science design manual. Cham: Springer.

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Analytical Software and Frameworks

Course Code: DLMBDSA02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	DLMBDSA01

Course Description

Analytical Software and Frameworks provides insight into contemporary software and platforms solutions for data analytics in business. The course introduces relevant frameworks and software used in modern data science projects. Commercial and open-source for cloud computing, distributed computing and machine learning, as well as a commercial development platform for in-memory database analytics, are covered. Additional software solutions may be covered by the lecturer as convenient. In particular in the written assignment, students are required to apply their technological knowledge to a specific scenario which requires interdisciplinary thinking of how to merge the particularities of a given application domain with the technological options.

Course Outcomes

On successful completion, students will be able to

- comprehend how cloud computing and distributed computing support the field of data analytics.
- understand in-memory database technologies for real-time analytics.
- apply advanced statistics and machine learning solutions to solve data analysis problems.
- compare the capabilities and limitations of the presented software solutions.
- understand how to identify the right technological solution for a specific application domain.

Contents

1. Introduction
 - 1.1 Software Systems
 - 1.2 Frameworks
 - 1.3 Distributed Computing
 - 1.4 Databases and Data Warehousing
2. Data Storage
 - 2.1 Data Clustering
 - 2.2 Data Replication
 - 2.3 Data Indexing
 - 2.4 Data Warehousing

3. Statistical Modeling Frameworks
 - 3.1 The R Project for Statistical Computing
 - 3.2 The Python Ecosystem
4. Machine Learning & Artificial Intelligence
 - 4.1 Overview of Modern Machine Learning Frameworks
 - 4.2 Introduction to TensorFlow & Keras
5. Cloud Computing Platforms & On-Premise Solutions
 - 5.1 Advantages and Disadvantages of Cloud, On-premise, and Edge Solutions
 - 5.2 Overview of Cloud Computing Solutions
6. Distributed Computing
 - 6.1 Overview of Distributed Computing Approaches
 - 6.2 Overview of Streaming Approaches
 - 6.3 Other Solutions
7. Database Technologies
 - 7.1 Overview of Database Approaches
 - 7.1.1 Row-based versus Column-based
 - 7.1.2 In Memory DB
 - 7.1.3 Relational DB versus noSQL
 - 7.1.4 Timeseries DB
 - 7.2 Overview of Database Implementations

Literature**Compulsory Reading****Further Reading**

- Elmasri, R., & Navathe, S. (2010). *Fundamentals of database systems*. Boston, MA: Addison-Wesley Publishing Co.
- EMC Education Services (Ed.). (2012). *Information storage and management: Storing, managing, and protecting digital information in classic, virtualized, and cloud environments* (2nd ed.). Indianapolis, IN: Wiley.
- Fayad, M., Schmidt, D., & Johnson, R. (1999). *Building application frameworks: Object-oriented foundations of framework design* (1st ed., Ch. 1 & 2). New York, NY: Wiley.
- Haslwanter, T. (2016). *An introduction to statistics with Python*. (pp. 5–42, 237–14). Switzerland: Springer.
- Hugos, M. H., & Hulitzky, D. (2010). *Business in the cloud: What every business needs to know about cloud computing*. Hoboken, NJ: John Wiley & Sons.
- Jackson, J. C., Vijayakumar, V., Quadir, M. A., & Bharathi, C. (2015). Survey on programming models and environments for cluster, cloud, and grid computing that defends big data. *Procedia Computer Science*, 50, 517–523.
- Jukic, N., Vrbsky, S., & Nestorov, S. (2016). *Database systems: Introduction to databases and data warehouses*. Burlington, VT: Prospect Press.
- Lander, J. P. (2017). *R for everyone: Advanced analytics and graphics*. 2nd ed. Boston, MA: Addison-Wesley Professional.
- Loo, A. W. (Ed.). (2012). *Distributed computing innovations for business, engineering, and science*. Hershey, PA: IGI Global.
- Özsu, M. T., & Valduriez, P. (2011). *Principles of distributed database systems*. New York, NY: Springer Science & Business Media.
- Poulton, N. (2015). *Data storage networking: Real world skills for the CompTIA storage + certification and beyond* (1st ed.). Indianapolis, IN: Wiley.
- Rehman, T. B. (2018). *Cloud computing basics*. Sterling, VA: Stylus Publishing, LLC.
- Unpingco, J. (2016). *Python for probability, statistics, and machine learning*. (Ch. 4). Cham: Springer.
- Walkowiak, S. (2016). *Big data analytics with R: Utilize R to uncover hidden patterns in your big data*. Birmingham: Packt Publishing.

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Leadership and Change

Module Code: DLMMGELC

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA MBA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
1. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Georg Berkel (Leadership) / Prof. Dr. Magdalena Bathen-Gabriel (Change Management)

Contributing Courses to Module

- Leadership (DLMBLSE01)
- Change Management (DLMBCM01)

Module Exam Type

Module Exam

Split Exam

Leadership

- Study Format "myStudies": Exam, 90 Minutes
- Study Format "Distance Learning": Exam, 90 Minutes

Change Management

- Study Format "Distance Learning": Written Assessment: Case Study

Weight of Module

see curriculum

Module Contents**Leadership**

- Foundations of professional leadership
- Leadership and motivation in the corporation
- Leadership and corporate culture
- Leadership and change management

Change Management

- The context and meaning of change
- The change process
- Perspectives for understanding change
- Implementing change

Learning Outcomes**Leadership**

On successful completion, students will be able to

- recognize underlying beliefs and attitudes towards leadership and compare the influence of various theories of leadership on the identification and development of leaders.
- recognize the impact of cultural environments on leadership, and understand the challenges and opportunities of cross-cultural management.
- outline the influence of social roles on leaders and employees, and assess the influence of roles types on the interactions between leaders and those they are leading.
- ,as a leader, support employees by drawing on empirical evidence to effectively meet the expectations of employees.
- recognize the roles and conflicting interests inherent to leadership positions and develop strategies to address locomotion and cohesion.
- discriminate between effective and non-effective methods for managing staff and organizational activities, and apply those techniques and tools in practice to maximize the satisfaction and effectiveness of staff.
- perform the various responsibilities delegated to a leader such as communicate with employees, lead planning activities, delegate tasks, and plan and lead controlling activities.
- create a plan to support employees through the process of change within an organization.
- assess personal leadership style using a variety of measures and evaluate leadership activities relative to transactional and transformational leadership styles.

Change Management

On successful completion, students will be able to

- recognize common features of organizational change and anticipate some of the standard difficulties encountered when an organization engages in change processes.
- explain the importance of organizational change.
- develop a conceptual framework for planned and improvised organizational change, and differentiate between anticipated, emergent, and opportunity-based change.
- utilize and redesign formal organizational structures to facilitate change processes.
- recognize the role of informal organizational structures and identify key stakeholders to promote change processes.
- analyze the social networks that exist within an organization, map independencies and motives/interests, and plan how to distribute information and redesign work flows.
- differentiate between groups of stakeholders and identify the most suitable strategy to adopt with each group.
- recognize the role of the change leader as a political broker and build social capital through informal methods.
- utilize stories and symbols when communicating with others in an organization to maximize leverage as a cultural change leader.
- draw on empirical evidence to plan and implement change processes in an organization.

Links to other Modules within the Study Program

This module is similar to other modules in the fields of Business Administration & Management

Links to other Study Programs of the University

All Master Programmes in the fields of Business & Management

Leadership

Course Code: DLMBLSE01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MBA	English		5	None

Course Description

In today's knowledge-based society, employees are a firm's most valuable resource. A key responsibility of leadership is to develop the knowledge, expertise, and skills of employees. Good leadership is crucial for the continued success of a firm in the face of increasingly competitive markets. This course presents the necessary competencies of the leader in a modern, knowledge-based organization. Central questions raised by modern leadership theory are presented and discussed. In doing so, the course focuses on requirements and instruments of professional leadership, aspects of situational leadership, and leadership communication and interactions, both in the context of strategic management and change processes. The methodological and conceptual foundations of leadership are presented to students, along with empirical examples and best-practice principles, with the intent for students to master the challenges of enhancing the firm's most valuable asset—its employees—via professional and contemporary leadership practices.

Course Outcomes

On successful completion, students will be able to

- recognize underlying beliefs and attitudes towards leadership and compare the influence of various theories of leadership on the identification and development of leaders.
- recognize the impact of cultural environments on leadership, and understand the challenges and opportunities of cross-cultural management.
- outline the influence of social roles on leaders and employees, and assess the influence of roles types on the interactions between leaders and those they are leading.
- ,as a leader, support employees by drawing on empirical evidence to effectively meet the expectations of employees.
- recognize the roles and conflicting interests inherent to leadership positions and develop strategies to address locomotion and cohesion.
- discriminate between effective and non-effective methods for managing staff and organizational activities, and apply those techniques and tools in practice to maximize the satisfaction and effectiveness of staff.
- perform the various responsibilities delegated to a leader such as communicate with employees, lead planning activities, delegate tasks, and plan and lead controlling activities.
- create a plan to support employees through the process of change within an organization.
- assess personal leadership style using a variety of measures and evaluate leadership activities relative to transactional and transformational leadership styles.

Contents

1. An Overview of Leadership
 - 1.1 Leadership and Personality: Trait Theories
 - 1.2 Leadership as a Skill: Attribute and Behavior Theories
 - 1.3 Positive Reinforcement: Behavioral Theories
 - 1.4 Leadership Dependent on the Situation: Situational Approaches
 - 1.5 Situational and Contingency Theories
 - 1.6 Theory of Functional Leadership Behavior
 - 1.7 Integrated Psychological Theory
 - 1.8 Transactional and Transformative Leadership
 - 1.9 Leadership as an Emotionally Charged Process
 - 1.10 Neo-Emergent Theory
2. Leadership as a Social Role
 - 2.1 Roles and Groups
 - 2.2 Role Types
 - 2.3 Formal Conditions for Social Roles – Corporate Context Determining Roles in Organizations
 - 2.4 The Individual and The Group – Conforming and Deviating Behavior
 - 2.5 The Problems of Formalized Role Understanding and Self-Concept
3. Leadership from the Employee’s Perspective
 - 3.1 General Expectations for Managers
 - 3.2 Truthfulness and Authenticity
 - 3.3 Handling Conflicts Competently
 - 3.4 Conflicts in Groups
 - 3.5 Conflict Resolution Pattern According to Matzat
 - 3.6 Enthusiasm
 - 3.7 Ability to Cope with Pressure
 - 3.8 Assertiveness
 - 3.9 Empathy
 - 3.10 Expertise

4. Leadership from the Manager's Perspective
 - 4.1 Self-Concept as a Manager
 - 4.2 Locomotion and Cohesion
 - 4.3 Individual Problems and Learning Dimensions of Management Behavior
 - 4.4 The Concept of Human Nature and Its Influence on Management Behavior: Theories from Maslow, McGregor, and Herzberg
 - 4.5 Ambiguity Tolerance
5. Management Tools
 - 5.1 Management Tools - Definition
 - 5.2 Organizational Management Tools
 - 5.3 Personnel Management Tools
6. Managerial Functions
 - 6.1 Responsibilities of a Manager
 - 6.2 Communication
 - 6.3 Foundations of Interpersonal Communication
 - 6.4 Planning
 - 6.5 Setting Objectives
 - 6.6 Delegating
 - 6.7 Controlling
 - 6.8 Creating a Feedback Culture
7. Organizational Change
 - 7.1 Knowledge
 - 7.2 Cultural Value Change and Subjectification
 - 7.3 Globalization
 - 7.4 Technological Progress
 - 7.5 Change Management – Leadership in Times of Change
8. Successful Employee Management
 - 8.1 Measuring Leadership Style and Leadership Behavior
 - 8.2 Measuring Transactional and Transformational Leadership with the Multifactor Leadership Questionnaire (MLQ)
 - 8.3 Correlation of Leadership Behavior with Subjective and Objective Success Criteria
 - 8.4 Validation of Leadership Success Using Situational Factors
 - 8.5 Leadership Principles Guiding Leadership Behavior

Literature**Compulsory Reading****Further Reading**

- Gneezy, U., & Rustichini, A. (2000). Pay enough or don't pay at all. *The Quarterly Journal of Economics*, 115(3), 791–810. (Database: EBSCO).
- Goleman, D., Boyatzis, R., & McKee, A. (2004). *Primal leadership: Learning to lead with emotional intelligence*. Boston, MA: Harvard Business School Press.
- Hechter, M., & Opp, K.-D. (2001). *Social norms*. New York, NY: Russell Sage Foundation.
- Herzberg, F., Mausner, B., & Bloch Synderman, B. (1993). *The motivation to work*. New Brunswick: Transaction Publishers. (Database: EBSCO).
- Kouzes, J. M., & Posner, B. Z. (1999). *Encouraging the heart: A leader's guide to rewarding and recognizing others*. San Francisco, CA: Jossey-Bass. (Database: CIANDO).
- Maslow, A. (1954). *Motivation and personality*. New York, NY: Harper & Row.
- Norton, R. W. (1975). Measurement of ambiguity tolerance. *Journal of Personality Assessment*, 39(6), 607–619. (Database: EBSCO).
- Trilling, L. (1972). *Sincerity and authenticity*. Cambridge, MA: Harvard University Press. (Database: EBSCO).

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

Change Management

Course Code: DLMBCM01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

We live in a world characterized by constant change. This affects not only individuals but also organizations. Even successful organizations need to constantly reinvent themselves in order to remain successful. This course presents a discussion of change in relation to the complexities of organizational life, with an emphasis on applying theory to actual practice. Organizational change is an international phenomenon and the course includes many international case examples. With a focus on organizational change as opposed to personal change and/or entrepreneurship, this course has a distinctly different focus from the related modules “Leadership” and “Innovation and Entrepreneurship.” The first part of the course considers the nature of change and different change models. The second part focuses on how different perspectives complement one another and can be used to better understand, analyze, and diagnose change processes. The course deals with issues of structure, culture, and politics. In the later part of the course, the implementation of change is considered in detail. Given that many change processes fail, this part is an important learning component to complement an in-depth understanding of change.

Course Outcomes

On successful completion, students will be able to

- recognize common features of organizational change and anticipate some of the standard difficulties encountered when an organization engages in change processes.
- explain the importance of organizational change.
- develop a conceptual framework for planned and improvised organizational change, and differentiate between anticipated, emergent, and opportunity-based change.
- utilize and redesign formal organizational structures to facilitate change processes.
- recognize the role of informal organizational structures and identify key stakeholders to promote change processes.
- analyze the social networks that exist within an organization, map independencies and motives/interests, and plan how to distribute information and redesign work flows.
- differentiate between groups of stakeholders and identify the most suitable strategy to adopt with each group.
- recognize the role of the change leader as a political broker and build social capital through informal methods.
- utilize stories and symbols when communicating with others in an organization to maximize leverage as a cultural change leader.
- draw on empirical evidence to plan and implement change processes in an organization.

Contents

1. Organizational Change
 - 1.1 What is Organizational Change About?
 - 1.2 Organizational Change is Ubiquitous
 - 1.3 Change is Difficult
2. Change Management
 - 2.1 The Context of Organizational Change
 - 2.2 Planned Versus Improvisational Change Management
 - 2.3 The Congruence Model of Change
3. Designing Structure
 - 3.1 Formal Structure in Organizations
 - 3.2 Grouping
 - 3.3 Linking
 - 3.4 The Change Leader as an Architect
4. Social Networks
 - 4.1 What are Social Networks?
 - 4.2 Key Terms of Social Network Analysis
 - 4.3 Unique Characteristics of Social Networks
 - 4.4 Social Networks and Organizational Change
5. Politics
 - 5.1 Organizations as Political Arena
 - 5.2 Politics and Change
 - 5.3 The Importance of a Political Perspective on Change
6. Sense-Making
 - 6.1 Organizational Culture
 - 6.2 Sense-Making in Organizations
 - 6.3 The Change Leader as Shaman
7. Change Implementation
 - 7.1 How to Implement Change Successfully
 - 7.2 Four Perspectives on Change

Literature**Compulsory Reading****Further Reading**

- Bolman, L. G., & Deal, T. E. (2013). Reframing organizations: Artistry, choice, and leadership (5th ed.). San Francisco, CA: Jossey-Bass.
- Cameron, K. S., & Quinn, R. E. (2011). Diagnosing and changing organizational culture: Based on the competing values framework (3rd ed.). San Francisco, CA: Jossey-Bass.
- Pentland, A. (2014). Social physics: How good ideas spread – The lessons from a new science. New York, NY: Penguin Press.
- McChrystal, S., Collins, T., Silverman, D., & Fussell, C. (2015). Team of teams: New rules of engagement for a complex world. New York, NY: Penguin Press.
- Worren, N. A. M. (2012). Organisation design: Re-defining complex systems. Harlow: Pearson.

Study Format Distance Learning

Study Format Distance Learning	Course Type Case Study
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Advanced Research Methods

Module Code: DLMARM

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	5	150 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
1. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Josephine Zhou-Brock (Advanced Research Methods)

Contributing Courses to Module

- Advanced Research Methods (DLMARM01)

Module Exam Type

Module Exam

Study Format: Distance Learning
Written Assessment: Written Assignment

Study Format: myStudies
Written Assessment: Written Assignment

Split Exam

Weight of Module

see curriculum

Module Contents

- Social Science and Research Paradigms
- Case Study Research
- Specific Topics of Qualitative Research
- Advanced Issues of Qualitative Research Conceptualization and Data Analysis
- Underlying Assumptions of Quantitative Research: Concepts and Consequences
- Evaluation Research

Learning Outcomes**Advanced Research Methods**

On successful completion, students will be able to

- understand and apply scientific methodologies in conducting empirical research.
- plan, design, and prepare research proposals.
- differentiate between different types of case studies, select and apply different data collection strategies.
- plan, conduct, and analyze case studies and surveys.
- scientifically analyze quantitative and qualitative data.
- conduct evaluation research to determine quality of research.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Methods

Links to other Study Programs of the University

All Master Programmes in the Business & Management fields

Advanced Research Methods

Course Code: DLMARM01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Advanced research methods, specifically business research, is scientific inquiry that attempts to uncover new information which helps a business improve performance, maximizing shareholder value while adhering to ethical and moral compliance standards. Managers seeking to conduct empirical research must maintain validity, reliability, and trustworthiness when utilizing scientific methodologies in order to produce meaningful and actionable results. Research proposals are typically written prior to conducting research, which have a certain structure, enabling the researcher to properly plan, conduct, and analyze case studies and surveys. Different data collection strategies are used to collect both qualitative and quantitative data, depending on the research proposal goals. Managers utilize their understanding of research methodologies to accurately assess the quality of research.

Course Outcomes

On successful completion, students will be able to

- understand and apply scientific methodologies in conducting empirical research.
- plan, design, and prepare research proposals.
- differentiate between different types of case studies, select and apply different data collection strategies.
- plan, conduct, and analyze case studies and surveys.
- scientifically analyze quantitative and qualitative data.
- conduct evaluation research to determine quality of research.

Contents

1. Theoretical Background: Social Science and Research Paradigms
 - 1.1 What is a Paradigm?
 - 1.2 Empiricism
 - 1.3 Critical Rationalism
 - 1.4 Epistemological Anarchism
 - 1.5 Structural Functionalism
 - 1.6 Symbolic Interactionism
 - 1.7 Ethnomethodology

2. Case Study Research
 - 2.1 Types of Case Study Research
 - 2.2 Maintaining Quality in Case Study Research
 - 2.3 Case Study Design
 - 2.4 Implementing Case Studies
 - 2.5 Analyzing Case Studies
3. Specific Topics of Qualitative Research
 - 3.1 Idea Generation
 - 3.2 Critical Incident Technique
 - 3.3 Understanding Communication: Discourse Analysis
 - 3.4 Perceiving Perception: Interpretive Phenomenological Analysis
4. Advanced Issues of Qualitative Research Conceptualizing and Data Analysis
 - 4.1 Measurement Theory
 - 4.2 Index and Scale Construction
 - 4.3 Types of Scale Construction
 - 4.4 The Problem of Nonresponse and Missing Data
 - 4.5 Implications of IT for Research Strategies
5. Underlying Assumptions of Quantitative Research: Concepts and Consequences
 - 5.1 Classical Test Theory
 - 5.2 Probabilistic Test Theory
 - 5.3 Advanced Topics of Test Theory
6. Evaluation Research
 - 6.1 What is Evaluation Research?
 - 6.2 Types of Evaluation Research
 - 6.3 Meta-Analysis
 - 6.4 Meta-Evaluation

Literature**Compulsory Reading****Further Reading**

- Babbie, E. R. (2021). *The practice of social research* (15th ed.). Cengage Learning.
- Giles, D. C. (2002). *Advanced research methods in psychology*. Routledge.
- Saunders, M., Thornhill, A., & Lewis, P. (2009). *Research methods for business students* (5th ed.). Pearson.

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

DLMARM01

Operations and Information Management

Module Code: DLMBAEOIM

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	None	MBA	5	150 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
1. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Philippe Tufinkgi (Operations and Information Management)

Contributing Courses to Module

- Operations and Information Management (DLMBAEOIM01)

Module Exam Type

Module Exam

Study Format: myStudies
Written Assessment: Case Study
Study Format: Distance Learning
Written Assessment: Case Study

Split Exam

Weight of Module

see curriculum

Module Contents

- Preparation of reliable demand forecasts
- Site planning
- Process design and process planning
- Inventory management and production control
- Information systems in the supply chain
- Behavioral operations management

<p>Learning Outcomes</p> <p>Operations and Information Management</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ apply selected and practice-oriented concepts of operations management in various tasks and draw appropriate conclusions for verifiable performance improvements. ▪ critically evaluate the benefits and limitations of modern and process-oriented software solutions in operations management. ▪ consider current and future developments in connection with the megatrends of digitization and climate protection in operations management. ▪ support the analysis, planning, and design of value-adding processes in supply chains through modern information systems. ▪ understand and anticipate the behavior of decision-makers and their individual preferences in order to better predict the actual behavior of the supply chain partners and optimize the achievement of own objectives. 	
<p>Links to other Modules within the Study Program</p> <p>This module is similar to other modules in the field of Economics.</p>	<p>Links to other Study Programs of the University</p> <p>All Master Programmes in the Business & Management field.</p>

Operations and Information Management

Course Code: DLMBAEOIM01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MBA	English		5	None

Course Description

Operations management comprises the planning, control, execution, and monitoring of all internal company resources and capacities for the manufacture of products and services. This course provides students with the knowledge and skills to apply theoretically-sound and practice-relevant concepts of operations management in the context of different problems and tasks (taking into account central megatrends) and draw process-relevant conclusions for verifiable performance improvements. The consideration of powerful software solutions plays an important role here. Starting from the creation of reliable demand forecasts, different scenarios for the optimal location decisions of companies are considered. The process design defines the basic framework for processes, decision rules, and process performance analyses. This then shows in the subsequent process planning how optimal sequences for orders are calculated under certain priority rules. In inventory management, various models for inventory optimization are considered in order to apply practice-relevant methods for calculating capacities and production plans, taking into account various restrictions. Supply chain management investigates how independent companies can optimally coordinate their activities and promote cross-company communication through the use of sustainable information systems. Concluding the course is an examination of human decision heuristics and preferences and their anticipation of decision behavior within the framework of behavioral operations management.

Course Outcomes

On successful completion, students will be able to

- apply selected and practice-oriented concepts of operations management in various tasks and draw appropriate conclusions for verifiable performance improvements.
- critically evaluate the benefits and limitations of modern and process-oriented software solutions in operations management.
- consider current and future developments in connection with the megatrends of digitization and climate protection in operations management.
- support the analysis, planning, and design of value-adding processes in supply chains through modern information systems.
- understand and anticipate the behavior of decision-makers and their individual preferences in order to better predict the actual behavior of the supply chain partners and optimize the achievement of own objectives.

Contents

1. Introduction to operations management
 - 1.1 Definition, subjects, and tools of operations management
 - 1.2 Operations management under circumstances of conflicting demands
2. Preparation of reliable demand forecasts
 - 2.1 The Forecast Problem
 - 2.2 Qualitative forecasting methods
 - 2.3 Causal and time series forecasts
 - 2.4 Assessment of forecast quality
3. Site planning
 - 3.1 Central problem aspects
 - 3.2 Arbitrary locations and transport costs
 - 3.3 Optimization with pre-determined locations
 - 3.4 Site selection and response times
4. Process design and process planning
 - 4.1 Process types
 - 4.2 Process structure
 - 4.3 Process performance
 - 4.4 Priority rules for planning and controlling processes
5. Inventory management and production control
 - 5.1 Models for optimizing stocks
 - 5.2 Continuous inventory management
 - 5.3 Function and application areas of MRP II and Just in Time
 - 5.4 Methods for optimal planning of capacities and production plans
6. Information systems in the supply chain
 - 6.1 Increased performance through product and process design
 - 6.2 Order policy, demand forecasts, and demand planning
 - 6.3 Hellengrath and Kuhn's three-pillar approach
 - 6.4 Requirements for supply chain information systems
 - 6.5 Market analysis of selected IT systems

7. Behavioral operations management
 - 7.1 Decision heuristics for solving complex problems
 - 7.2 Decision behavior and decision prognosis
 - 7.3 Decision influencing

Literature

Compulsory Reading

Further Reading

- Bozarth, C. C. & Handfield, R. B. (2019). Introduction to operations and supply chain management (5th ed.). Pearson Education Limited.
- Das, A. (2015). An introduction to operations management: The joy of operations. Routledge.
- Hill, A., & Hill, T. (2018). Essential operations management (2nd ed.). Red Globe Press.
- Slack, N. & Brandon-Jones, A. (2018). Operations and process management: Principles and practice for strategic impact. Pearson.

Study Format myStudies

Study Format myStudies	Course Type Case Study
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Case Study
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

DLMBAEOIM01

2. Semester

Consumer Behavior and Research

Module Code: DLMBCBR

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
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Semester / Term 2. Semester	Duration Minimaldauer: 1 Semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
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Module Coordinator

Caterina Fox (International Consumer Behavior) / Caterina Fox (Applied Marketing Research)

Contributing Courses to Module

- International Consumer Behavior (DLMBCBR01)
- Applied Marketing Research (DLMBCBR02)

Module Exam Type

Module Exam

Split Exam

International Consumer Behavior

- Study Format "myStudies": Exam, 90 Minutes
- Study Format "Distance Learning": Exam, 90 Minutes

Applied Marketing Research

- Study Format "myStudies": Exam, 90 Minutes
- Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents

International Consumer Behavior

- Consumer Behavior
- The Consumer Decision-Making Process
- Internal Influences on Consumer Behavior
- External Influences on Consumer Behavior
- International Consumer Behavior
- International Marketing Strategy and Consumer Behavior

Applied Marketing Research

- The Role of Marketing Research in Managerial Decision-Making
- Problem Definition and the Marketing Research Process
- Secondary Data and Qualitative Research
- Survey Research and the Concept of Measurement
- Observational Research
- Sampling Issues, Data Processing, and Fundamental Data Analysis
- Communicating the Research Results

Learning Outcomes

International Consumer Behavior

On successful completion, students will be able to

- outline the purchase decision-making process undertaken by the consumer.
- describe the internal and external influences on the consumer decision-making processes.
- identify the different research methods available to companies to collect relevant data regarding their consumers and their behavior
- develop a plan to generate required market research data regarding consumer behavior and decision-making.
- be able to generate, analyze, interpret and report relevant data regarding consumers.
- present the key concepts characterizing international consumer behavior and discuss their impact on global marketing strategies.

Applied Marketing Research

On successful completion, students will be able to

- recognize and promote the importance of marketing research methodologies in supporting key marketing management decisions.
- identify some of the challenges of marketing research in an international environment.
- identify appropriate analysis tools for a given marketing related problem on a strategic and operational level.
- identify errors made in the research process.
- outline the stages of the marketing research process.
- identify ethical problems in a marketing research situation and propose an ethically sound approach.
- propose a research design to study a particular research question.
- compare and contrast different research methods.
- recommend good practice for a variety of research techniques.
- design questionnaires with sound measurement properties.
- interpret results of advanced marketing research efforts.
- transfer the gained insights into their future international work environment.

Links to other Modules within the Study Program

This module is similar to other modules in the field(s) Marketing & Sales

Links to other Study Programs of the University

All Master Programmes in the Marketing field(s)

International Consumer Behavior

Course Code: DLMBCBR01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In a global economy characterized by greater competition, companies operating internationally need comprehensive market-driven strategies to survive in the market place. The course provides students with the relevant concepts for understanding the international environment of the company with focus on the demand side/the consumer. Students learn how differences in culture, economic systems, and political environments impact consumers' behavior in terms of decision-making in the fields of acquisition, consumption, and disposal of products, services, experiences, and ideas.

Course Outcomes

On successful completion, students will be able to

- outline the purchase decision-making process undertaken by the consumer.
- describe the internal and external influences on the consumer decision-making processes.
- identify the different research methods available to companies to collect relevant data regarding their consumers and their behavior
- develop a plan to generate required market research data regarding consumer behavior and decision-making.
- be able to generate, analyze, interpret and report relevant data regarding consumers.
- present the key concepts characterizing international consumer behavior and discuss their impact on global marketing strategies.

Contents

1. Consumer Behavior
 - 1.1 Consumer Behavior and International Marketing
 - 1.2 Consumer Decision-Making in the Marketplace
2. The Consumer Decision-Making Process
 - 2.1 The Pre-Purchase Stage
 - 2.2 The Purchase Stage
 - 2.3 The Post-Purchase Stage

3. Internal Influences on Consumer Behavior
 - 3.1 Motives and Motivation
 - 3.2 Perception
 - 3.3 Attitude
4. External Influences on Consumer Behavior
 - 4.1 Culture
 - 4.2 Subculture
 - 4.3 Groups and Families
5. International Consumer Behavior
 - 5.1 Cultural Dimensions
 - 5.2 The Influence of Social Media on Consumer Decision-Making
6. International Marketing Strategy and Consumer Behavior
 - 6.1 International Market Segmentation and Product Positioning
 - 6.2 Consumer Behavior and Product Strategy
 - 6.3 Consumer Behavior and Communication Strategy
 - 6.4 Consumer Behavior and Pricing Strategy
 - 6.5 Consumer Behavior and Distribution Strategy

Literature**Compulsory Reading****Further Reading**

- Schiffman, L. G., & Kanuk, L. L. (2014). Consumer behavior. Frenchs Forest.: Pearson Education Australia.
- Solomon, M. (2016). Consumer behavior: Buying, having, and being (12th ed.). New York City, NY: Pearson.

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Applied Marketing Research

Course Code: DLMBCBR02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In a global economy characterized by greater competition, companies operating internationally need comprehensive market-driven strategies in order to survive in the market place. The course allows students to explore marketing research, the information-gathering arm of marketing practice. The topic is viewed primarily from the perspective of a consumer of marketing research, i.e. a busy manager who needs information to guide decision making. Given their role in decision-making regarding marketing and sourcing marketing research, it is helpful for managers to understand how producers of research approach the process. This background will help you as a manager to become a better-informed consumer of research who is able to participate in research design, evaluate the quality of marketing information that crosses your desk, and conduct marketing research projects yourself when appropriate.

Course Outcomes

On successful completion, students will be able to

- recognize and promote the importance of marketing research methodologies in supporting key marketing management decisions.
- identify some of the challenges of marketing research in an international environment.
- identify appropriate analysis tools for a given marketing related problem on a strategic and operational level.
- identify errors made in the research process.
- outline the stages of the marketing research process.
- identify ethical problems in a marketing research situation and propose an ethically sound approach.
- propose a research design to study a particular research question.
- compare and contrast different research methods.
- recommend good practice for a variety of research techniques.
- design questionnaires with sound measurement properties.
- interpret results of advanced marketing research efforts.
- transfer the gained insights into their future international work environment.

Contents

1. The Role of Marketing Research in Managerial Decision-Making
 - 1.1 The Importance of Marketing Research in Decision-Making
 - 1.2 The Institutions Involved in Marketing Research
 - 1.3 Common Challenges in Conducting Marketing Research
2. Problem Definition and the Marketing Research Process
 - 2.1 From Problem Recognition to Research Objectives: Step One
 - 2.2 From Research Design to Follow-Up: Steps Two to Six
 - 2.3 Forward and Backward Linkages in the Marketing Research Process
3. Secondary Data and Qualitative Research
 - 3.1 Advantages and Limitations of Secondary Data
 - 3.2 Definition and Types of Qualitative Research
 - 3.3 Limitations of Qualitative Research
4. Survey Research and the Concept of Measurement
 - 4.1 Survey Errors and Their Impact on Research Outcomes
 - 4.2 Measurement Scales
 - 4.3 Questionnaire Design
5. Observational Research
 - 5.1 Observational Research Defined
 - 5.2 Approaches to Observational Research
 - 5.3 Advantages and Limitations of Observational Research
6. Sampling Issues, Data Processing, and Fundamental Data Analysis
 - 6.1 Sampling Methods and Types of Samples
 - 6.2 Data Processing Issues
 - 6.3 Fundamental Data Analysis
7. Communicating the Research Results
 - 7.1 The Major Steps in Communicating the Results
 - 7.2 Organization of the Research Report
 - 7.3 The Marketing Research Presentation

Literature**Compulsory Reading****Further Reading**

- Aaker, D. A., Kumar, V., Leone, R., & Day, G. S. (2012). *Marketing Research* (11th ed.). Hoboken, NJ: John Wiley & Sons.
- Grover, R., & Vriens, M. (2006). *The Handbook of Marketing Research: Uses, Misuses, and Future Advances*. Thousand Oaks, CA: Sage Publications.
- Iacobucci, D., & Churchill, G. A. (2015). *Marketing Research: Methodological Foundations* (11th ed.). Mason, OH: South-Western Thomson Learning.
- Malhotra, N. K., Birks, D. F., & Wills, P. A. (2012). *Marketing Research: An Applied Approach* (4th ed.). Harlow: Pearson.

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Accounting

Module Code: DLMBACCE

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
2. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Gerhard Sälzer (Advanced Management Accounting & Control) / Prof. Dr. Gerhard Sälzer (Current Issues in Accounting)

Contributing Courses to Module

- Advanced Management Accounting & Control (DLMBACCE01)
- Current Issues in Accounting (DLMBACCE02)

Module Exam Type

Module Exam

Split Exam

Advanced Management Accounting & Control

- Study Format "Distance Learning": Exam, 90 Minutes

Current Issues in Accounting

- Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents**Advanced Management Accounting & Control**

- Controllership and the CFO: Core Competencies, Organization, and Strategies
- Contingency Theory and Management Accounting and Control
- Levers of Control
- Behavioral Management Accounting and Control
- Transfer Pricing, and Corporate and Shared Service Centers
- Balance Scorecard, Executive Remuneration, and Control
- Product Life Cycle, Business Strategy, and Control

Current Issues in Accounting

- Preparation of Financial Statements
- Optimization of Receivables and Inventory
- Optimization of Liabilities and Equity
- Current Issues in Financial Accounting
- Valuing Businesses
- Capital Budgeting 154
- Financial Modeling and Valuation

Learning Outcomes

Advanced Management Accounting & Control

On successful completion, students will be able to

- Describe how controllership is set up in international companies.
- Explain how management accounting and control have to consider the contingencies under which they are set up.
- Design management accounting and control processes specific to the contingencies characterizing a specific company.
- Utilize management accounting and control processes to address strategic uncertainties and support organizational learning.
- Design, evaluate, and optimize management accounting and control systems and practices to influence the behavior of managers and employees.
- Identify the importance of transfer pricing for multinational groups.
- Discuss the role of the CFO in an international company.

Current Issues in Accounting

On successful completion, students will be able to

- explain selected management and financial accounting issues.
- Analyze relevant issues specific to the level of financial accounting established in a company.
- Identify and explain the specific tasks of a CFO with regards to the different functions of financial accounting and financial management.
- Describe the regulatory changes following the economic crisis, e.g. Basel III, and identify their impact of financial accounting and control.
- Discuss recent developments concerning IFRS.
- Develop processes and strategic plans that recognize the increased importance of working capital optimization and capital restructuring.
- Identify the functions of a chief treasurer or controller in a multinational corporation.

Links to other Modules within the Study Program

This module is similar to other modules in the field(s) of Finance & Tax Accounting

Links to other Study Programs of the University

All Master Programmes in the Business & Management field(s)

Advanced Management Accounting & Control

Course Code: DLMBACCE01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course deals with advanced aspects of management accounting and control. Students will understand how controllership is set up in international companies and explore the contingencies of management accounting and control, e.g. strategy, organizational life cycle phase, size, and ownership structure. The course also introduces the concept of the levers of control and highlights not only the traditional feedback and constraining function of control systems, but also the learning and expanding function of these control levers. As management accounting and control ultimately aims to influence the behavior of managers and employees when implementing the organization's goals, behavioral aspects must be considered. Constraints such as limitations concerning the information processing capabilities of managers have to be taken into account when designing management control systems. Furthermore, as companies grow larger and operate in different countries, transfer pricing systems for controlling corporate and shared service centers have to be set up. Upon completion of this course, students will also understand the consequences of different approaches to transfer pricing.

Course Outcomes

On successful completion, students will be able to

- Describe how controllership is set up in international companies.
- Explain how management accounting and control have to consider the contingencies under which they are set up.
- Design management accounting and control processes specific to the contingencies characterizing a specific company.
- Utilize management accounting and control processes to address strategic uncertainties and support organizational learning.
- Design, evaluate, and optimize management accounting and control systems and practices to influence the behavior of managers and employees.
- Identify the importance of transfer pricing for multinational groups.
- Discuss the role of the CFO in an international company.

Contents

1. Controllershship and the CFO: Core Competencies, Organization, and Strategies
 - 1.1 Management Accounting and Control
 - 1.2 Core Competencies of CFOs and Controllers
 - 1.3 Controllershship Strategies
 - 1.4 Organization of the Controller and Finance Unit
2. Contingency Theory and Management Accounting and Control
 - 2.1 Contingency Theory
 - 2.2 Differences in Management Accounting and Control According to Different Contingencies
 - 2.3 Limitations of Contingency Theory
3. Levers of Control
 - 3.1 Levers of Control
 - 3.2 Implications of the Levers of Control for the Management Accounting and Control Function
 - 3.3 Instruments for Different Levers of Control
4. Behavioral Management Accounting and Control
 - 4.1 Cognitive and Behavioral Constraints of Managers
 - 4.2 Implications for the Design of Management Accounting and Control Systems
 - 4.3 Behavioral Aspects of Implementing Management Control Systems
5. Transfer Pricing, and Corporate and Shared Service Centers
 - 5.1 Transfer Pricing Methods
 - 5.2 Transfer Pricing in Multi-National Companies
 - 5.3 Organizing Corporate Centers and Allocation of Their Costs
 - 5.4 Organizing and Pricing of Shared Service Centers
6. Balance Scorecard, Executive Remuneration, and Control
 - 6.1 Balanced Scorecard: An Overview
 - 6.2 Measures in Balanced Scorecard
 - 6.3 Agency Theory and Balanced Scorecard
 - 6.4 Implications of Balanced Scorecard on Control

7. Product Life Cycle, Business Strategy, and Control
 - 7.1 An Overview of Product Life Cycle
 - 7.2 Stages of Product Life Cycle and Business Strategy
 - 7.3 Implications of Product Life Cycle on Control

Literature

Compulsory Reading

Further Reading

- Hilton, R. W. (2008). *Managerial accounting: Creating value in a dynamic business environment* (8th ed.) (pp. 754–756). New York, NY: McGraw-Hill.
- Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategy into action* (pp. 43–167). Boston, MA: Harvard Business School Press.
- Riahi-Belkaoui, A. (2001). *Behavioral management accounting* (pp. 115–138). Westport, CT: Quorum Books. (Database: EBSCO).
- Simmons, R. (1995). *Levers of control: How managers use innovative control systems to drive strategic renewal*. Boston, MA: Harvard Business School Press.
- Weber, J. (2011). The development of controller tasks: Explaining the nature of controllership and its changes. *Journal of Management Control*, 22, 25–46.

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

Current Issues in Accounting

Course Code: DLMBACCE02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	DLMBACCE01

Course Description

Management accounting and financial accounting are constantly changing and adapting to internal and external circumstances. Financial accounting according to IFRS is continually evolving; developments occur in accounting rules and instruments for financial management are constantly emerging. Following the financial and economic crisis in 2008, accounting changed significantly following the introduction of additional regulatory rules and operating requirements. This course gives students an insight into selected issues and provides practical examples in management accounting and financial accounting. Students are introduced to specific tasks of a CFO with regard to accounting and financial management. The course will also facilitate students to develop an in-depth understanding of working capital optimization and capital restructuring. Finally, students will apply their financial and management accounting knowledge in an integrated financial modeling exercise.

Course Outcomes

On successful completion, students will be able to

- explain selected management and financial accounting issues.
- Analyze relevant issues specific to the level of financial accounting established in a company.
- Identify and explain the specific tasks of a CFO with regards to the different functions of financial accounting and financial management.
- Describe the regulatory changes following the economic crisis, e.g. Basel III, and identify their impact of financial accounting and control.
- Discuss recent developments concerning IFRS.
- Develop processes and strategic plans that recognize the increased importance of working capital optimization and capital restructuring.
- Identify the functions of a chief treasurer or controller in a multinational corporation.

Contents

1. Preparation of Financial Statements
 - 1.1 Accrual and Deferral Concepts for Recording Transactions
 - 1.2 End-of-Period Adjustments and the Use of Accounting Estimates
 - 1.3 Preparation of Financial Statements and the Classified Balance Sheet
 - 1.4 The Accrual Basis of Accounting and the Interpretation of Financial Statements
 - 1.5 Financial Analysis and the Company's Liquidity: Working Capital Ratio, Current Ratio, and Quick Ratio
2. Optimization of Receivables and Inventory
 - 2.1 Receivables and Uncollectibles
 - 2.2 Accounting for Receivables and Uncollectibles
 - 2.3 Inventories Classification
 - 2.4 Inventory Cost Flow Assumptions and Their Impact on Financial Statements
 - 2.5 Financial Analysis: Accounts Receivable and Inventory Turnover Ratios
3. Optimization of Liabilities and Equity
 - 3.1 Financing Using Current Liabilities, Notes Payable, and Contingencies
 - 3.2 Long-Term Sources of Finance
 - 3.3 Debt and Equity Financing and Earnings Per Share
 - 3.4 Financial Statement Analysis Using Price-Earnings Ratio
4. Current Issues in Financial Accounting
 - 4.1 International Financial Reporting Standards (IFRS)
 - 4.2 Principle- Versus Rule-Based Standards and IFRS Fair Value Measures
 - 4.3 Specific IFRS Standards
 - 4.4 Financial Statement Presentation under IFRS
 - 4.5 Integrated Revenue Recognition and the Implications of Adopting IFRS
5. Valuing Businesses
 - 5.1 Financial Statements and Valuation
 - 5.2 Accrual Accounting and Valuation: Pricing Book Value
 - 5.3 Accrual Accounting and Valuation: Pricing Earnings
 - 5.4 Business Valuation Methods in Practice
 - 5.5 Corporate Restructuring, Corporate Governance, and Auditor's Role in Firm Valuation

6. Capital Budgeting
 - 6.1 Capital Budgeting Decisions
 - 6.2 Non-Discounting Models: Payback and Accounting Rate of Return
 - 6.3 Discounting Models: The Net Present Value (NPV) Method and Internal Rate of Return (IRR)
 - 6.4 NPV Versus IRR for Selecting Mutually Exclusive Projects
 - 6.5 Basics of Modeling Capital Budgeting
7. Financial Modeling and Valuation
 - 7.1 Using Assumptions and Building a Financial Model
 - 7.2 Analysis, Valuation, and Planning

Literature**Compulsory Reading****Further Reading**

- Berk, J., DeMarzo, P., Harford J. (2021). Fundamentals of Corporate Finance, (5th ed.). Pearson.
- Hansen, D. R., & Mowen, M. M. (2015). Cornerstones of cost management (3rd ed.). Boston, MA: Cengage.
- Häcker, J. & Ernst, D. (2017). Financial Modeling: An Introductory Guide to Excel and VBA Applications in Finance (1st ed.). Palgrave Macmillan.
- Needles, B. E., & Powers, M. (2013). International financial reporting standards: An introduction (3rd ed.). Boston, MA: Cengage.
- Penman, S. H. (2013). Financial statement analysis and security valuation (5th ed.). New York, NY: McGraw Hill Education.
- Warren, C. S. (2017). Survey of accounting (8th ed.). Boston, MA: Cengage.

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

DLMBACCE02

IT Governance and Service Management

Module Code: DLMBITGSM

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	None	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
2. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. André Köhler (IT Service Management) / Prof. Dr. André Köhler (IT Governance and Compliance)

Contributing Courses to Module

- IT Service Management (DLMBITGSM01)
- IT Governance and Compliance (DLMBITGSM02)

Module Exam Type

Module Exam

Split Exam

IT Service Management

- Study Format "Distance Learning": Exam, 90 Minutes

IT Governance and Compliance

- Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents**IT Service Management**

- IT infrastructure library (ITIL)
- ITIL service strategy
- ITIL service design
- ITIL service transition
- ITIL service operation

IT Governance and Compliance

- Establishing IT governance and compliance
- COBIT framework
- IT governance frameworks
- Data protection and data security

Learning Outcomes**IT Service Management**

On successful completion, students will be able to

- understand IT service management as the enabler of information technology strategies and operations objectives.
- define the touchpoints between IT service management and management information systems.
- differentiate between lightweight and heavyweight approaches to IT service management.
- understand benchmarks and assessments to measure the capability of a service provider and its IT service management competences.
- apply IT services management tools and platforms proactively based on current information technology research and advisory.

IT Governance and Compliance

On successful completion, students will be able to

- explain IT governance and compliance both as tools to achieve organizational goals and to satisfy regulatory requirements.
- know the different IT governance frameworks given, in particular the industry standard model COBIT.
- set out the processes and policies for administering and managing IT systems for ensuring compliance with local and international regulatory requirements.
- understand that ensuring compliance with the IT governance framework can be a daunting task that requires constant collection, organization, monitoring, analysis and reporting on event logs to detect and manage control-related activity.
- recognize the IT governance and compliance monitoring tools for ensuring that controls for information systems are effectively implemented, monitored, and maintained.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Computer Science & Software Development.

Links to other Study Programs of the University

All Master Programmes in the IT & Technology field.

IT Service Management

Course Code: DLMBITGSM01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course focuses on the nature and practice of IT services that keep IT systems running. It introduces students to the knowledge and experience needed to provide IT as a service to organizations, mainly based on the IT Infrastructure Library (ITIL) which is the industry standard for this purpose.

Course Outcomes

On successful completion, students will be able to

- understand IT service management as the enabler of information technology strategies and operations objectives.
- define the touchpoints between IT service management and management information systems.
- differentiate between lightweight and heavyweight approaches to IT service management.
- understand benchmarks and assessments to measure the capability of a service provider and its IT service management competences.
- apply IT services management tools and platforms proactively based on current information technology research and advisory.

Contents

1. Introduction to IT Service Management
 - 1.1 IT Services, Business IT Services
 - 1.2 Service Level Agreement (SLA)
 - 1.3 IT Service Management
 - 1.4 Reference Models for IT Service Management
2. IT Infrastructure Library (ITIL)
 - 2.1 Purpose and content of the IT Infrastructure Library
 - 2.2 Service Live Cycle in ITIL
 - 2.3 Overview on Service Strategy and Operational Processes
 - 2.4 Continual Service Improvement

3. ITIL – Service Strategy
 - 3.1 Business Relationship Management
 - 3.2 Service Portfolio Management
 - 3.3 Financial Management for Services
 - 3.4 Demand Management
4. ITIL – Operational Processes: Service Design
 - 4.1 Service Level Management
 - 4.2 Service Catalogue Management
 - 4.3 Availability Management
 - 4.4 Service Continuity Management
5. ITIL – Operational Processes: Service Transition
 - 5.1 Transition Planning and Support
 - 5.2 Change Management
 - 5.3 Service Asset and Configuration Management
 - 5.4 Release and Deployment Management
6. ITIL – Operational Processes: Service Operation
 - 6.1 Incident Management
 - 6.2 Problem Management
 - 6.3 Request Fulfilment
 - 6.4 Event Management

Literature**Compulsory Reading****Further Reading**

- The Stationery Office (2007). The Introduction to the ITIL Service Lifecycle Book. Norwich: TSO. (The Stationery Office).

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

IT Governance and Compliance

Course Code: DLMBITGSM02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

IT governance and compliance are key elements within corporate governance, since most modern businesses rely heavily on IT infrastructure for their success. These elements detail the required leadership and organizational structures for maintaining and extending information technology in order to meet business strategies and objectives.

Course Outcomes

On successful completion, students will be able to

- explain IT governance and compliance both as tools to achieve organizational goals and to satisfy regulatory requirements.
- know the different IT governance frameworks given, in particular the industry standard model COBIT.
- set out the processes and policies for administering and managing IT systems for ensuring compliance with local and international regulatory requirements.
- understand that ensuring compliance with the IT governance framework can be a daunting task that requires constant collection, organization, monitoring, analysis and reporting on event logs to detect and manage control-related activity.
- recognize the IT governance and compliance monitoring tools for ensuring that controls for information systems are effectively implemented, monitored, and maintained.

Contents

1. About IT Governance
 - 1.1 Concept and Definitions
 - 1.2 The Value of IT in the Organization
 - 1.3 Current State and Perceptions
 - 1.4 Governance, Compliance and Risk Management in IT

2. Establishing IT Governance and Compliance
 - 2.1 Assessment
 - 2.2 IT Strategy
 - 2.3 Tactics
 - 2.4 Operations
 - 2.5 Compliance
 - 2.6 Performance
3. The COBIT Framework
 - 3.1 Overview of COBIT
 - 3.2 The COBIT Goals Cascade
 - 3.3 The COBIT Process Reference Model
 - 3.4 Deploying and Implementing COBIT
4. IT Governance Frameworks
 - 4.1 Quality Management as a Foundation
 - 4.2 ISO 9000 Family
 - 4.3 Maturity Models
 - 4.4 Relationship to Service and Architecture Frameworks (ITIL, TOGAF)
 - 4.5 Relationship to IT Security Frameworks (ISO 27000 family)
5. Data Protection and IT Security
 - 5.1 Data Protection
 - 5.2 IT Security Management
 - 5.3 IT Security Threats and Attack Scenarios
 - 5.4 Countermeasures
 - 5.5 Cryptography

Literature**Compulsory Reading****Further Reading**

- Selig, G. (2008). Implementing IT governance: A practical guide to global best practices in IT management. North Brabant: Van Haren Publishing. (Database: ProQuest).

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

DLMBITGSM02

Product Development and Design Thinking

Module Code: DLMBPDDT

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
2. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Dorian Mora (Product Development) / Prof. Dr. Dorian Mora (Design Thinking)

Contributing Courses to Module

- Product Development (DLMBPDDT01)
- Design Thinking (DLMBPDDT02)

Module Exam Type

Module Exam

Split Exam

Product Development

- Study Format "myStudies": Exam, 90 Minutes
- Study Format "Distance Learning": Exam, 90 Minutes

Design Thinking

- Study Format "Distance Learning": Written Assessment: Project Report

Weight of Module

see curriculum

<p>Module Contents</p> <p>Product Development</p> <ul style="list-style-type: none"> Production planning techniques Design tasks Product development approaches Digital product development and organizational aspects <p>Design Thinking</p> <p>This course will put students in the mindset of Design Thinking. Students will be introduced to phases and distinct methods for inspiration, as well as the ideation and implementation of products. A current list of topics is located in the Learning Management System.</p>	
<p>Learning Outcomes</p> <p>Product Development</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> know the basic definitions and principles of (new) product development. understand the key skills in product development. discuss, differentiate, and select appropriate product development approaches with respect to a given scenario. work with digital product development tools and techniques like CAD, PDM and PLM at a basic level. develop own solutions and approaches to academic and practical questions. discuss, evaluate, and adapt different digital product development techniques and tools. <p>Design Thinking</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> comprehend, critically reflect on, and adopt the Design Thinking mindset. understand the inspiration, ideation, and implementation phases. evaluate and identify appropriate methods from the toolbox of human-centered design for given design tasks and challenges. 	
<p>Links to other Modules within the Study Program</p> <p>This module is similar to other modules in the field of Design</p>	<p>Links to other Study Programs of the University</p> <p>All Master Programs in the Design, Architecture & Construction fields</p>

Product Development

Course Code: DLMBPDDT01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course aims to provide basic work and problem-solving methods for the successful development of products. It introduces the definition of key design tasks and various alternative product development approaches such as flow-based, lean product development, and design thinking. Finally, the students will become familiar with the use of computer-aided design (CAD) tools and how they integrate into modern product development approaches.

Course Outcomes

On successful completion, students will be able to

- know the basic definitions and principles of (new) product development.
- understand the key skills in product development.
- discuss, differentiate, and select appropriate product development approaches with respect to a given scenario.
- work with digital product development tools and techniques like CAD, PDM and PLM at a basic level.
- develop own solutions and approaches to academic and practical questions.
- discuss, evaluate, and adapt different digital product development techniques and tools.

Contents

1. Introduction
 - 1.1 Basic Definitions
 - 1.2 The Product Development Process
 - 1.3 Indicators and Metrics
 - 1.4 Product Development Models
 - 1.5 Current Trends in Product Development
2. The Product Development Process
 - 2.1 Planning
 - 2.2 Concept Development
 - 2.3 Design
 - 2.4 Testing and Refinement
 - 2.5 Production and Ramp-up

3. Product Development Approaches
 - 3.1 Lean Product Development
 - 3.2 Design Thinking
 - 3.3 Human-Centered Design
 - 3.4 User Experience Strategy
 - 3.5 Open Innovation
4. Digital Tools
 - 4.1 Computer-Aided Design
 - 4.2 Computer-Aided Quality
 - 4.3 Product Data Management
 - 4.4 Product Lifecycle Management
5. Organizational Perspective
 - 5.1 Incremental, Platform, and Breakthrough Development
 - 5.2 Building Teams
 - 5.3 Political Issues in Organizations
 - 5.4 Distributed New Product Development

Literature**Compulsory Reading****Further Reading**

- Kahn, K. B., Kay, S. E., Slotegraaf, R. J., & Uban, S. (Eds.). (2012). *The PDMA handbook of new product development* (3rd ed.). Hoboken, NJ: John Wiley & Sons. (Database: ProQuest).
- Ottosson, S. (2018). *Developing and managing innovation in a fast changing and complex world: Benefiting from dynamic principles*. Cham: Springer. (Database: ProQuest).
- Ulrich, K. T., & Eppinger, S. D. (2016). *Product design and development* (6th ed.). New York, NY: McGraw Hill.

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Design Thinking

Course Code: DLMBPDDT02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In this course, students will receive a hands-on introduction to human-centered design via the Design Thinking method. Beyond conveying the individual basic principles, the procedures in Design Thinking are examined in detail. In order to fully understand Design Thinking in terms of important aspects in practice, selected methods for the individual process steps are presented in theory and application. Students will learn to improve their design process by reflecting on and adapting their activities.

Course Outcomes

On successful completion, students will be able to

- comprehend, critically reflect on, and adopt the Design Thinking mindset.
- understand the inspiration, ideation, and implementation phases.
- evaluate and identify appropriate methods from the toolbox of human-centered design for given design tasks and challenges.

Contents

- The course covers current topics and trends in Design Thinking, illustrating some methods and techniques as well as case studies. Each participant must create a project report on a chosen project, where he/she describes the application of the Design Thinking approach to a real product development scenario.

Literature**Compulsory Reading****Further Reading**

- IDEO.org. (2015). The Field Guide to Human-Centered Design. A step-by-step guide that will get you solving problems like a designer. Retrieved from <http://www.designkit.org/resources/1>
- Pressman, Andy (2019): Design Thinking. A Guide to Creative Problem Solving for Everyone, New York : Routledge.
- Lockwood, T., & Papke, E. (n.d.). Innovation by design : how any organization can leverage design thinking to produce change, drive new ideas, and deliver meaningful solutions.
- Lewrick, M., Link, P., Leifer, L. J., & Langensand, N. (2018). The design thinking playbook : mindful digital transformation of teams, products, services, businesses and ecosystems. John Wiley & Sons.

Study Format Distance Learning

Study Format Distance Learning	Course Type Project
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Project Report

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

DLMBPDDT02

Big Data

Module Code: DLMBBD-01

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
2. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Dr. Hamzeh Alavirad (Data Utilization) / Dr. Hamzeh Alavirad (Application Scenarios and Case Studies)

Contributing Courses to Module

- Data Utilization (DLMBBD01)
- Application Scenarios and Case Studies (DLMBBD02-01)

Module Exam Type

Module Exam	Split Exam
	<p><u>Data Utilization</u></p> <ul style="list-style-type: none"> • Study Format "Distance Learning": Exam, 90 Minutes <p><u>Application Scenarios and Case Studies</u></p> <ul style="list-style-type: none"> • Study Format "Distance Learning": Written Assessment: Case Study

Weight of Module

see curriculum

<p>Module Contents</p> <p>Data Utilization</p> <ul style="list-style-type: none"> ▪ Pattern recognition ▪ Natural language processing ▪ Image recognition ▪ Detection and sensing ▪ Problem-solving ▪ Decision-making <p>Application Scenarios and Case Studies</p> <ul style="list-style-type: none"> ▪ Agile development ▪ Workflow overview ▪ Fields of application ▪ Sprint Planning; Sprint ▪ Sprint Retrospective ▪ Committee presentation 	
<p>Learning Outcomes</p> <p>Data Utilization</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ understand how identity, similarity, and diversity of data can be utilized in problem-solving approaches. ▪ differentiate between complicated and complex systems of investigation. ▪ identify the variability of a problem under investigation. ▪ distinguish between invariant and dynamic features of an investigated system. ▪ synthesize gained insights to propose a reliable data analytics solution. ▪ apply different approaches for acquiring and using a knowledge management system. <p>Application Scenarios and Case Studies</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ establish an application scenario for data science within a self-organized team. ▪ identify requirements and appropriate technologies for data collection. ▪ evaluate and select applicable technologies for data pre-processing and processing. ▪ assess challenges and risks of the selected approach. ▪ define clearly the outcome and value of the approach. ▪ elaborate a conceptual design document and presentation for decision-makers. 	
<p>Links to other Modules within the Study Program</p> <p>This module is similar to other modules in the fields of Data Science & Artificial Intelligence</p>	<p>Links to other Study Programs of the University</p> <p>All Master Programmes in the IT & Technology fields</p>

Data Utilization

Course Code: DLMBBD01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The course Data Utilization introduces case-based applications that take advantage of regularities and patterns found within continuously generated texts, images, or sensor data. The cases solve issues of pattern recognition, natural language processing, image recognition, detection and sensing, problem-solving, and decision support. The cases are related to the application fields of cybersecurity, linguistics, augmented reality, intelligent transportation, problem-solving, and decision support.

Course Outcomes

On successful completion, students will be able to

- understand how identity, similarity, and diversity of data can be utilized in problem-solving approaches.
- differentiate between complicated and complex systems of investigation.
- identify the variability of a problem under investigation.
- distinguish between invariant and dynamic features of an investigated system.
- synthesize gained insights to propose a reliable data analytics solution.
- apply different approaches for acquiring and using a knowledge management system.

Contents

1. Introduction
 - 1.1 The Meaning of Identity, Similarity, and Diversity
 - 1.2 Data Patterns and Ontologies
2. Pattern Recognition
 - 2.1 Analysis of User Interaction, Attitude, and Behavior
 - 2.2 Predictive Analytics
 - 2.3 Preventing the Unknown: User Behavior Analytics in Cybersecurity
3. Natural Language Processing
 - 3.1 Concepts of Natural Language
 - 3.2 Speech Recognition and Acoustic Modeling
 - 3.3 Discerning the Meaning: Linguistics and Social Media

4. Image Recognition
 - 4.1 Basics of Image Representation
 - 4.2 Integral Transforms and Compression
 - 4.3 Exploiting the Visual: Image Recognition for Augmented Reality
5. Detection and Sensing
 - 5.1 Sensor Construction and Techniques
 - 5.2 Intelligent Agents and Surveillance
 - 5.3 Managing the Complex: Sensor Networks in Intelligent Transportation Systems
6. Problem-solving
 - 6.1 Knowledge Sharing and the Cloud
 - 6.2 Rule-based Systems
 - 6.3 Learning from Nature: Expert Systems in Business
7. Decision Support
 - 7.1 Invariants, Determinants, and Alternatives in Decision-making
 - 7.2 Correlation and Causality in Strategic Decision-making
 - 7.3 Approaching the Crossroads: Dashboards and Visualization
8. Data Security and Data Protection
 - 8.1 Securing Data Storage and Processing Infrastructure Against Unauthorized Access
 - 8.2 Compliance and Regulations, GDPR

Literature

Compulsory Reading

Further Reading

- Bajcsy, P., Chalfoun, J., & Simon, M. (2017). Web microanalysis of big image data. Berlin:Springer. (Database: ProQuest).
- Delen, D. (2015). Real-world data mining: Applied business analytics and decision making. NewYork, NY: Pearson.
- Farzindar, A., Inkpen, D., & Hirst, G. (2017). Natural language processing for social media (2nd ed.).San Rafael, CA: Morgan & Claypool Publishers. (Database: ProQuest).
- Hsu, H., Chang, C., & Hsu, C. (Eds.). (2017). Big data analytics for sensor-network collectedintelligence. Cambridge, MA: Academic Press. (Database: ProQuest).
- Pearl, J., & Mackenzie, D. (2018). The book of why: The new science of cause and effect. New York,NY: Basic Books.

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Application Scenarios and Case Studies

Course Code: DLMBBD02-01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course provides an opportunity for students to work on application scenarios for data science in selected industry sectors. This allows the students to combine the learning objectives from the other modules in a setting which closely resembles further work applications: Starting from the identification of suitable application areas, a specific use-case is selected and a set of metrics and/or KPIs is selected which can be used whether the case study is considered successful and leads to tangible benefit. A broad discussion on which data and type of data, as well as where to obtain, store, and process the data, allows students detailed insight into many practical issues that arise when dealing with data-driven projects, ranging from technical questions about infrastructure to data quality and relevant domain expertise. The actual work on the case study begins with the creation of a detailed project plan which defines objectives, means, and outcome. The plan is then implemented using an agile project management framework. The course closes with delivery of a design document and a final presentation in front of a committee of selected lecturers.

Course Outcomes

On successful completion, students will be able to

- establish an application scenario for data science within a self-organized team.
- identify requirements and appropriate technologies for data collection.
- evaluate and select applicable technologies for data pre-processing and processing.
- assess challenges and risks of the selected approach.
- define clearly the outcome and value of the approach.
- elaborate a conceptual design document and presentation for decision-makers.

Contents

1. Introduction to Agile Frameworks
 - 1.1 Scrum
 - 1.2 Kanban
 - 1.3 EduScrum

2. Fields of Application & Case Study Setup
 - 2.1 Overview of Fields of Application
 - 2.2 Definition of Success
 - 2.3 Selection of either of the fields (1 per team)
3. Data Sources
 - 3.1 Identifying Potential Internal and External Data Sources
 - 3.2 Identifying Potential Data Types and Data Processing Requirements
 - 3.3 Identifying Potential Data Quality Challenges
4. Case Study Work
 - 4.1 Creating a Project Plan
 - 4.2 Implementation of the Case Study Using the Agile Approach
5. Case Study Presentation
 - 5.1 Case Study Presentation: Approach and Key Findings
 - 5.2 Creation and Submission of Case Study Report

Literature**Compulsory Reading****Further Reading**

- Ashmore, S. & Runyan, K. (2014). Introduction to agile methods. Addison-Wesley.
- Delhij, A., van Solingen, R., & Wijnandst, W. (2015). The eduScrum guide. Available online.
- Han, J., Kamber, M., & Pei, J. (2012). Data mining: Concepts and techniques (3rd ed.). Morgan Kaufmann.
- Schwaber, K., & Sutherland, J. (2017). The Scrum guide—The definitive guide to Scrum: The rules of the game.

Study Format Distance Learning

Study Format Distance Learning	Course Type Case Study
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Leadership and Corporate Governance

Module Code: DLMMGELCG

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA MBA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
2. Semester	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Jürgen Matthias Seeler (Business Ethics and Corporate Governance) / Prof. Dr. Katharina Rehfeld (Seminar Current Issues in Leadership & Management)

Contributing Courses to Module

- Business Ethics and Corporate Governance (DLMBAEBCG01)
- Seminar Current Issues in Leadership & Management (DLMCILM01)

Module Exam Type

Module Exam

Split Exam

Business Ethics and Corporate Governance

- Study Format "myStudies": Written Assessment: Written Assignment
- Study Format "Distance Learning": Written Assessment: Written Assignment

Seminar Current Issues in Leadership & Management

- Study Format "Distance Learning": Written Assessment: Research Essay

Weight of Module

see curriculum

<p>Module Contents</p> <p>Business Ethics and Corporate Governance</p> <ul style="list-style-type: none"> ▪ Introduction to Business Ethics and Corporate Governance ▪ Ethics Theories ▪ Business Ethics Problem Areas and Solutions ▪ Basic Perspectives of Corporate Governance ▪ Monitoring Concepts for Corporate Governance ▪ Combining Business Ethics and Corporate Governance <p>Seminar Current Issues in Leadership & Management</p> <p>Current issues in Leadership and Management focuses on compelling issues in leadership theory and practice. It is intended to present students with some of the latest and most innovative thinking about leadership and management and to promote practical insights for leadership within a variety of settings.</p>	
<p>Learning Outcomes</p> <p>Business Ethics and Corporate Governance</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ explain the most important concepts and definitions of business ethics. ▪ distinguish important theories of business ethics. ▪ implement business ethics concepts in business practice. ▪ explain different understandings of corporate governance. ▪ highlight the influences of business ethics on corporate governance. ▪ discuss the relationship between business ethics and corporate governance on the basis of a term paper using an example from business practice. <p>Seminar Current Issues in Leadership & Management</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ expand embedded understandings of leadership and management using theoretical inputs as well as practical cases. ▪ systematically explore specific contemporary issues in leadership and management through guided literature research. ▪ develop research skills encompassing problem definition, literature research, research methods and scientific writing. 	
<p>Links to other Modules within the Study Program</p> <p>This module is similar to other modules in the fields of Economics and Business Administration & Management</p>	<p>Links to other Study Programs of the University</p> <p>All Master Programmes in the Business & Management fields</p>

Business Ethics and Corporate Governance

Course Code: DLMBAEBECG01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MBA	English		5	None

Course Description

Within the framework of the course "Business Ethics and Corporate Governance", the students prepare a written assignment for which they have to select one out of a variety of topics proposed in the Learning Management System. Students are required to demonstrate their capacity to link business ethics and corporate governance, both theoretically and based on an example from business practice. The students show the ability to familiarize themselves with the topic, to link scientific theory and entrepreneurial practice and to present their findings in a structured systematic way.

Course Outcomes

On successful completion, students will be able to

- explain the most important concepts and definitions of business ethics.
- distinguish important theories of business ethics.
- implement business ethics concepts in business practice.
- explain different understandings of corporate governance.
- highlight the influences of business ethics on corporate governance.
- discuss the relationship between business ethics and corporate governance on the basis of a term paper using an example from business practice.

Contents

1. Introduction to Business Ethics and Corporate Governance
 - 1.1 Basic Terms and Definitions in Business Ethics
 - 1.2 Basic Terms and Definitions in Corporate Governance
 - 1.3 The Link between Business Ethics and Corporate Governance
2. Ethics Theories
 - 2.1 Ethics Theories
 - 2.2 Comparison between Deontology and Utilitarianism
 - 2.3 Business Ethics Concepts evolving from Ethics Theories

3.	Business Ethics Problem Areas and Solutions
3.1	Categorization of Ethical Problems in Business
3.2	Components of a Corporate Ethics Program
3.3	Ethics Implementation in Business Practice
4.	Basic Perspectives of Corporate Governance
4.1	Important Terms and Definitions of Corporate Governance
4.2	Approaches to Corporate Governance
4.3	The Concept of Control
5.	Monitoring Concepts for Corporate Governance
5.1	Governance Mechanisms
5.2	Governance Systems
5.3	Corporate Governance Codes
6.	Combining Business Ethics and Corporate Governance
6.1	Linking Business Ethics and Corporate Governance
6.2	Developing an Ethically Oriented Corporate Governance
6.3	Leadership in the Context of Ethical Corporate Governance

Literature
Compulsory Reading
Further Reading
<ul style="list-style-type: none"> ▪ Dimmock, M., & Fisher, A. (2017). Ethics for A-level. Open Book Publishers. ▪ Rendtorff, J. D. (2019). Cosmopolitan business ethics: Towards a global ethos of management. Taylor & Francis. ▪ Rossouw, D., & Van Vuuren, L. (2017). Business ethics (6th ed.). Oxford University Press. ▪ Treviño, L. K., & Nelson, K. A. (2017). Managing business ethics: Straight talk about how to do it right (7th ed.). Wiley & Sons. ▪ Ulrich, P. (2008). Integrative economic ethics: Foundations of a civilized market economy. Cambridge University Press.

Study Format myStudies

Study Format myStudies	Course Type Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input checked="" type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Online Lecture
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Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input checked="" type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input checked="" type="checkbox"/> Shortcast <input checked="" type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input checked="" type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input checked="" type="checkbox"/> Live Tutorium/Course Feed <input type="checkbox"/> Reader <input checked="" type="checkbox"/> Slides

Seminar Current Issues in Leadership & Management

Course Code: DLMCILM01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Current issues in Leadership and Management focuses on compelling issues in leadership theory and practice. It is intended to present students with some of the latest and most innovative thinking about leadership and management and to promote practical insights for leadership within a variety of settings. The course encourages students to look beyond embedded leadership ideas and practices and to consider leadership more broadly. Students research a topic of their choice in depth and write their own research report. Students are invited to rethink their orientation to leadership and human interaction.

Course Outcomes

On successful completion, students will be able to

- expand embedded understandings of leadership and management using theoretical inputs as well as practical cases.
- systematically explore specific contemporary issues in leadership and management through guided literature research.
- develop research skills encompassing problem definition, literature research, research methods and scientific writing.

Contents

- Examples of research topics on current issues in leadership and management are available when starting the module. For the research essay, students can choose from these topics or can suggest their own.
- Destructive leadership and toxic bosses
- Managing virtual teams
- Women and gender in leadership
- Leveraging individual leadership potential
- Ethical leadership
- Teams and national culture

Literature**Compulsory Reading****Further Reading**

- Turabian, K. L. (2013). A manual for writers of research papers, theses, and dissertations. Chicago: University of Chicago Press.
- Swales, J. M., & Feak, C. R. (2012). Academic writing for graduate students, essential tasks and skills. Michigan: University of Michigan Press.
- Bailey, S. (2011). Academic writing for international students of business. New York, NY: Routledge.
- Paiz, J.M., Angeli A., Wagner, J., Lawrick L., Moore K., Anderson M., Soderlund L., ... Keck R. (2013). Reference List: Basic Rules. In Purdue Online Writing Lab. Retrieved from <https://owl.english.purdue.edu/owl/resource/560/05/>

Study Format Distance Learning

Study Format Distance Learning	Course Type Seminar
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

DLMCILM01

Seminar: Managing People and Organizations

Module Code: DLMMGSMPO

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 5	Student Workload 150 h
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Semester / Term 2. Semester	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
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Module Coordinator

Prof. Dr. Muhammad Ashfaq (Seminar: Managing People and Organizations)

Contributing Courses to Module

- Seminar: Managing People and Organizations (DLMMGSMPO01)

Module Exam Type

Module Exam

Study Format: Distance Learning
Written Assessment: Research Essay
Study Format: myStudies
Written Assessment: Research Essay

Split Exam

Weight of Module

see curriculum

Module Contents

This seminar deals with issues in managing people and organizations.

Learning Outcomes

Seminar: Managing People and Organizations

On successful completion, students will be able to

- familiarize themselves autonomously with a given topic from the field of "Managing People and Organizations".
- independently research subject-specific literature and evaluate it in a targeted manner.
- elaborate important characteristics, interrelationships and findings in a written assignment.

Links to other Modules within the Study Program

This module is similar to other modules in the fields of Business Administration & Management

Links to other Study Programs of the University

Master Programmes in the Business & Management fields

Seminar: Managing People and Organizations

Course Code: DLMMGSMP001

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In the seminar "Managing People and Organizations" students write a research essay on a specific topic. The students demonstrate that they are able to autonomously familiarize themselves with a topic of the seminar and to document and present the knowledge gained in an organized manner.

Course Outcomes

On successful completion, students will be able to

- familiarize themselves autonomously with a given topic from the field of "Managing People and Organizations".
- independently research subject-specific literature and evaluate it in a targeted manner.
- elaborate important characteristics, interrelationships and findings in a written assignment.

Contents

- The seminar deals with "Managing People and Organizations". Each participant is expected to write a research paper on a topic assigned to them.

Literature

Compulsory Reading

Further Reading

- Bailey, S. (2011). Academic writing for international students of business. New York, NY: Routledge.
- Swales, J. M., & Feak, C. R. (2012). Academic writing for graduate students, essential tasks and skills. Michigan: University of Michigan Press.
- Turabian, K. L. (2013). A manual for writers of research papers, theses, and dissertations. Chicago: University of Chicago Press.
- Paiz, J.M., Angeli A., Wagner, J., Lawrick L., Moore K., Anderson M., Soderlund L., ... Keck R. (2013). Reference List: Basic Rules. In Purdue Online Writing Lab. Retrieved from <https://owl.english.purdue.edu/owl/resource/560/05/>

Study Format Distance Learning

Study Format Distance Learning	Course Type Seminar
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

Study Format myStudies

Study Format myStudies	Course Type Seminar
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

DLMMGSMPO01

Internship

Module Code: OPTINTER1

Module Type see curriculum	Admission Requirements On campus offer only	Study Level	CP 10	Student Workload 300 h
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Semester / Term 2. Semester	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
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Module Coordinator

see MyCampus (Internship)

Contributing Courses to Module

- Internship (OPTINTER110)

Module Exam Type

Module Exam

Study Format: On Campus
Reflection (of Practical Work) / Group Reflection

Split Exam

Weight of Module

see curriculum

Module Contents

Internship according to the "Internship Regulations" of the IU.

<p>Learning Outcomes</p> <p>Internship</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ apply skills and knowledge they have obtained during the first three semesters of the programme in an entrepreneurial environment. ▪ develop his / her practical and analytical skills in order to improve his / her employability. ▪ have practical knowledge and learn to work within an organization. ▪ acquire a first deep insight into organisational structures and communication procedures. ▪ apply communication skills, social skills, problem solving, time and project management which will shape their general management skills. ▪ shape their personality with the help of the interdisciplinary nature of the course especially in the area of the key qualifications like interpersonal skills or intercultural skills. 	
<p>Links to other Modules within the Study Program</p> <p>Builds on modules of the chosen degree program</p>	<p>Links to other Study Programs of the University</p> <p>All on campus offered programs</p>

Internship

Course Code: OPTINTER110

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
	English		10	On campus offer only

Course Description

This module consists of three parts: preparation tutorials. During these tutorials, students will learn about the intention of the internship and about the intellectual as well as social requirements of the working environment. the internship itself, and Workshops that accompany the internship by presentations and give an insight into different companies and working environments by the students.

Course Outcomes

On successful completion, students will be able to

- apply skills and knowledge they have obtained during the first three semesters of the programme in an entrepreneurial environment.
- develop his / her practical and analytical skills in order to improve his / her employability.
- have practical knowledge and learn to work within an organization.
- acquire a first deep insight into organisational structures and communication procedures.
- apply communication skills, social skills, problem solving, time and project management which will shape their general management skills.
- shape their personality with the help of the interdisciplinary nature of the course especially in the area of the key qualifications like interpersonal skills or intercultural skills.

Contents

- Internship according to the “Internship Regulation” of the IU.

Literature

Compulsory Reading

- Sweitzer, F. H. & King, M. A. (2009). The Successful Internship: Personal, Professional, and Civic Development. 3rd ed.. Cengage. ISBN: 0-495-59642-6.
- Kaser, K., Brooks, J. R. & Brooks, K. (2007). Making the Most of your Internship. Thomson. ISBN: 0-538-44432-0.
- Myers Kiser, P. (2008). The Human Services Internship: Getting the Most from your Experience. 2nd ed.. Cengage. ISBN: 0-495-09226-6.

Further Reading

Study Format On Campus

Study Format On Campus	Course Type Practical work
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Reflection (of Practical Work) / Group Reflection

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
13 h	0 h	7 h	0 h	280 h	300 h

Instructional Methods
In order to prepare students for their internship, a preparatory lecturing seminar will be held. During their internship, students will report about their progress by writing reports (start up report or mid-term report).

Master Thesis

Module Code: DLMMTHES

Module Type see curriculum	Admission Requirements See current study and exam regulations (SPO)	Study Level MA	CP 15	Student Workload 450 h
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Semester / Term 2. Semester	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
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Module Coordinator

Prof. Dr. Jöran Pieper (Master Thesis) / Prof. Dr. Jöran Pieper (Colloquium)

Contributing Courses to Module

- Master Thesis (DLMMTHES01)
- Colloquium (DLMMTHES02)

Module Exam Type

Module Exam

Split Exam

Master Thesis

- Study Format "Distance Learning": Written Assessment: Master Thesis (90)
- Study Format "myStudies": Written Assessment: Master Thesis (90)

Colloquium

- Study Format "myStudies": Presentation: Colloquium (10)
- Study Format "Distance Learning": Presentation: Colloquium (10)

Weight of Module

see curriculum

<p>Module Contents</p> <p>Master Thesis</p> <ul style="list-style-type: none"> ▪ Written Master Thesis <p>Colloquium</p> <ul style="list-style-type: none"> ▪ Thesis Defense 	
<p>Learning Outcomes</p> <p>Master Thesis</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ work on a problem from their major field of study by applying the specialist and methodological skills they have acquired during their studies. ▪ analyse selected tasks with scientific methods, critically evaluate them and develop appropriate solutions under the guidance of an academic supervisor. ▪ record and analyse existing (research) literature appropriate to the topic of the Master's thesis. ▪ prepare a detailed written elaboration in compliance with scientific methods. <p>Colloquium</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ present a problem from their field of study under consideration of academic presentation and communication techniques. ▪ reflect on the scientific and methodological approach chosen in the Master's thesis. ▪ actively answer subject-related questions from subject experts (experts of the Master's thesis). 	
<p>Links to other Modules within the Study Program</p> <p>All modules in the master program</p>	<p>Links to other Study Programs of the University</p> <p>All Master Programmes</p>

Master Thesis

Course Code: DLMMTHES01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		13.5	See current study and exam regulations (SPO)

Course Description

The aim and purpose of the Master's thesis is to successfully apply the subject-specific and methodological competencies acquired during the course of study in the form of an academic dissertation with a thematic reference to the major field of study. The content of the Master's thesis can be a practical-empirical or theoretical-scientific problem. Students should prove that they can independently analyse a selected problem with scientific methods, critically evaluate it and work out proposed solutions under the subject-methodological guidance of an academic supervisor. The topic to be chosen by the student from the respective field of study should not only prove the acquired scientific competences, but should also deepen and round off the academic knowledge of the student in order to optimally align his professional abilities and skills with the needs of the future field of activity.

Course Outcomes

On successful completion, students will be able to

- work on a problem from their major field of study by applying the specialist and methodological skills they have acquired during their studies.
- analyse selected tasks with scientific methods, critically evaluate them and develop appropriate solutions under the guidance of an academic supervisor.
- record and analyse existing (research) literature appropriate to the topic of the Master's thesis.
- prepare a detailed written elaboration in compliance with scientific methods.

Contents

- Within the framework of the Master's thesis, the problem as well as the scientific research goal must be clearly emphasized. The work must reflect the current state of knowledge of the topic to be examined by means of an appropriate literature analysis. The student must prove his ability to use the acquired knowledge theoretically and/or empirically in the form of an independent and problem-solution-oriented application.

Literature

Compulsory Reading

Further Reading

- Bui, Y. N. (2013). *How to Write a Master's Thesis* (2nd ed.). SAGE Publications, Incorporated.
- Turabian, K. L. (2013). *A Manual for Writers of Research Papers, theses, and dissertations* (8th ed.). University of Chicago Press.
- Further subject specific literature

Study Format Distance Learning

Study Format Distance Learning	Course Type Thesis
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Master Thesis

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
405 h	0 h	0 h	0 h	0 h	405 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

Study Format myStudies

Study Format myStudies	Course Type Thesis
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Master Thesis

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
405 h	0 h	0 h	0 h	0 h	405 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

Colloquium

Course Code: DLMMTHES02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		1.5	See current study and exam regulations (SPO)

Course Description

The colloquium will take place after submission of the Master's thesis. This is done at the invitation of the experts. During the colloquium, the students must prove that they have fully independently produced the content and results of the written work. The content of the colloquium is a presentation of the most important work contents and research results by the student, and the answering of questions by the experts.

Course Outcomes

On successful completion, students will be able to

- present a problem from their field of study under consideration of academic presentation and communication techniques.
- reflect on the scientific and methodological approach chosen in the Master's thesis.
- actively answer subject-related questions from subject experts (experts of the Master's thesis).

Contents

- The colloquium includes a presentation of the most important results of the Master's thesis, followed by the student answering the reviewers' technical questions.

Literature

Compulsory Reading

Further Reading

- Renz, K.-C. (2016): The 1 x 1 of the presentation. For school, study and work. 2nd edition, Springer Gabler, Wiesbaden.

Study Format myStudies

Study Format myStudies	Course Type Thesis Defense
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Presentation: Colloquium

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
45 h	0 h	0 h	0 h	0 h	45 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides

Study Format Distance Learning

Study Format Distance Learning	Course Type Thesis Defense
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Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Presentation: Colloquium

Student Workload					
Self Study	Contact Hours	Tutorial	Self Test	Independent Study	Hours Total
45 h	0 h	0 h	0 h	0 h	45 h

Instructional Methods	
<input type="checkbox"/> Learning Sprints® <input type="checkbox"/> Course Book <input type="checkbox"/> Vodcast <input type="checkbox"/> Shortcast <input type="checkbox"/> Audio <input type="checkbox"/> Exam Template	<input type="checkbox"/> Review Book <input type="checkbox"/> Creative Lab <input checked="" type="checkbox"/> Guideline <input type="checkbox"/> Live Tutorium/Course Feed <input checked="" type="checkbox"/> Slides