# MODULE HANDBOOK

# **MBA**

Master of Business Administration (FS-MBA-01-E-90)

90 ECTS

**Distance Learning or myStudies** 



Classification: consecutive

# Contents

1. Semester
Module DLMBLSE: Leadership
Module Description
Course DLMBLSE01: Leadership
Module DLMBIE-01: Innovation and Entrepreneurship
Module Description
Course DLMBIE01-01: Innovation and Entrepreneurship
Module DLMINRE: Corporate Finance
Module Description
Course DLMINRE01: Corporate Finance
Module DLMMARE: International Marketing
Module Description
Course DLMMARE01: International Marketing
Module DLMBME-01: Managerial Economics
Module Description45
Course DLMBME01-01: Managerial Economics
Module DLMBPM: Performance Measurement
Module Description
Course DLMBPM01: Performance Measurement
2. Semester
Module DLMBSME: Strategic Management
Module Description
Course DLMBSME01: Strategic Management
Module DLMBAEBECG: Business Ethics and Corporate Governance
Module Description
Course DLMBAEBECG01: Business Ethics and Corporate Governance
Module DLMBAEOIM: Operations and Information Management
Module Description
Course DLMBAEOIM01: Operations and Information Management

Module DLMBCFIE: Corporate Finance and Investment	
Module Description	87
Course DLMBCFIE01: Advanced Corporate Finance	90
Course DLMBCFIE02: Investment Analysis & Portfolio Management	
Module DLMBACCE: Accounting	
Module Description	97
Course DLMBACCE01: Advanced Management Accounting & Control	100
Course DLMBACCE02: Current Issues in Accounting	104
Module DLMBSPBE: Sales, Pricing and Brand Management	
Module Description	
Course DLMBSPBE01: Global Brand Management	
Course DLMBSPBE02: Sales and Pricing	
Module DLMBCBR: Consumer Behavior and Research	
Module Description	
Course DLMBCBR01: International Consumer Behavior	
Course DLMBCBR02: Applied Marketing Research	127
Module DLMBITPAM: IT Project and Architecture Management	
Module Description	
Course DLMBITPAM01: IT Project Management	
Course DLMBITPAM02: IT Architecture Management	137
Module DLMBITGSM: IT Governance and Service Management	
Module Description	
Course DLMBITGSM01: IT Service Management	
Course DLMBITGSM02: IT Governance and Compliance	147
Module DLMBMMIIT: Manufacturing Methods Industry 4.0 and Internet of Things	
Module Description	
Course DLMBMMIIT01: Internet of Things	
Course DLMBMMIIT02: Manufacturing Methods Industry 4.0	158
Module DLMBPDDT: Product Development and Design Thinking	
Module Description	
Course DLMBPDDT01: Product Development	
Course DLMBPDDT02: Design Thinking	
Module DLMBDSA: Data Science and Analytics	
Module Description	
Course DLMBDSA01: Data Science	
Course DLMBDSA02: Analytical Software and Frameworks	179

Module DLMBBD-01: Big Data	
Module Description	
Course DLMBBD01: Data Utilization	185
Course DLMBBD02-01: Application Scenarios and Case Studies	
Module DLMBAEHSP: Health Systems and Policy	
Module Description	
Course DLMIHMIHS01: International Health Systems	
Course DLMIHMHPP01: Health Policy and Planning	196
Module DLMBAEEOH: Economics of Health	
Module Description	
Course DLMIHMHE01: Health Economics	
Course DLMIHMHF01: Healthcare Financing	
Module MWPM-01_E: Human Resource Management: Theory	
Module Description	
Course MWPM01-01_E: Human Resource Management I	
Course MWPM02-01_E: Human Resource Management II	214
Module DLMBAEHRMP: Human Resource Management: Practice	
Module Description	
Course DLMTUP01_E: Talent Management & HR Development	
Course DLMFPM01_E: Project: Human Resources Management	
Module MWCH_E: Supply Chain and Sourcing Management	
Module Description	
Course MWCH01_E: Global Supply Chain Management	
Course MWCH02_E: Supply Chain Risk Management and Controlling	234
Module DLMBAEAIM: Aspects of International Management	
Module Description	
Course DLMBGE01: Managing in a Global Economy	
Course DLMINTSATIM01_E: Seminar: Current Issues in International Management	248
Module DLMBAEEES: Entrepreneurial Ecosystems	
Module Description	
Course DLMIEEIEE01: Innovation and Entrepreneurship Ecosystems	
Course DLMIEEEIS01: Entre- and Intrapreneurship	
Module DLMBAEIDL: Innovation and Design Lab	
Module Description	
Course DLMIEEBMD01: Business Model Design	
Course DLMBPDDT02: Design Thinking	271

Module DLMBAEESM: E-Sports-Management	
Module Description	275
Course DLMBAEESM01: Introduction to E-Sports Management	277
Course DLMBAEESM02: Project: E-Sports Management	280
Module DLMBAEESME: E-Sports Marketing and Event Management	
Module Description	283
Course DLMBAEESME01: Media and Marketing Management in E-Sports	286
Course DLMBAEESME02: E-Sports Event Management	
Module DLMIMWKI: Artificial Intelligence	
Module Description	293
Course DLMAIAI01: Artificial Intelligence	295
Course DLMAISAIS01: Seminar: Al and Society	299
Module DLMBAEAIP: AI in Practice	
Module Description	301
Course DLMDSUCE01: Use Case and Evaluation	303
Course DLMAISCTAI01: Seminar: Current Topics in Al	306
Module DLMSFCS: Salesforce Consultant Specialization	
Module Description	309
Course DLMSFCS01: Salesforce Administrator and Service Cloud Consultant	311
Course DLMSFCS02: Salesforce Sales Cloud Consultant	313
Module DLMSFSS: Salesforce Sales Specialization	
Module Description	
Course DLMWSA01_E: Sales Management I	
Course DLMSFSS01: Salesforce Sales Skills	
3. Semester	
Module DLMBCFIE: Corporate Finance and Investment	
Module Description	329
Course DLMBCFIE01: Advanced Corporate Finance	
Course DLMBCFIE02: Investment Analysis & Portfolio Management	
Module DLMBACCE: Accounting	
Module Description	339
Course DLMBACCE01: Advanced Management Accounting & Control	342
Course DLMBACCE02: Current Issues in Accounting	346
Module DLMBSPBE: Sales, Pricing and Brand Management	
Module Description	351

Course DLMBSPBE01: Global Brand Management	354
Course DLMBSPBE02: Sales and Pricing	358
Module DLMBCBR: Consumer Behavior and Research	
Module Description	363
Course DLMBCBR01: International Consumer Behavior	
Course DLMBCBR02: Applied Marketing Research	
Module DLMBITPAM: IT Project and Architecture Management	
Module Description	373
Course DLMBITPAM01: IT Project Management	
Course DLMBITPAM02: IT Architecture Management	
Module DLMBITGSM: IT Governance and Service Management	
Module Description	383
Course DLMBITGSM01: IT Service Management	386
Course DLMBITGSM02: IT Governance and Compliance	389
Module DLMBMMIIT: Manufacturing Methods Industry 4.0 and Internet of Things	
Module Description	393
Course DLMBMMIIT01: Internet of Things	395
Course DLMBMMIIT02: Manufacturing Methods Industry 4.0	400
Module DLMBPDDT: Product Development and Design Thinking	
Module Description	
Course DLMBPDDT01: Product Development	
Course DLMBPDDT02: Design Thinking	411
Module DLMBDSA: Data Science and Analytics	
Module Description	
Course DLMBDSA01: Data Science	417
Course DLMBDSA02: Analytical Software and Frameworks	421
Module DLMBBD-01: Big Data	
Module Description	425
Course DLMBBD01: Data Utilization	
Course DLMBBD02-01: Application Scenarios and Case Studies	430
Module DLMBAEHSP: Health Systems and Policy	
Module Description	
Course DLMIHMIHS01: International Health Systems	435
Course DLMIHMHPP01: Health Policy and Planning	438
Module DLMBAEEOH: Economics of Health	
Module Description	443

Course DLMIHMHE01: Health Economics	
Course DLMIHMHF01: Healthcare Financing	448
Module MWPM-01_E: Human Resource Management: Theory	
Module Description	451
Course MWPM01-01_E: Human Resource Management I	453
Course MWPM02-01_E: Human Resource Management II	456
Module DLMBAEHRMP: Human Resource Management: Practice	
Module Description	459
Course DLMTUP01_E: Talent Management & HR Development	462
Course DLMFPM01_E: Project: Human Resources Management	466
Module MWCH_E: Supply Chain and Sourcing Management	
Module Description	469
Course MWCH01_E: Global Supply Chain Management	472
Course MWCH02_E: Supply Chain Risk Management and Controlling	
Module DLMBAEAIM: Aspects of International Management	
Module Description	481
Course DLMBGE01: Managing in a Global Economy	485
Course DLMINTSATIM01_E: Seminar: Current Issues in International Management	490
Module DLMBAEEES: Entrepreneurial Ecosystems	
Module Description	
Course DLMIEEIEE01: Innovation and Entrepreneurship Ecosystems	
Course DLMIEEEIS01: Entre- and Intrapreneurship	502
Module DLMBAEIDL: Innovation and Design Lab	
Module Description	
Course DLMIEEBMD01: Business Model Design	
Course DLMBPDDT02: Design Thinking	
Module DLMBAEESM: E-Sports-Management	
Module Description	
Course DLMBAEESM01: Introduction to E-Sports Management	
Course DLMBAEESM02: Project: E-Sports Management	522
Module DLMBAEESME: E-Sports Marketing and Event Management	
Module Description	
Course DLMBAEESME01: Media and Marketing Management in E-Sports	
Course DLMBAEESME02: E-Sports Event Management	532
Module DLMIMWKI: Artificial Intelligence	
Module Description	535

Course DLMAIAIO1: Artificial Intelligence	537
Course DLMAISAIS01: Seminar: Al and Society	541
Module DLMBAEAIP: AI in Practice	
Module Description	
Course DLMDSUCE01: Use Case and Evaluation	545
Course DLMAISCTAI01: Seminar: Current Topics in Al	548
Module DLMSFCS: Salesforce Consultant Specialization	
Module Description	551
Course DLMSFCS01: Salesforce Administrator and Service Cloud Consultant	553
Course DLMSFCS02: Salesforce Sales Cloud Consultant	555
Module DLMSFSS: Salesforce Sales Specialization	
Module Description	557
Course DLMWSA01_E: Sales Management I	
Course DLMSFSS01: Salesforce Sales Skills	
Module OPTINTER1: Internship	
Module Description	567
Course OPTINTER110: Internship	
Module MBCP: Capstone Project	
Module Description	571
Course MBCP02: Capstone Thesis	
Course MBCP03: Capstone Thesis Defense	577

2020-10-01



# 1. Semester



# Leadership

# Module Code: DLMBLSE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Georg Berkel (Leadership)

# **Contributing Courses to Module**

Leadership (DLMBLSE01)

Module Exam Type	
Module Exam	Split Exam
Study Format: myStudies Exam, 90 Minutes	
Study Format: Distance Learning Exam, 90 Minutes	
Weight of Module	

# Module Contents

see curriculum

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

#### **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.

# 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 IU International University of Applied Sciences

All Master Programmes in the Business & Management field.

# Leadership

Course Code: DLMBLSE01

Study Level	Language of Instruction	Contact Hours	СР	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 emotionalintelligence. 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	Course Type
myStudies	Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☑ Vodcast	☐ Guideline
☐ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book ☑ Vodcast ☐ Shortcast ☑ Audio ☑ Exam Template	<ul><li>□ Review Book</li><li>□ Creative Lab</li><li>□ Guideline</li><li>☑ Live Tutorium/Course Feed</li></ul>

# Innovation and Entrepreneurship

Module Code: DLMBIE-01

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Georg Berkel (Innovation and Entrepreneurship)

#### **Contributing Courses to Module**

Innovation and Entrepreneurship (DLMBIE01-01)

Module Exam Type	
Module Exam	Split Exam
<u>Study Format: myStudies</u> Exam, 90 Minutes	
Study Format: Distance Learning Exam, 90 Minutes	
Weight of Module	·

# **Module Contents**

see curriculum

- Innovation management and entrepreneurship in a globalized world
- Basics of entrepreneurship
- Business ideas and company foundations
- Financing sources and processes
- Internet, digital business, and artificial intelligence
- Strategic alliances
- Family-owned companies

#### **Learning Outcomes**

#### **Innovation and Entrepreneurship**

On successful completion, students will be able to

- understand the importance, fundamentals, and dimensions of entrepreneurship and its derivatives (intrapreneurship, corporate entrepreneurship, stakeholder relationships, and family businesses).
- analyze the opportunities and challenges associated with evaluating a business idea and setting up a business.
- distinguish between the different motivations behind entrepreneurial activity and develop specific objectives for new enterprises.
- develop a business model, including benchmarks for assessing desired sustainable growth.
- apply different legal forms to business start-ups and select the appropriate legal form for a specific business model.
- understand the different ways in which entrepreneurship and innovation can be financed and weigh them against each other in terms of medium- and long-term advantages and disadvantages.
- develop a rigorous business plan that can be used both as a planning and financing instrument.
- apply, in principle, an entrepreneurial mindset in a variety of different contexts of future professional development.

# 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 IU International University of Applied Sciences

All Master Programmes in the Business & Management field.

# Innovation and Entrepreneurship

Course Code: DLMBIE01-01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	None

#### **Course Description**

In today's globalized and digital world, entrepreneurs have more opportunities to develop and market products and services than ever before. However, entrepreneurship, whether in the form of entrepreneurship or intrapreneurship, presents special challenges. In order to avoid the typical pitfalls of starting and growing a business, a sound understanding of innovation management and building a business is essential. Particular attention must be paid to the financing of entrepreneurial activity, both from the perspective of the entrepreneur and the investor. Innovation and entrepreneurial activity are the basis and driving force of our economy. Even looking at other economies, it is obvious that innovation and entrepreneurship are crucial at every stage of economic development. Small enterprises in developing countries initiate the development of economic institutions and create supply, demand, and markets. These enterprises lay the foundation for economic development and growth. In developed economies, innovation and entrepreneurship are the driving forces behind competition and competitiveness in the global context. In all parts of the world, family businesses play the most important role. The rapid technological and social change present in our societies requires the innovative use of digital technologies (internet and artificial intelligence), as well as flexibility in handling new forms of organization (e.g., strategic alliances between companies). This course introduces students to the ideas behind, motives, and drivers of entrepreneurial activity and innovation and teaches them the practical aspects of the identification, analysis, and development of innovations and business ideas. The core competence of the entrepreneur—the ability to negotiate with investors and partners—is also addressed.

#### **Course Outcomes**

On successful completion, students will be able to

- understand the importance, fundamentals, and dimensions of entrepreneurship and its derivatives (intrapreneurship, corporate entrepreneurship, stakeholder relationships, and family businesses).
- analyze the opportunities and challenges associated with evaluating a business idea and setting up a business.
- distinguish between the different motivations behind entrepreneurial activity and develop specific objectives for new enterprises.
- develop a business model, including benchmarks for assessing desired sustainable growth.
- apply different legal forms to business start-ups and select the appropriate legal form for a specific business model.
- understand the different ways in which entrepreneurship and innovation can be financed and weigh them against each other in terms of medium- and long-term advantages and disadvantages.
- develop a rigorous business plan that can be used both as a planning and financing instrument.
- apply, in principle, an entrepreneurial mindset in a variety of different contexts of future professional development.

### Contents

- 1. Entrepreneurship
  - 1.1 Entrepreneurship and entrepreneur
  - 1.2 Enterprise related theories of entrepreneurship
  - 1.3 The economic significance of entrepreneurship
- 2. Company formation strategy
  - 2.1 Different contexts in which companies are founded
  - 2.2 The Entrepreneur
  - 2.3 Business models and strategies
- 3. Innovation and innovation management
  - 3.1 Innovation
  - 3.2 Innovation management
  - 3.3 Protection of intellectual property
  - 3.4 Case study: BMW Empathic Design
- 4. Legal form in international comparison
  - 4.1 Germany
  - 4.2 International comparison: USA

- 5. Financing entrepreneurial activity I: Sources of finance
  - 5.1 Incubators, accelerators and crowdfunding
  - 5.2 Business angels
  - 5.3 Private equity and corporate venture capital
  - 5.4 Public start-up support
- 6. Financing entrepreneurial activity II: Financing processes
  - 6.1 The investor view: Deal sourcing and deal screening
  - 6.2 The entrepreneurial view: Negotiations with investors
  - 6.3 The evaluation of business start-ups
- 7. The business plan
  - 7.1 Purpose and objectives of the business plan
  - 7.2 Expectations regarding the business plan
  - 7.3 Structure and content of the business plan
  - 7.4 Guidelines for creating a business plan
- 8. Digital business models and artificial intelligence
  - 8.1 e-Business
  - 8.2 Artificial intelligence
  - 8.3 The Globotics Evolution
- 9. Cooperative strategy: Alliances and joint ventures
  - 9.1 Cooperative strategy
  - 9.2 The right "fit"
  - 9.3 The right "form"
- 10. Family-owned company
  - 10.1 Definitions
  - 10.2 Economic significance
  - 10.3 Strengths and weaknesses

### Literature

# **Compulsory Reading**

#### **Further Reading**

- Mariotti, S., & Glackin, C. (2016). Entrepreneurship: Starting & operating a small business (4th ed.). Pearson.
- Parker, S. C. (2009). The economics of entrepreneurship (pp. 1–28). Cambridge University Press.
- Scarborough, N. M., & Cornwall, J. R. (2019). Essentials of entrepreneurship and small business management (9th ed.). Pearson.

# **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods			
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab		
☐ Vodcast	☐ Guideline		
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed		
☑ Exam Template			

# **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods			
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab		
☐ Vodcast	☐ Guideline		
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed		
☑ Exam Template			

# Corporate Finance

# Module Code: DLMINRE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Stéphane Timmer (Corporate Finance)

### **Contributing Courses to Module**

Corporate Finance (DLMINRE01)

Module Exam Type	
Module Exam	Split Exam
Study Format: Distance Learning Exam, 90 Minutes	
Study Format: myStudies Exam, 90 Minutes	
Weight of Module	

see curriculum

### **Module Contents**

- Portfolio and capital market theory
- Financing and capital structure
- Company assessment procedures
- Acquisition, corporate control, and governance
- Finance planning

#### **Learning Outcomes**

#### **Corporate Finance**

On successful completion, students will be able to

- know the key components of corporate finance.
- use financial mathematical methods.
- apply the previously learned methods by using selected data sets and case studies.
- understand the capital structures of a corporation as well as their need to make investment and funding decisions.
- apply the common methods of business valuation and understand the basics of mergers & acquisitions.

# Links to other Modules within the Study Program

his module is similar to other modules in the field of Finance & Tax Accounting.

### Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the IT & Business & Management field.

# Corporate Finance

Course Code: DLMINRE01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	None

#### **Course Description**

How is funding provided to a corporate activity? How much loan capital and/or own capital does one need? Which projects are worth investing in? What is the actual value of a company? What instruments are available to measure the value of a company and assess financial markets? How can one ensure an optimal balance between the competing goals of liquidity, safety, yield, and growth? This course offers answers to these and other complex questions on the topic of financing and investing. The introduction deals with portfolio selection and capital market theory. With this theoretical foundation, various financing types and capital structures are then explained in detail. Well-known corporate assessment procedures, such as the discounted cash flow method, are presented, as are different calculations that can be used to inform decision making. A critical element of the course is the topic of mergers and acquisitions. Case studies are included to illustrate which parties are typically involved in a merger or acquisition and what criteria is used to determine the success of such a venture. The course concludes with the topic of finance planning.

### **Course Outcomes**

On successful completion, students will be able to

- know the key components of corporate finance.
- use financial mathematical methods.
- apply the previously learned methods by using selected data sets and case studies.
- understand the capital structures of a corporation as well as their need to make investment and funding decisions.
- apply the common methods of business valuation and understand the basics of mergers & acquisitions.

#### Contents

- 1. Portfolio and Capital Market Theory
  - 1.1 Capital Markets and Informational Efficiency
  - 1.2 Portfolio Theory
  - 1.3 CAPM
- 2. Stock and Portfolio Analysis
  - 2.1 Measures of Risk and Performance
  - 2.2 Stock Analysis

- 3. Optimal Capital Structure
  - 3.1 Capital Structure Based on the Traditional Theorem
  - 3.2 Capital Structure According to Modigliani/Miller
  - 3.3 Neo-Institutional Capital Structure Model
- 4. Types of Financing
  - 4.1 Internal and External Financing
  - 4.2 Debt Financing
  - 4.3 Equity Financing
  - 4.4 Additional Financing Options
- 5. Capital Budgeting
  - 5.1 Fundamental Concepts
  - 5.2 Static Capital Budgeting Methods
  - 5.3 Dynamic Investment Calculation Methods
- 6. Business Valuation
  - 6.1 Purpose and Methods of Business Valuation
  - 6.2 Individual Valuation Methods
  - 6.3 Total Valuation Methods
  - 6.4 Weighted Average Cost of Capital (WACC)
- 7. Corporate Control and M&A
  - 7.1 The Market for Corporate Control: Mergers and Acquisitions
  - 7.2 Motivations for M&A Transactions
  - 7.3 Phases of M&A Transactions
- 8. Specific Forms of M&A, Private Equity, Due Diligence, and IPOs
  - 8.1 Due Diligence
  - 8.2 Friendly and Hostile Takeovers, LBOs, MBOs, and MBIs, and IPOs
  - 8.3 Private Equity & Venture Capital Companies
- 9. Corporate Governance
  - 9.1 Internal and External Corporate Governance
  - 9.2 Example of Legal Basis: Sarbanes Oxley Act (SOX)
  - 9.3 Effect on the Company Performance and the Significance of Ownership Structures
  - 9.4 Additional Financing Options

- 10. Financial Planning
  - 10.1 Principles of Financial Planning
  - 10.2 Cash Budgeting
  - 10.3 Projected Financial Statements and Ratios

#### 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.
- Brealey, R. A., Myers, S. C., & Marcus, A. J. (2015). Fundamentals of corporate finance (8th ed.).
   New York, NY: McGraw-Hill Education.
- Brigham, E. F., & Daves, P. R. (2016). Intermediate financial management (12th ed.). Boston, MA: Cengage.
- Copeland, T. E., Weston, J. F., & Shastri, K. (2014). Financial theory and corporate policy (Pearson New International ed.). Harlow: Pearson Education.
- Damodaran, A. (2014). Applied corporate finance (4th ed.). Hoboken, NJ: Wiley & Sons.

# **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# International Marketing

# **Module Code: DLMMARE**

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Maren Weber (International Marketing)

# **Contributing Courses to Module**

International Marketing (DLMMARE01)

Module Exam Type		
Module Exam	Split Exam	
Study Format: Distance Learning Exam, 90 Minutes		
<u>Study Format: myStudies</u> Exam, 90 Minutes		
Weight of Module		

#### see curriculum

# **Module Contents**

- Introduction to international marketing
- The international context of corporations
- International marketing strategies
- Features of the marketing-mix specific to the international context
- Trends in international marketing

## **Learning Outcomes**

## **International Marketing**

On successful completion, students will be able to

- transfer well-known marketing management concepts to an international context, recognize limitations of their transferability, and continually develop these concepts.
- perform a structural analysis of the context surrounding specific internationalizing decisions, recognize the various contexts in these scenarios, and formulate alternative decisions.
- assess different strategic and political marketing alternatives in specific scenarios using relevant criteria and develop a decision template for developing marketing plans.
- combine actual issues from industry with the most recent scientific insights into successful marketing approaches in order to develop the skills and knowledge required to manage international marketing in a corporate setting.

# 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 IU International University of Applied Sciences

All Master Programmes in the Marketing & Communication field.

# International Marketing

Course Code: DLMMARE01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	None

# **Course Description**

The most important task of international marketing is recognizing which international markets and business-related dependencies should be targeted for the marketing of products and services. The course begins with defining key terms and concepts associated with the field of marketing management and then extrapolates these to the international context. The first section of the course equips students with an understanding of how to perform a structured analysis of international markets, using elements of the "PEST Analysis" (political, legal, economical, sociocultural, and technological frameworks). Strategical aspects of marketing as well as instruments used to analyze the marketing mix are discussed as they relate to the international context. Inadequate consideration of marketing orientation as well as underestimating the impact of cultural differences both present serious threats to the success of any corporation. This course shall therefore analyze and discuss contemporary case studies involving multinational corporations to elucidate these potential threats. Industry-based case studies also offer students the opportunity to put into practice the knowledge and tools acquired in this course to address some of the specific challenges of international marketing.

#### **Course Outcomes**

On successful completion, students will be able to

- transfer well-known marketing management concepts to an international context, recognize limitations of their transferability, and continually develop these concepts.
- perform a structural analysis of the context surrounding specific internationalizing decisions, recognize the various contexts in these scenarios, and formulate alternative decisions.
- assess different strategic and political marketing alternatives in specific scenarios using relevant criteria and develop a decision template for developing marketing plans.
- combine actual issues from industry with the most recent scientific insights into successful
  marketing approaches in order to develop the skills and knowledge required to manage
  international marketing in a corporate setting.

#### **Contents**

- Introduction to International Marketing
  - 1.1 Issues Related to International Marketing
  - 1.2 Environmental Factors in International Market Development
  - 1.3 Features of Buying Behavior in International Marketing

- 2. International Marketing Strategies
  - 2.1 Marketing Segmentation and Market Selection
  - 2.2 Market Entry Strategy
  - 2.3 Market Exit Strategy
- 3. International Market Research
  - 3.1 Qualitative and Quantitative Primary Research
  - 3.2 International Survey and Observations
- 4. International Marketing for Specific Sectors
  - 4.1 Industrial Goods Sector
  - 4.2 Consumer Goods Sector
  - 4.3 Wholesale and Retail Sector
  - 4.4 Service Sector
- 5. International Products
  - 5.1 Product Policy
  - 5.2 Product Mix and Degree of Standardization
  - 5.3 Brand Policy
- 6. International Pricing and Terms and Sales Policies
  - 6.1 Pricing on International Markets
  - 6.2 Types of Price Discrimination
  - 6.3 Credit and Discount Policy
- 7. International Promotion
  - 7.1 International Promotion
  - 7.2 International Promotion Mix
  - 7.3 Optimal Standardization
- 8. International Distribution
  - 8.1 Distribution Channels, Intermediaries, and Distribution Schemes
  - 8.2 Organizational Forms for International Market Development
  - 8.3 Potential for Standardization
- 9. International Marketing Mix
  - 9.1 Home Country Orientation
  - 9.2 Global Orientation
  - 9.3 Multinational Orientation

# Literature

# **Compulsory Reading**

# **Further Reading**

Bradley, F. (2004). International marketing strategy (5th ed.). Toronto: Pearson Education.

# **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods			
☐ Learning Sprints®	□ Review Book		
☑ Course Book	☐ Creative Lab		
□ Vodcast	☐ Guideline		
☑ Shortcast	☑ Live Tutorium/Course Feed		
☑ Audio			
☑ Exam Template			

# **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods			
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab		
□ Vodcast	☐ Guideline		
☑ Shortcast	☑ Live Tutorium/Course Feed		
☑ Audio			
☑ Exam Template			

# Managerial Economics

Module Code: DLMBME-01

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Dr. Christoph Kneiding (Managerial Economics)

# **Contributing Courses to Module**

Managerial Economics (DLMBME01-01)

Module Exam Type		
Module Exam	Split Exam	
Study Format: Distance Learning Exam, 90 Minutes		
Study Format: myStudies Exam, 90 Minutes		
Weight of Module		

# see curriculum

# **Module Contents**

- The nature of managerial economics
- Market forces: Demand and supply
- Market structures and competition
- Strategy analysis and decision-making

#### **Learning Outcomes**

## **Managerial Economics**

On successful completion, students will be able to

- Define the scope of managerial economics and describe its contribution to both entrepreneurial decision-making and economic theory at large.
- Identify and interpret various macroeconomic indicators and analyze the role of macroeconomic factors in shaping governmental and central bank policies.
- Calculate various elasticities of demand and accurately estimate future demand using regression analysis.
- Identify price and non-price determinants of supply and calculate production and cost functions.
- Identify various market structures and evaluate pricing strategies adopted by firms.
- Evaluate the role and effectiveness of policies to reduce the occurrence of market failure.
- Recognize the role of understanding risk in managerial decision-making and select advantageous capital budgeting projects.
- Apply theories of economic behavior and design entrepreneurial strategies to successfully manage a company and secure for it a competitive advantage.

# 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 IU International University of Applied Sciences

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

# Managerial Economics

Course Code: DLMBME01-01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	None

## **Course Description**

This course takes an in-depth look into the economic framework underlying markets and economies and the economic rationale underlying strategic decisions. In order to enable students to analyze the economic environment and draw conclusions from a managerial perspective, the first part of the course is devoted to the description and analysis of market forces. Following this, strategic decision making makes up the second half of the course. In particular, these latter units deal with the role of different market structures and asymmetric information as well as the fundamentals of game theory, which supports students to understand with the underlying decision making processes at work in modern economics.

#### **Course Outcomes**

On successful completion, students will be able to

- Define the scope of managerial economics and describe its contribution to both entrepreneurial decision-making and economic theory at large.
- Identify and interpret various macroeconomic indicators and analyze the role of macroeconomic factors in shaping governmental and central bank policies.
- Calculate various elasticities of demand and accurately estimate future demand using regression analysis.
- Identify price and non-price determinants of supply and calculate production and cost functions.
- Identify various market structures and evaluate pricing strategies adopted by firms.
- Evaluate the role and effectiveness of policies to reduce the occurrence of market failure.
- Recognize the role of understanding risk in managerial decision-making and select advantageous capital budgeting projects.
- Apply theories of economic behavior and design entrepreneurial strategies to successfully manage a company and secure for it a competitive advantage.

#### **Contents**

- 1. The Nature, Scope, and Method of Managerial Economics
  - 1.1 The Nature and Scope of Managerial Economics
  - 1.2 The Method of Managerial Economics

- 2. The Macroeconomic Environment
  - 2.1 Macroeconomic Conditions and the Business Cycle
  - 2.2 Government and Central Bank Policies
- 3. Market Force: Demand
  - 3.1 The Theory of Demand
  - 3.2 Elasticity of Demand
  - 3.3 Demand Estimation
- 4. Market Force: Supply
  - 4.1 The Theory of Supply
  - 4.2 Price Determination
  - 4.3 Production Theory
  - 4.4 Cost Theory
- 5. Market Structures and Competition
  - 5.1 Theories of the Firm
  - 5.2 Market Structures
  - 5.3 Pricing Strategies
- 6. Government Regulation and Industry
  - 6.1 Market Failures
  - 6.2 Government Policies to Reduce Market Failure
- 7. Strategic Analysis and Decision-Making
  - 7.1 Game Theory
  - 7.2 Information and Decision-Making
  - 7.3 Auctions
- 8. Capital Budgeting and Risk
  - 8.1 Capital Budgeting
  - 8.2 Investment Analysis
  - 8.3 Risk Versus Uncertainty

## Literature

# **Compulsory Reading**

## **Further Reading**

- Keat, P. G., Young, P. K., & Erfle, S. E. (2014). Managerial economics: Economic tools for today's decision makers (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- McGuigan, J. R., Moyer, R. C., & Harris, F. H. (2017). Managerial economics: Applications, strategies and tactics (14th ed.). Boston, MA: Cengage Learning.
- Perloff, J. M., & Brander, J. A. (2017). Managerial economics and strategy (2nd ed.). Upper Saddle River, NJ: Pearson.
- Png, I. (2016). Managerial economics (5th ed.). Abingdon: Routledge.

# **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☐ Live Tutorium/Course Feed
☑ Exam Template	

# Performance Measurement

Module Code: DLMBPM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Dr. Tobias Broweleit (Performance Measurement)

# **Contributing Courses to Module**

Performance Measurement (DLMBPM01)

Module Exam Type		
Module Exam	Split Exam	
Study Format: Distance Learning Exam, 90 Minutes		
Study Format: myStudies Exam, 90 Minutes		
Weight of Module		

#### weight of Module

see curriculum

# **Module Contents**

- Performance measurement concepts
- Measuring financial performance
- Drivers of financial and operational performance

#### **Learning Outcomes**

#### **Performance Measurement**

On successful completion, students will be able to

- Describe the history of performance measurement theory and its influence of present-day understanding of performance measurement.
- Report on a business's financial performance using accounting calculations (such as return on equity, return on assets, return on investment, earnings per share, gross profit margin, etc.) and market-based calculations (such as price-to-earnings ratio, net present value, internal rate of return, etc.).
- Explain the economic value added (EVA) model and calculate this metric using data from the company.
- Identify, define, and track drivers of operational performance, specifically quality, dependability, speed, cost, and flexibility.
- Derive performance metrics, such as customer satisfaction or sales forecast-to-plan performance, and link these with overall performance targets to create a performance measurement system.
- Conduct a customer profitability analysis using activity-based costing and calculate customer lifetime value using company data.
- Summarize strategies for benchmarking and measuring intellectual capital.
- Measuring organizational performance using the following tools: Balanced Scorecard, the EFQM Excellence Model, the Performance Prism and the SMART Pyramid approach.
- Evaluate the strengths and weaknesses of different performance measurement metrics and frameworks.

# 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 IU International University of Applied Sciences

All Master Programmes in the Business & Management field.

# Performance Measurement

Course Code: DLMBPM01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	None

#### **Course Description**

After specifying a company's strategic goals, managers face the challenge to implement these strategies. Performance measurement and performance management support the implementation of strategy by using performance measures to address financial and non-financial/operational aspects. Consequently, students get to know the function of performance measurement and performance management as part of the overall management functions. Furthermore, they will acquire an understanding of various performance aspects (e.g. financial drivers measured by the economic value added, customer drivers measured and managed by customer lifetime value, process drivers measured and managed in the context of continuous improvement programs). Understanding financial performance measurement concepts is especially crucial before students go on to identify operational drivers.

#### **Course Outcomes**

On successful completion, students will be able to

- Describe the history of performance measurement theory and its influence of present-day understanding of performance measurement.
- Report on a business's financial performance using accounting calculations (such as return on equity, return on assets, return on investment, earnings per share, gross profit margin, etc.) and market-based calculations (such as price-to-earnings ratio, net present value, internal rate of return, etc.).
- Explain the economic value added (EVA) model and calculate this metric using data from the company.
- Identify, define, and track drivers of operational performance, specifically quality, dependability, speed, cost, and flexibility.
- Derive performance metrics, such as customer satisfaction or sales forecast-to-plan performance, and link these with overall performance targets to create a performance measurement system.
- Conduct a customer profitability analysis using activity-based costing and calculate customer lifetime value using company data.
- Summarize strategies for benchmarking and measuring intellectual capital.
- Measuring organizational performance using the following tools: Balanced Scorecard, the EFQM Excellence Model, the Performance Prism and the SMART Pyramid approach.
- Evaluate the strengths and weaknesses of different performance measurement metrics and frameworks.

#### **Contents**

- 1. Performance Measurement as Part of the Overall Management Framework
  - 1.1 Theories Before 1950
  - 1.2 Theories After 1950
- 2. Measuring Financial Performance
  - 2.1 Reviewing Traditional Models of Financial Performance Measurement
  - 2.2 The Economic Value Added (EVA) Metric
- 3. Drivers of Operational Performance
  - 3.1 The Five Operations Performance Objectives
  - 3.2 Analysis of Performance Drivers
- 4. Customer Profitability Analysis, Lifetime Value, and Benchmarking
  - 4.1 Profitability Analysis
  - 4.2 Customer Lifetime Value
  - 4.3 Benchmarking
- 5. Intellectual Capital Measurement and Management
  - 5.1 Importance and Challenges of Intellectual Capital Measurement
  - 5.2 Approaches of Managing and Measuring Intellectual Capital
- 6. Performance Measurement Concepts
  - 6.1 Objectives of Performance Measurement Systems
  - 6.2 The Balanced Scorecard
  - 6.3 Performance Prism and SMART Pyramid
  - 6.4 European Foundation for Quality Management (EFQM)
- 7. Common Characteristics of Different Concepts
  - 7.1 Common Characteristics of Different Concepts
  - 7.2 Pitfalls in Performance Measurement and Management

# Literature

# **Compulsory Reading**

# **Further Reading**

- Neely, A. (2007). Business performance measurement: Theory and practice (2nd ed.). Cambridge: Cambridge University Press.
- Simons, R. (2000). Performance measurement and control systems for implementing strategy: Text and cases (International ed.). Upper Saddle River, NJ: Prentice Hall.

# **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book
☐ Vodcast	☐ Creative Lab ☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	

# **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	





# 2. Semester



# Strategic Management

Module Code: DLMBSME

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Maren Weber (Strategic Management)

# **Contributing Courses to Module**

Strategic Management (DLMBSME01)

Module Exam Type		
Module Exam	Split Exam	
<u>Study Format: myStudies</u> Exam, 90 Minutes		
Study Format: Distance Learning Exam, 90 Minutes		
Weight of Module		

#### 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 IU International University of Applied Sciences

All Master Programmes in the Business & Management field.

# Strategic Management

Course Code: DLMBSME01

Study Level	Language of Instruction	Contact Hours	СР	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, Alley, 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	Course Type
myStudies	Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book ☐ Vodcast	☐ Review Book ☐ Creative Lab ☐ Guideline
☑ Shortcast ☑ Audio ☑ Exam Template	☑ Live Tutorium/Course Feed

# **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	cload				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	

# Business Ethics and Corporate Governance

Module Code: DLMBAEBECG

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Jürgen Matthias Seeler (Business Ethics and Corporate Governance)

### **Contributing Courses to Module**

Business Ethics and Corporate Governance (DLMBAEBECG01)

Module Exam Type			
Module Exam	Split Exam		
<u>Study Format: myStudies</u> Written Assessment: Written Assignment			
Study Format: Distance Learning Written Assessment: Written Assignment			
Weight of Module			
see curriculum			

## **Module Contents**

- 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

### **Learning Outcomes**

## **Business Ethics and Corporate Governance**

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.

# Links to other Modules within the Study Program

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

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Business & Management fields

# Business Ethics and Corporate Governance

Course Code: DLMBAEBECG01

Study Level	Language of Instruction	Contact Hours	СР	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**

- 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	Course Type
myStudies	Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☑ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☑ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# Operations and Information Management

Module Code: DLMBAEOIM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	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	Split Exam	
Study Format: myStudies Written Assessment: Case Study		
Study Format: Distance Learning Written Assessment: Case Study		
Weight of Module		

## **Module Contents**

see curriculum

- 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

#### **Learning Outcomes**

### **Operations and Information Management**

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.

# Links to other Modules within the Study Program

This module is similar to other modules in the field of Economics.

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the Business & Management field.

## Operations and Information Management

Course Code: DLMBAEOIM01

Study Level	Language of Instruction	Contact Hours	СР	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 practicerelevant 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 Hellingrath 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	Course Type
myStudies	Case Study

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

☐ Review Book
☐ Creative Lab
☑ Guideline
☑ Live Tutorium/Course Feed

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Case Study

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# Corporate Finance and Investment

Module Code: DLMBCFIE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	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				
	Advanced Corporate Finance			
	Study Format "Distance Learning": Exam			
	Investment Analysis & Portfolio Management			
	• 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.

## Links to other Modules within the Study Program

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

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the Business & Management field

## Advanced Corporate Finance

Course Code: DLMBCFIE01

Study Level	Language of Instruction	Contact Hours	СР	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., Dallocchio, 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	Course Type
Distance Learning	Online Lecture

Information about the examination				
Examination Admission Requirements	BOLK: yes Course Evaluation: no			
Type of Exam	Exam			

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®	☑ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	□ Reader
☑ Exam Template	□ Slides

## Investment Analysis & Portfolio Management

**Course Code: DLMBCFIE02** 

Study Level	Language of Instruction	Contact Hours	СР	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.). UpperSaddle 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 SaddleRiver, NJ: Pearson. (Database: EBSCO).

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Accounting

## Module Code: DLMBACCE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	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 IU International University of Applied Sciences

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

## Advanced Management Accounting & Control

**Course Code: DLMBACCE01** 

Study Level	Language of Instruction	Contact Hours	СР	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. Controllership and the CFO: Core Competencies, Organization, and Strategies
  - 1.1 Management Accounting and Control
  - 1.2 Core Competencies of CFOs and Controllers
  - 1.3 Controllership 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
- 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	Course Type
Distance Learning	Online Lecture

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

Student \	Vorkload				
Self Stud	y Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

## Current Issues in Accounting

Course Code: DLMBACCE02

Study Level	Language of Instruction	Contact Hours	СР	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 Ouick 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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods				
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab			
☐ Vodcast	☐ Guideline			
☑ Shortcast	☐ Live Tutorium/Course Feed			
☑ Audio				
☑ Exam Template				

# Sales, Pricing and Brand Management

Module Code: DLMBSPBE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimaldauer: 1 Semester	WiSe/SoSe	English

# **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.

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.

# **Sales and Pricing**

#### **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(s) of Marketing & Sales

### Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the Marketing field(s)

# Global Brand Management

Course Code: DLMBSPBE01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>☑ Vodcast</li> <li>□ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

# Sales and Pricing

Course Code: DLMBSPBE02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	DLMBSPBE01

#### **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 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.

#### **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.

- 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: Myilibrary).
- 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	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>☑ Vodcast</li> <li>□ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

# Consumer Behavior and Research

Module Code: DLMBCBR

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimaldauer: 1 Semester	WiSe/SoSe	English

# **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 "Distance Learning": Exam, 90 Minutes	
	Applied Marketing Research	
	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 ethics 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 IU International University of Applied Sciences

All Master Programmes in the Marketing field(s)

# International Consumer Behavior

Course Code: DLMBCBR01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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 Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Applied Marketing Research

Course Code: DLMBCBR02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	DLMBCBR01

### **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 ethics 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.

- 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 Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# IT Project and Architecture Management

Module Code: DLMBITPAM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Inga Schlömer (IT Project Management) / Prof. Dr. Inga Schlömer (IT Architecture Management)

# **Contributing Courses to Module**

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

Module Exam Type	
Module Exam	Split Exam
	IT Project Management
	Study Format "Distance Learning": Exam
	IT Architecture Management
	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.

# 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 IU International University of Applied Sciences

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

# IT Project Management

Course Code: DLMBITPAM01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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	Course Type
Distance Learning	Online Lecture

Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	□ Reader
☑ Exam Template	□ Slides

# IT Architecture Management

Course Code: DLMBITPAM02

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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	Course Type
Distance Learning	Case Study

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# IT Governance and Service Management

Module Code: DLMBITGSM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	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		
	<u>IT Service Management</u>		
	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 IU International University of Applied Sciences

All Master Programmes in the IT & Technology field

# IT Service Management

Course Code: DLMBITGSM01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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

#### **Compulsory Reading**

### **Further Reading**

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

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods			
☐ Learning Sprints®	□ Review Book		
☑ Course Book	☐ Creative Lab		
□ Vodcast	☐ Guideline		
☑ Shortcast	☑ Live Tutorium/Course Feed		
☑ Audio			
☑ Exam Template			

# IT Governance and Compliance

Course Code: DLMBITGSM02

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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

#### **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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods			
☐ Learning Sprints®	□ Review Book		
☑ Course Book	☐ Creative Lab		
□ Vodcast	☐ Guideline		
☑ Shortcast	☑ Live Tutorium/Course Feed		
☑ Audio			
☑ Exam Template			

# Manufacturing Methods Industry 4.0 and Internet of Things

### Module Code: DLMBMMIIT

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Leonardo Riccardi (Internet of Things) / Prof. Dr. Leonardo Riccardi (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
	<ul> <li>Internet of Things</li> <li>Study Format "Distance Learning": Exam,</li> <li>90 Minutes</li> <li>Study Format "myStudies": Exam, 90 Minutes</li> </ul>
	<ul> <li>Manufacturing Methods Industry 4.0</li> <li>Study Format "myStudies": Exam, 90 Minutes</li> <li>Study Format "Distance Learning": Exam, 90 Minutes</li> </ul>
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 IU International University of Applied Sciences

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

# Internet of Things

Course Code: DLMBMMIIT01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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

#### **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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

### **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☐ Live Tutorium/Course Feed
☑ Exam Template	

# Manufacturing Methods Industry 4.0

Course Code: DLMBMMIIT02

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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

### **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	Course Type
myStudies	Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	<ul><li>□ Review Book</li><li>□ Creative Lab</li><li>□ Guideline</li><li>□ Live Tutorium/Course Feed</li></ul>

Study Format	Course Type	
Distance Learning	Online Lecture	

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Product Development and Design Thinking

**Module Code: DLMBPDDT** 

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Leonardo Riccardi (Product Development) / Prof. Dr. Leonardo Riccardi (Design Thinking)

### **Contributing Courses to Module**

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

Module Exam Type		
Module Exam	Split Exam	
	Product Development	
	<ul> <li>Study Format "Distance Learning": Exam,</li> <li>90 Minutes</li> <li>Study Format "myStudies": Exam, 90 Minutes</li> </ul>	
	<u>Design Thinking</u>	
	Study Format "Distance Learning": Written     Assessment: Project Report	
Weight of Module		
see curriculum		

#### **Module Contents**

#### **Product Development**

- Production planning techniques
- Design tasks
- Product development approaches
- Digital product development and organizational aspects

#### **Design Thinking**

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.

#### **Learning Outcomes**

#### **Product Development**

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.

#### **Design Thinking**

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.

Links to other Modules with	in the Study
Program	

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

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Design, Architecture & Construction fields

# Product Development

Course Code: DLMBPDDT01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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

### **Compulsory Reading**

#### **Further Reading**

- Kahn, K. B., Kay, S. E., Slotegraaf, R. J., & Uban, S. (Eds.). (2012). The PDMA handbook of new productdevelopment (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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

# Study Format myStudies

Study Format	Course Type
myStudies	Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

# Design Thinking

Course Code: DLMBPDDT02

Study Level	Language of Instruction	Contact Hours	СР	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.

#### **Compulsory Reading**

#### **Further Reading**

- IDEO.org. (2015). The Field Guide to Human-Centered Design. A step-by-step guide that will get you solving prob-lems 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 pro-duce change, drive new ideas, and deliver meaningful solutions.
- Lewrick, M., Link, P., Leifer, L. J., & Langensand, N. (2018). The design thinking playbook: mindful digital transfor-mation of teams, products, services, businesses and ecosystems. John Wiley & Sons.

Study Format	Course Type
Distance Learning	Project

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	□ Review Book □ Creative Lab
□ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
□ Exam Template	

# Data Science and Analytics

Module Code: DLMBDSA

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Ulrich Kerzel (Data Science) / Prof. Dr. Ulrich Kerzel (Analytical Software and Frameworks)

### Contributing Courses to Module

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

Module Exam Type				
Module Exam	Split Exam			
	<ul><li><u>Data Science</u></li><li>Study Format "Distance Learning": Exam,</li><li>90 Minutes</li></ul>			
	Analytical Software and Frameworks  • 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
- 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.

# 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 IU International University of Applied Sciences

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

# Data Science

**Course Code: DLMBDSA01** 

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

#### **Course Description**

The course Data Science 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. 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
- 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.

- 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

#### **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	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Analytical Software and Frameworks

Course Code: DLMBDSA02

Study Level	Language of Instruction	Contact Hours	СР	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.

#### **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.

- 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

### **Compulsory Reading**

- Elmasri, R., & Navathe, S. (2010). Fundamentals of database systems. Boston, MA: Addison-WesleyPublishing 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-orientedfoundations 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 knowabout cloud computing. Hoboken, NJ: John Wiley & Sons.
- Jackson, J. C., Vijayakumar, V., Quadir, M. A., & Bharathi, C. (2015). Survey on programming modelsand environments for cluster, cloud, and grid computing that defends big data. ProcediaComputer Science, 50, 517–523.
- Jukic, N., Vrbsky, S., & Nestorov, S. (2016). Database systems: Introduction to databases and datawarehouses. 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 bigdata. Birmingham: Packt Publishing.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# Big Data

## Module Code: DLMBBD-01

Module Type	Admission Requirements	Study Level	СР	Student Workload
see curriculum	<ul><li>none</li></ul>	MA	10	300 h
	■ DLMBBD01			

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	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	
	<u>Data Utilization</u>	
	• Study Format "Distance Learning": Exam, 90 Minutes	
	Application Scenarios and Case Studies	
	Study Format "Distance Learning": Written     Assessment: Case Study	
Weight of Module	·	
see curriculum		

### **Module Contents**

### **Data Utilization**

- Pattern recognition
- Natural language processing
- Image recognition
- Detection and sensing
- Problem-solving
- Decision-making

## **Application Scenarios and Case Studies**

- Agile development
- Workflow overview
- Fields of application
- Sprint Planning: Sprint
- Sprint Retrospective
- Committee presentation

## **Learning Outcomes**

## **Data Utilization**

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.

## **Application Scenarios and Case Studies**

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.

# Links to other Modules within the Study Program

This module is similar to other modules in the fields of Data Science & Artificial Intelligence

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the IT & Technology fields

## Data Utilization

Course Code: DLMBBD01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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, GPDR

## **Compulsory 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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

## Application Scenarios and Case Studies

Course Code: DLMBBD02-01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	DLMBBD01

## **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.

- 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

## **Compulsory 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	Course Type
Distance Learning	Case Study

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

Student Workload							
Self Study Presence Tutorial Self Test Practical Experience Hours Total							
110 h	0 h	20 h	20 h	0 h	150 h		

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# Health Systems and Policy

Module Code: DLMBAEHSP

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Michael Thiede (International Health Systems) / Prof. Dr. Michael Thiede (Health Policy and Planning)

## Contributing Courses to Module

- International Health Systems (DLMIHMIHS01)
- Health Policy and Planning (DLMIHMHPP01)

Module Exam Type			
Module Exam Split Exam			
	<u>International Health Systems</u>		
	• Study Format "Distance Learning": Exam, 90 Minutes (100)		
	Health Policy and Planning		
	Study Format "Distance Learning": Written     Assessment: Case Study		
Weight of Module			
see curriculum			

## **Module Contents**

## **International Health Systems**

- Aims and Principles of Health Care Systems
- Structural Features of Health Care Systems
- Health System Building Blocks
- Health System Efficiency
- Health Equity
- Country Case Studies

## **Health Policy and Planning**

- Policy Making and Health Policy Making
- Agenda Setting
- The role of Interest Groups
- Comparative Health Policy
- Leadership in Health Policy

## **Learning Outcomes**

## **International Health Systems**

On successful completion, students will be able to

- understand various healthcare system delivery models.
- develop analytical skills in healthcare market drivers.
- identify and make a synthesis of national and international healthcare policies.
- interpret decision making processes in health care from an international perspective.

#### **Health Policy and Planning**

On successful completion, students will be able to

- reflect on the complexity of health policy processes at national and international level.
- identify and strategically respond to the roles of stakeholders and stakeholder groups in policy processes.
- understand how and by whom policy agendas are set and how these processes can in turn be influenced.
- assess and analyse the formation and the influence of different interest groups in terms of political economy.
- compare health policies internationally and to consider lessons learned.

# Links to other Modules within the Study Program

This module is similar to other modules in the field of Healthcare Management

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the field of Health Affairs

## International Health Systems

Course Code: DLMIHMIHS01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	None

## **Course Description**

This course addresses the health system perspective of international healthcare management. It emphasizes the system view and introduces the principles of good governance, equity, efficiency and sustainability as well as building blocks for health care systems design and management. The course conveys concepts, skills and core competencies in key areas as required by different stakeholder groups. By means of a structured comparative approach, the course analyzes different health systems that have long served as "prototypes" in the discussion, such as the UK's National Health Service and the German Statutory Health Insurance. The course builds on concepts from health policy, health economics, insurance economics and broader health systems research.

#### **Course Outcomes**

On successful completion, students will be able to

- understand various healthcare system delivery models.
- develop analytical skills in healthcare market drivers.
- identify and make a synthesis of national and international healthcare policies.
- interpret decision making processes in health care from an international perspective.

- 1. Health Care Systems Internationally: Politics, Economics, and Policy
  - 1.1 Aims and Principles of Health Care Systems
  - 1.2 Structural Features of Health Care Systems
  - 1.3 Health System Building Blocks
  - 1.4 Contextual Factors
  - 1.5 Health System Governance
- 2. Organizing the Provision of Services
  - 2.1 Primary Care
  - 2.2 Specialist Care
  - 2.3 Hospital Care
  - 2.4 Pharmaceutical Care

- 3. Managing the Health Workforce
  - 3.1 Medical Education
  - 3.2 Supply and Distribution of Health Workers
  - 3.3 Health Workforce Governance
  - 3.4 Health Worker Migration
- 4. Health System Efficiency
  - 4.1 Measuring and Comparing Health System Outputs
  - 4.2 Cross-National Efficiency Comparisons of Health Systems
- 5. Health Equity
  - 5.1 Equity in Health Care Delivery
  - 5.2 Equity in Health Financing
- 6. Health Systems by Country An Analytical Approach
  - 6.1 Germany
  - 6.2 United Kingdom
  - 6.3 United States
  - 6.4 Health Systems in Other Parts of the World

## **Compulsory Reading**

## **Further Reading**

- Cylus, J./Papanicolas, I./Smith, P. (2016). Health system efficiency. How to make measurement matter for policy and management. Copenhagen, European Observatory on Health Systems and Policies/World Health Organization.
- Johnson, J., Stoskopf, C. & Shi, L. (2018). Comparative Health Systems: A Global Perspective, 2nd edition. Burlington MA: Jones & Bartlett.
- Mills, A./Martinez-Álvarez, M./Ranson, M.K. (2020). The design of health systems. In: Merson, M./Black, R./Mills, A. (eds.): Global health: Diseases, programs, systems, and policies. 4th edition, Jones & Bartlett, Burlington, MA.
- Rice, T. (2021). Health insurance systems. Academic Press, Cambridge, MA.
- World Health Organization (n.d.). Health in transition (HITs). Health system reviews. (URL: http://www.searo.who.int/entity/asia\_pacific\_observatory/publications/hits/hit\_home/en/&

https://eurohealthobservatory.who.int/).

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload							
Self Study Presence Tutorial Self Test Practical Experience Hours Total							
90 h	0 h	30 h	30 h	0 h	150 h		

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	

## Health Policy and Planning

Course Code: DLMIHMHPP01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	None

## **Course Description**

This course provides a sound introduction to health policy design and planning processes. The individual stakeholders, their respective incentive systems and communication channels are discussed against the background of national, international and global agendas in health policy. The institutional and legal framework plays just as much a role as, for example, the formation and influence of different interest groups. The course also deals with the comparative analysis of national health policies. The course emphasizes the relevance and role of leadership in health policy and planning.

#### **Course Outcomes**

On successful completion, students will be able to

- reflect on the complexity of health policy processes at national and international level.
- identify and strategically respond to the roles of stakeholders and stakeholder groups in policy processes.
- understand how and by whom policy agendas are set and how these processes can in turn be influenced.
- assess and analyse the formation and the influence of different interest groups in terms of political economy.
- compare health policies internationally and to consider lessons learned.

- 1. Policy-Making and Health Policy-Making
  - 1.1 Making Policy in a Complex World
  - 1.2 Policy Public Policy Health Policy
  - 1.3 Stakeholders in Health Policy
  - 1.4 The Private Sector
  - 1.5 The Policy Process

- 2. Agenda Setting
  - 2.1 The "Right to Health"
  - 2.2 Legitimacy, Feasibility and Support
  - 2.3 Governments as Agenda-Setters
  - 2.4 Legislature, Executive and Judicative
  - 2.5 Mass Media as Agenda Setters
- 3. Evidence-Based Policy Making
  - 3.1 Sources of Evidence
  - 3.2 Paradigms in Policy Research
  - 3.3 Limitations
- 4. The Role of Interest Groups
  - 4.1 Types of Interest Groups
  - 4.2 Civil-Society Groups
  - 4.3 Private Sector Interest Groups
  - 4.4 Public-Private Health Partnerships
- 5. Comparative Health Policy
  - 5.1 Globalizing the Policy Process
  - 5.2 Health Policies within the Health System Context
  - 5.3 Public Health Policies Internationally
  - 5.4 Cross National Learning
- 6. Leadership in Health Policy
  - 6.1 Characterizing Public Leadership
  - 6.2 Levels of Leadership

## **Compulsory Reading**

- Blank, R./Burau, V./Kuhlmann, E. (2018): Comparative health policy. 5th edition, London, Red Globe Press.
- Buse, K./Mays, N./Walt, G. (2012): Making health policy. 2nd edition, Maidenhead, Open University Press.
- Forman, L. (2017): What do human rights bring to discussions of power and politics in health policy and systems?. Global Public Health, 14(4), 489-502, doi: 10.1080/17441692.2017.1405457.
- Gilson, L. (2016): Everyday politics and the leadership of health policy implementation. Health Systems & Reform, 2(3), 187-193, doi: 10.1080/23288604.2016.1217367.
- Gore, R./Parker, R. (2019): Analysing power and politics in health policies and systems. Global Public Health, 14(4), 481-488, doi: 10.1080/17441692.2019.1575446.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# **Economics of Health**

## Module Code: DLMBAEEOH

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Michael Thiede (Health Economics) / Prof. Dr. Michael Thiede (Healthcare Financing)

## **Contributing Courses to Module**

- Health Economics (DLMIHMHE01)
- Healthcare Financing (DLMIHMHF01)

Module Exam Type		
Module Exam	Split Exam	
	<ul><li>Health Economics</li><li>Study Format "Distance Learning": Exam, 90 Minutes</li></ul>	
	<ul><li>Healthcare Financing</li><li>Study Format "Distance Learning": Oral Assignment</li></ul>	
Weight of Module see curriculum		

### **Module Contents**

### **Health Economics**

- Economic Peculiarities of the Healthcare Market
- Equality and Fairness
- Delivering Healthcare
- Economic Evaluation and Priority Setting

## **Healthcare Financing**

- Health Expenditure as a Key Input for Health Financing
- Revenue Collection
- Risk Pooling Mechanisms
- Provider Payment Mechanisms
- Trends in Healthcare Financing

## **Learning Outcomes**

### **Health Economics**

On successful completion, students will be able to

- analyze demand and supply on health markets from an economic perspective and to derive consequences.
- substantiate the necessity to focus on distributive goals with the help of theories of distributive justice.
- explore economic scope for action from the perspective of service providers in the health sector.
- reflect on the principles of health economic evaluation and to use and appraise them against the background of allocation decisions.

## **Healthcare Financing**

On successful completion, students will be able to

- interpret health care financing in the light of health expenditure trends.
- explain the health financing functions and illustrate them with real world examples.
- analyze the quality incentives associated with provider payment mechanisms.
- showcase the strengths and weaknesses of pay for performance models.
- dissect DRG based payments for hospital services and evaluate alternative approaches.

# Links to other Modules within the Study Program

This module is similar to other modules in the field of Healthcare Management

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the field of Health Affairs

## Health Economics

Course Code: DLMIHMHE01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	None

### **Course Description**

This course addresses the economic peculiarities of the healthcare market, with a particular focus on the requirements for decision-makers in the healthcare sector. Students are sensitized to economic thinking and are confronted in particular with the tension between efficiency and equity in healthcare. While the module content draws on economic theory, the policy implications are evident in each section of the module.

### **Course Outcomes**

On successful completion, students will be able to

- analyze demand and supply on health markets from an economic perspective and to derive consequences.
- substantiate the necessity to focus on distributive goals with the help of theories of distributive justice.
- explore economic scope for action from the perspective of service providers in the health sector.
- reflect on the principles of health economic evaluation and to use and appraise them against the background of allocation decisions.

- 1. The Peculiar Market for Healthcare
  - 1.1 Demand and Need
  - 1.2 Supply: Resources, Production and Costs
  - 1.3 Asymmetric Information and the Agency Relationship
  - 1.4 Externalities
  - 1.5 Market Failure and its Consequences
- 2. Government Intervention in Healthcare Markets
  - 2.1 Economic Rationale for Government Intervention
  - 2.2 Forms of Government Intervention
  - 2.3 Government Involvement in Healthcare
  - 2.4 Government Failure
  - 2.5 Competitive Strategies

- **Equality and Fairness** 
  - 3.1 Distributive Preferences
  - 3.2 Concepts of Health Equity
  - 3.3 Theories of Distributive Justice
  - 3.4 Exogenous Determinants of Health
  - 3.5 Policy Lessons
- Delivering Healthcare
  - The Physician as a Supplier of Medical Services
  - 4.2 Supplier-Induced Demand
  - 4.3 Economics of Hospital Care
- Economic Evaluation and Priority Setting
  - 5.1 Benefits and the Measurement of Health Benefits
  - 5.2 Costing Healthcare
  - 5.3 Types of Economic Evaluation
  - 5.4 QALYs and the Cost-Effectiveness Threshold
  - 5.5 Policy Implications
- Health Econometrics
  - 6.1 Introduction to Applied Health Econometrics
  - 6.2 Methods for Causal Analysis

## **Compulsory Reading**

- Drummond, M. et al. (2015): Methods for the economic evaluation of health care programmes. 4th edition, Oxford, Oxford University Press.
- McPake, B. et al. (2020): Health economics an international perspective. 4th edition, Abingdon, Routledge.
- Olsen, J. (2017): Principles in health economics and policy. 2nd edition. Oxford, Oxford University Press.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	

## Healthcare Financing

Course Code: DLMIHMHF01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	None

## **Course Description**

This course breaks down challenges in health financing from a systems perspective. The course investigates how health financing supports the achievement of national and international health goals. Health expenditure analysis is linked to different approaches of health financing. The course agenda follows different stakeholders' perspectives. It also showcases trends in health financing and analyzes dominant provider payment mechanisms.

### **Course Outcomes**

On successful completion, students will be able to

- interpret health care financing in the light of health expenditure trends.
- explain the health financing functions and illustrate them with real world examples.
- analyze the quality incentives associated with provider payment mechanisms.
- showcase the strengths and weaknesses of pay for performance models.
- dissect DRG based payments for hospital services and evaluate alternative approaches.

- 1. Health Expenditure Analysis
  - 1.1 Global Trends in Health Spending
  - 1.2 Burden of Disease and Domestic Health Spending
  - 1.3 Government Health Spending
- 2. Financing Healthcare
  - 2.1 Revenue Raising
  - 2.2 Risk Pooling
  - 2.3 Resource Allocation
  - 2.4 Service Provision
- 3. Provider Payment Systems and Associated Quality Incentives
  - 3.1 Fee-for-Service
  - 3.2 Capitation
  - 3.3 Global Budget
  - 3.4 Diagnosis-Related Groups (DRGs)
  - 3.5 Deductibles, Coinsurance and Co-Payments

- 4. Health Financing Globally
  - 4.1 Health Spending Scenarios
  - 4.2 Global Financing Mechanisms
  - 4.3 Alignment
- 5. Pay-for-Performance
  - 5.1 Pay-for-Performance and Quality of Care
  - 5.2 Pay-for-Performance at the Primary Care Level
  - 5.3 Pay-for-Performance at the Hospital Level
- 6. The Evolution of DRGs
  - 6.1 Principles of DRG Payment
  - 6.2 DRG-Based Payment for Hospital Services: Country Case Studies

## **Compulsory Reading**

- Cashin, C. et al. (eds.)(2014). Paying for performance in healthcare. European Observatory on Health Systems and Policies/World Health Organization. Maidenhead, Open University Press.
- Cleverley, W./Cleverley, J. (2018). Essentials of health care finance. 8th edition. Burlington, MA, Jones & Bartlett.
- Feldhaus, I./Mathauer, I. (2018). Effects of mixed provider payment systems and aligned cost sharing practices on expenditure growth management, efficiency, and equity: a structured review of the literature. BMC Health Services Research, 18: 996. doi: 10.1186/s12913-018-3779-1
- Global Burden of Disease Health Financing Collaborator Network (2019). Past, present, and future of global health financing: a review of development assistance, government, out-of-pocket, and other private spending on health for 195 countries, 1995-2050. Lancet, 393, pp. 2233-2260.
- Kutzin, J. et al. (2017) Developing a national health financing strategy: a reference guide. Geneva, World Health Organization.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination		
Examination Admission Requirements  BOLK: yes Course Evaluation: no		
Type of Exam	Oral Assignment	

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# Human Resource Management: Theory

Module Code: MWPM-01\_E

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

### **Module Coordinator**

Prof. Dr. Michaela Moser (Human Resource Management I) / Prof. Dr. Michaela Moser (Human Resource Management II)

## Contributing Courses to Module

- Human Resource Management I (MWPM01-01\_E)
- Human Resource Management II (MWPM02-01\_E)

Module Exam Type		
Module Exam	Split Exam	
	Human Resource Management I	
	Study Format "Distance Learning": Exam, 90 Minutes	
	Human Resource Management II	
	Study Format "Distance Learning": Exam, 90 Minutes	
Weight of Module		
see curriculum		

## **Module Contents**

## **Human Resource Management I**

- HR Strategy
- Strategic and Operational Human Resource Management
- Personnel Planning
- Personnel Adjustment
- Assessment, Remuneration and Development of Personnel

### **Human Resource Management II**

- Organizational Behavior
- Basics of Individual Behavior
- Group Behavior
- Behavioral Influence at the Organizational Level through Organizational Structure and Culture
- Role of Human Resource Management in Change Processes
- Content and Process Theories of Motivation

## **Learning Outcomes**

## **Human Resource Management I**

On successful completion, students will be able to

- assess the challenges of strategic human resources management.
- explain basic issues and sub-issues of workforce planning.
- explain workforce adjustment with the subcases of recruitment, selection, and release.
- explain the importance of employer branding and HR marketing.
- comprehend occasions and procedures of personnel appraisal, compensation issues as well as the subject and process of personnel development.

## **Human Resource Management II**

On successful completion, students will be able to

- analyze the behavior of all stakeholders in organizations and underlying theories.
- explain the basics of individual behavior.
- explain behavior at the group level.
- understand the impact of organizational structure and culture on employee behavior and the role of human resource management in change processes.
- explain content and process theories of motivation.

# Links to other Modules within the Study Program

This module is similar to other modules in the field of Human Resources

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programms in the Human Resources field

## Human Resource Management I

Course Code: MWPM01-01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

Human resources have become an essential strategic success factor for all companies. The Human Resource Management major allows to deepen the business knowledge in this area, which is crucial for a company's competitiveness. This course teaches the challenges of modern Human Resource Management in the areas of human resource strategy, human resource planning, human resource adjustment, human resource evaluation, remuneration as well as human resource development.

#### **Course Outcomes**

On successful completion, students will be able to

- assess the challenges of strategic human resources management.
- explain basic issues and sub-issues of workforce planning.
- explain workforce adjustment with the subcases of recruitment, selection, and release.
- explain the importance of employer branding and HR marketing.
- comprehend occasions and procedures of personnel appraisal, compensation issues as well as the subject and process of personnel development.

- 1. Personnel Management and Human Resource Management
  - 1.1 Delimitation of the Terms Used
  - 1.2 Influencing Factors and Perspectives of HRM
  - 1.3 Lines of Development of HRM
- 2. Strategic Human Resources Management
  - 2.1 Strategic Aspects of HRM
  - 2.2 Theory Models of Strategic HRM
  - 2.3 Strategic HRM in Corporate Practice
- 3. Personnel Planning
  - 3.1 Basic Questions of Personnel Planning
  - 3.2 Personnel Requirements Planning
  - 3.3 Staff Scheduling
  - 3.4 Personnel Cost Planning

- 4. Personnel Adjustment
  - 4.1 Recruitment
  - 4.2 Personnel Selection
  - 4.3 Staff Release
- 5. Assessment, Remuneration and Development of Personnel
  - 5.1 Personnel Appraisal
  - 5.2 Incentive and Remuneration
  - 5.3 Human Resources Development

## **Compulsory Reading**

- Collings, D. G./Scullion, H. (2011): Global talent management. Routledge, New York.
- Dessler, G. (2015): Human Resource Management. Pearson Prentice Hall, New Jersey.
- Dowling, P. J./Engle, A. D./Festing, M. (2017): International Human Resource Management. Andover Cengage Learning, Hampshire.
- Mayrhofer, W./Farndale, E./Brewster, C. (2018): Handbook of Research on Comparative Human Resource Management. 2nd edition, Edward Elgar Publishing, Cheltenham.
- Wilkinson, A. (2009): The SAGE Handbook of Human Resource Management. SAGE Publications Ltd, Thousand Oaks, California.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	<ul><li>□ Review Book</li><li>□ Creative Lab</li><li>□ Guideline</li><li>☑ Live Tutorium/Course Feed</li></ul>

## Human Resource Management II

Course Code: MWPM02-01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

In this course, relevant topics of Organizational Behavior are studied in depth. In the Anglo-Saxon world, Organizational Behavior is a natural part of the basic curriculum of social and economic science courses. Accordingly, the basic model and lines of development of Organizational Behavior are first dealt with in an overview. Furthermore, behavior is examined at the level of the individual, the group and the organization. The role of Human Resource Management in organizational change is also addressed. Finally, motivational foundations are considered in the form of content and process theories of motivation.

#### **Course Outcomes**

On successful completion, students will be able to

- analyze the behavior of all stakeholders in organizations and underlying theories.
- explain the basics of individual behavior.
- explain behavior at the group level.
- understand the impact of organizational structure and culture on employee behavior and the role of human resource management in change processes.
- explain content and process theories of motivation.

- 1. Organizational Behavior
  - 1.1 Basic Model of Organizational Behavior
  - 1.2 Development Lines of the Organizational Behavior
  - 1.3 Basic Assumptions of Organizational Behavior
- 2. Fundamentals of Individual Behavior
  - 2.1 Biographical Characteristics and Personality
  - 2.2 Emotions
  - 2.3 Values and Attitudes
- 3. Group and Team
  - 3.1 Groups and Teams
  - 3.2 Group Processes
  - 3.3 Explanatory Approaches for Behavior in Groups

- 4. The Organization
  - 4.1 Design Variables of the Organization
  - 4.2 Organizational Culture and Climate
  - 4.3 The Role of Human Resource Management in Organizational Change
- 5. Motives, Motivation and Motivation Theories
  - 5.1 Motives and Motivation
  - 5.2 Content Theories
  - 5.3 Process Theories

## **Compulsory Reading**

- Buchanan, D. A./Huczynski, A. A. (2016): Organizational Behaviour. 9th edition, Pearson, Harlow (UK).
- Dessler, G. (2015): Human Resource Management. Pearson Prentice Hall, New Jersey.
- King, D./Lawley, S. (2016): Organizational Behaviour. 2nd edition, Oxford University Press, Oxford.
- Mayrhofer, W./Farndale, E./Brewster, C. (2018): Handbook of Research on Comparative Human Resource Management. Edward Elgar Publishing, Cheltenham.
- Robbins, S. P./Judge, T. A./Campbell, T. T. (2017): Organizational Behaviour. 2nd edition, Pearson, Harlow (UK).

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Human Resource Management: Practice

Module Code: DLMBAEHRMP

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Michaela Moser (Talent Management & HR Development) / Dr. Anna Meindl (Project: Human Resources Management)

## **Contributing Courses to Module**

- Talent Management & HR Development (DLMTUP01\_E)
- Project: Human Resources Management (DLMFPM01\_E)

Module Exam Type				
Module Exam	Split Exam			
	Talent Management & HR Development			
	Study Format "Distance Learning": Written     Assessment: Case Study			
	Project: Human Resources Management			
	Study Format "Distance Learning": Written     Assessment: Project Report			
Weight of Module				
see curriculum				

## **Module Contents**

## Talent Management & HR Development

- Theoretical Models of Organizational Development
- Theoretical Models of Change Management
- Tools and Methods
- The Praxis of Talent Management and its Organizational Implementation
- The Process of Success Control
- Talent Management in International Companies a comparative Analysis

## **Project: Human Resources Management**

Project tasks on operational and strategic HR management in small, medium-sized and large companies on selected topics from the areas of HR planning, recruitment, staff deployment, HR marketing & employer branding, staff deployment, talent management and HR development, compensation & benefits, staff retention, staff release, HR controlling, ethics in HR management, international HR management and digitalization in HR management.

## **Learning Outcomes**

#### Talent Management & HR Development

On successful completion, students will be able to

- put talent management and HR development in the overall context of human resources management.
- define the ethical framework of talent management and HR development.
- explain the goals, methods and tools of talent management and HR development.
- identify the current challenges and changes of talent management and HR development both within the national as well as international context.
- understand the various ways of talent management and HR development.
- explain the tools that measure talent management and people development success, as well as the difficulties involved.
- describe specific examples as well as best practices of the application of talent management and HR development.

#### **Project: Human Resources Management**

On successful completion, students will be able to

- analyze and solve operational and strategic issues of human resource management in small, medium and large enterprises and develop recommendations for actionsand implementation.
- apply existing theoretical knowledge of human resource management within a project work on the topics of human resource planning, recruitment, staff deployment, human resource marketing & employer branding, staff deployment, talent management and human resource development, compensation & benefits, staff retention, staff release, human resource controlling, ethics in human resource management, international human resource management and digitalization in human resource management.
- assess the internal and external challenges facing the company with respect to the project and derive as well as implement recommendations for action.
- assess the discrepancy between theory and practical application of human resource management models, tools, methods and strategies.
- justify the elaboration of the human resource project in a conclusive manner in a project report on the basis of a concrete entrepreneurial initial situation.
- assess central instruments and methods of human resource management with regard to their suitability and applicability in a corporate context and, in a further step, transfer them to a company within the framework of a project.
- use their acquired methodological skills to design and implement a concrete
- project.

# Links to other Modules within the Study Program

This module is similar to other modules in the field of Human Resources

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Human Resources field

## Talent Management & HR Development

Course Code: DLMTUP01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

Demographic change has forced companies to find, nurture, develop and retain their talent. As a result, the HR manager must continuously revise and organize talent management and development as efficiently as possible. The course is designed to help students understand the importance of talent management and human resource management and to teach them the tools necessary to implement activities related to talent management and human resource development.

#### **Course Outcomes**

On successful completion, students will be able to

- put talent management and HR development in the overall context of human resources management.
- define the ethical framework of talent management and HR development.
- explain the goals, methods and tools of talent management and HR development.
- identify the current challenges and changes of talent management and HR development both within the national as well as international context.
- understand the various ways of talent management and HR development.
- explain the tools that measure talent management and people development success, as well as the difficulties involved.
- describe specific examples as well as best practices of the application of talent management and HR development.

## Contents

- 1. Fundamentals of Talent Management and Human Resources Development
  - 1.1 Concepts and Definitions
  - 1.2 Basic Legal Regulations
  - 1.3 The Challenge of Demographic Change
  - 1.4 Ethical Frameworks
- 2. Competence and Performance Management
  - 2.1 Competence and Skills Management
  - 2.2 Performance and Potential

- 3. E-learning and Blended Learning
  - 3.1 Special Characteristics and Framework Conditions
  - 3.2 Planning, Design and Control
  - 3.3 IT Basics
- 4. Management Development
  - 4.1 Leadership Development
  - 4.2 360° Feedbacks
  - 4.3 Coaching and Mentoring
- 5. Talent Relationship Management
  - 5.1 Target Group Definition
  - 5.2 Employer Branding and Employer Promise
  - 5.3 Search Strategies
  - 5.4 Candidate Experience and Engagement
- 6. Organizational Implementation
  - 6.1 Responsibilities and Structure
  - 6.2 The Role of Managers
  - 6.3 IT Systems for Talent Management and HR Development
  - 6.4 Talent Management and Human Resources Development in Large Companies and SMEs Using the Example of Financial Institutions/Banks
- 7. Monitoring the Success of Talent Management and HR Development
  - 7.1 Key Figures and KPIs
  - 7.2 The Problem of Success Control
- 8. International Talent Management and International Human Resources Development
  - 8.1 International HR Development
- 9. An Application Example: ABB
  - 9.1 Talent Management and Human Resources Development at ABB

## Literature

## **Compulsory Reading**

## **Further Reading**

- Berger, L. A./Berger, D. A. (2010): The Talent Management Handbook. 2nd edition, McGraw-Hill,
   New York
- Boxall, P./Purcell, J. (2008): Strategy and Human Resource Management, 2nd edition, Palgrave Macmillan, Hampshire.
- Collings, D. G./ Scullion, H. (2011): Global talent management. Routledge, New York.
- Dessler, G. (2013): Human Resource Management. 13th edition, Prentice Hall, Boston.
- Fuentes, D. G. (2020): Rethinking Approaches to Succession Planning and Developing a Leadership Pipeline in Academic Pharmacy. American Journal of Pharmaceutical Education, 84(12), 1564–1566. Marchington, M./Wilkinson, A. (2008): Human Resource Management at Work, 4th edition, CIPD, London.
- Redman, T./Wilkinson, A. (2009): Contemporary Human Resource Management, 3rd edition. Harlow FT Prentice Hall, New Jersey.
- Scullion, H./Collings, D. G. (Hrsg.) (2011): Global Talent Management. Routledge, New York.
- Younas, M./Bari, M. W. (2020): The relationship between talent management practices and retention of generation "Y" employees: mediating role of competency development. Economic Research-Ekonomska Istrazivanja, 33(1), 1330–1353.

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Case Study

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
110 h	0 h	20 h	20 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

## Project: Human Resources Management

Course Code: DLMFPM01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

On the basis of a selected project from company HR practice, students are enabled to deal with the current strategic and operational challenges of modern HR management. In doing so, the students' competencies are to be sharpened in terms of technical, methodological and also social aspects for initiating, designing and implementing reality and application-related projects in small, medium-sized and large companies in the field of strategic and operational HR management. With the help of a specific project, participants will be challenged to put themselves in the role of responsible human resources managers or speakers, to understand problems and to solve them using the concepts and methods of modern human resources and project management.

## **Course Outcomes**

On successful completion, students will be able to

- analyze and solve operational and strategic issues of human resource management in small, medium and large enterprises and develop recommendations for actionsand implementation.
- apply existing theoretical knowledge of human resource management within a project work on the topics of human resource planning, recruitment, staff deployment, human resource marketing & employer branding, staff deployment, talent management and human resource development, compensation & benefits, staff retention, staff release, human resource controlling, ethics in human resource management, international human resource management and digitalization in human resource management.
- assess the internal and external challenges facing the company with respect to the project and derive as well as implement recommendations for action.
- assess the discrepancy between theory and practical application of human resource management models, tools, methods and strategies.
- justify the elaboration of the human resource project in a conclusive manner in a project report on the basis of a concrete entrepreneurial initial situation.
- assess central instruments and methods of human resource management with regard to their suitability and applicability in a corporate context and, in a further step, transfer them to a company within the framework of a project.
- use their acquired methodological skills to design and implement a concrete
- project.

## Contents

Project report on operational and strategic human resource management in small, mediumsized and large companies on the topics of human resource planning, human resource recruitment, human resource deployment, human resource marketing & employer branding, talent management and human resource development, compensation & benefits, human resource retention, human resource release, human resource controlling, ethics in human resource management, international human resource management and digitalization in human resource management.

#### Literature

## **Compulsory Reading**

## **Further Reading**

- Dessler, G. (2015): Human resource management. Pearson Prentice Hal, New Jersey.
- Dowling, P. J./Engle, A. D./Festing, M. (2017): International human resource management. Andover Cengage Learning, Hampshire.
- Kerzner, H. (2013): Project Management Case Studies. 4th edition, John Wiley & Sons, New Jersey.
- Mayrhofer, W./Farndale, E./Brewster, C. (2018): Handbook of Research on Comparative Human Resource Management. Edward Elgar Publishing, Cheltenham (UK).
- Pratt, D. (2015): Great Lessons in Project Management. O´Reilly, Newton (Massachusetts).

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Project

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

Student Workload							
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total		
120 h	0 h	20 h	0 h	0 h	140 h		

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
☐ Exam Template	

# Supply Chain and Sourcing Management

Module Code: MWCH\_E

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Sebastian Stütz (Global Supply Chain Management) / Prof. Dr. Hubert Vogl (Supply Chain Risk Management and Controlling)

## **Contributing Courses to Module**

- Global Supply Chain Management (MWCH01\_E)
- Supply Chain Risk Management and Controlling (MWCH02\_E)

Module Exam Type	
Module Exam	Split Exam
	Global Supply Chain Management
	Study Format "Fernstudium": Exam,     90 Minutes
	<ul><li>Supply Chain Risk Management and Controlling</li><li>Study Format "Fernstudium": Exam,</li><li>90 Minutes</li></ul>
Weight of Module	
see curriculum	

## **Module Contents**

## **Global Supply Chain Management**

- Value networks motives, typologies, goals
- Directions of impact of SCM strategies

## Supply Chain Risk Management and Controlling

- SCM instruments
- Controlling systems in value networks
- Risk management in value networks

## **Learning Outcomes**

## **Global Supply Chain Management**

On successful completion, students will be able to

- specify the goals and tasks of supply chain management and how it differs from pure logistics management.
- specify the tools and instruments for designing SCM.
- list possible measures to avoid obstacles in the implementation and operation of supply chains
- assess the potential impact of coordinating collaborations on supply chain management.
- name the basic supply, disposal and recycling strategies and indicate their contents.
- indicate the motives for quality management in SCM and the methods and instruments used.
- assess which business software can support and control the functions of the supply chain.

## **Supply Chain Risk Management and Controlling**

On successful completion, students will be able to

- assess tasks of the controlling department and evaluate problems in implementation of controlling systems in supply chains.
- assess the significance of key figures in supply chain controlling and know how these are used.
- reflect on instruments of SC controlling and determine combinations of classical and innovative controlling instruments.
- determine when SCM software is used in controlling and what is required for their implementation.
- explain the tools of controlling and apply them in practice.
- name and explain options that influence the success of a supply chain, why risk management is carried out within supply chains and compatible strategies for supply chains.
- understand the organizational design with System Dynamics and the use in the supply chain management.

## Links to other Modules within the Study Program

This module is similar to other modules in the fields of Transportation & Logistics

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Transport & Logistics fields

## Global Supply Chain Management

Course Code: MWCH01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

A problem-centered understanding of global value networks requires knowledge of their motives and goals. Furthermore, in view of the apparent diversity, it seems particularly useful to systematize these networks in certain typologies. On the basis of such systematizations it is then possible to systematize the spectrum of strategically relevant questions and design options in the field of SCM in a differentiated form. In addition, this also makes it possible to present the instrumental categories of SCM that are particularly relevant in this context.

#### **Course Outcomes**

On successful completion, students will be able to

- specify the goals and tasks of supply chain management and how it differs from pure logistics management.
- specify the tools and instruments for designing SCM.
- list possible measures to avoid obstacles in the implementation and operation of supply chains.
- assess the potential impact of coordinating collaborations on supply chain management.
- name the basic supply, disposal and recycling strategies and indicate their contents.
- indicate the motives for quality management in SCM and the methods and instruments used.
- assess which business software can support and control the functions of the supply chain.

## **Contents**

- 1. Motives and Effects of Logistics Value Networks
  - 1.1 What does Supply Chain Management mean?
  - 1.2 What is logistics management?
  - 1.3 Service providers in the supply chain
  - 1.4 Importance of Supply Chain Management
- 2. Typologies of SCM and design models
  - 2.1 Supply chain strategy
  - 2.2 Instruments for supply chain strategies
  - 2.3 Inventory Reduction in Warehouse Management
  - 2.4 Freight cost reduction within the framework of the transport cost policy
  - 2.5 Efficient Replenishment

- 3. Problem-oriented concepts and corresponding management concepts
  - 3.1 Problems in the supply chain
  - 3.2 Interfaces in the Supply Chain
  - 3.3 The Bullwhip Effect
  - 3.4 Collaborative Planning, Forecasting and Replenishment (CPFR)
- 4. Tasks and goals of the SCM
  - 4.1 Tasks in Supply Chain Management
  - 4.2 Goals of Supply Chain Management
  - 4.3 Sustainable Supply Chain Management (SSCM
- 5. Cooperation and coordination
  - 5.1 The Corporate Strategy
  - 5.2 Sensible corporate strategies: Instruments and Methods
  - 5.3 Strategic alliances in the context of supply chain management
  - 5.4 Requirements for successful cooperation
  - 5.5 Bundling of activities and process adjustments in cooperations
- 6. Supply, disposal and recycling strategies
  - 6.1 Supply strategies
  - 6.2 Disposal strategies
  - 6.3 Recycling, reuse/recycling and the corresponding strategies
- 7. Quality assurance
  - 7.1 Quality management systems
  - 7.2 Quality Assurance in Supply Chain Management
  - 7.3 Methods in quality management
  - 7.4 Instruments in organizational design
- 8. Information retrieval
  - 8.1 Information Technology in Supply Chain Management
  - 8.2 Business Software
  - 8.3 The Balanced Scorecard as a control instrument

## Literature

## **Compulsory Reading**

## **Further Reading**

- Arndt, H. (2010): Supply Chain Management. Optimization of logistic processes. 5th edition, Gabler, Wiesbaden.
- Chopra, S./Meindl, P. (2007): Supply Chain Management. Strategy, Planning and Operation. 3rd edition, Pearson, New Jersey.
- Cohen, S./Roussel, J. (2006): Strategic Supply Chain Management. Springer, Berlin/ Heidelberg.
- Corsten, H./Gössinger, R. (2008): Introduction to Supply Chain Management. 2nd edition, Oldenbourg, Munich.
- Handfield, R. B./Nichols, E. L. (2008): Introduction to Supply Chain Management. Prentice Hall, Upper Saddle River, NJ.
- Petry, T. (2006): Network strategy. Core of an integrated management of corporate networks. Gabler, Wiesbaden.
- Pfohl, H. C. (2009): Logistics systems. Fundamentals of Business Administration. 8th Edition, Springer, Berlin.
- Schulte, C. (2009): Logistics. Ways to optimize the supply chain. 5th edition, Vahlen, Munich.
- Simchi-Levi, D./Kaminsky, P./Simchi-Levi, E. (2008): Designing and Managing the Supply Chain. Concepts, Strategies and Case Studies. 3rd edition, McGraw-Hill, Boston.
- Werner, H. (2010): Supply Chain Management. Basics, strategies, instruments. Springer, Berlin.

## **Study Format Fernstudium**

Study Format	Course Type
Fernstudium	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☑ Vodcast	☐ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

## Supply Chain Risk Management and Controlling

Course Code: MWCH02\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

Global value networks prove to be particularly dynamic and sometimes fragile constructions. This observation draws attention to two important aspects of SCM: On the one hand, the need to develop an effective and efficient controlling system for such supply chains. The controlling information generated via key figure systems can make important contributions to the stabilization and optimization of the value-added network. On the other hand, to the necessity of a systematic risk management, with the focus on early identification and future prospects.

#### **Course Outcomes**

On successful completion, students will be able to

- assess tasks of the controlling department and evaluate problems in implementation of controlling systems in supply chains.
- assess the significance of key figures in supply chain controlling and know how these are used.
- reflect on instruments of SC controlling and determine combinations of classical and innovative controlling instruments.
- determine when SCM software is used in controlling and what is required for their implementation.
- explain the tools of controlling and apply them in practice.
- name and explain options that influence the success of a supply chain, why risk
   management is carried out within supply chains and compatible strategies for supply chains.
- understand the organizational design with System Dynamics and the use in the supply chain management.

## Contents

- 1. Basics of controlling in and of supply chains
  - 1.1 Conceptual design of controlling in supply chain management systems
  - 1.2 The importance of controlling in the supply chain
  - 1.3 Cost Tracking
  - 1.4 Different types of supply chain controlling
- 2. Key figure systems in the supply chain 2.1 Meaning of key figures
  - 2.1 Types of key figures in the supply chain
  - 2.2 Visualization of key figures

- 3. Instruments in Supply Chain Controlling
  - 3.1 SCOR models as control instruments
  - 3.2 From traditional to innovative instruments
- 4. Controlling the Supply Chain in Connection with Information Technology
  - 4.1 ERP Systems
  - 4.2 CRM and SCM Systems
  - 4.3 Case study for the implementation of an SCM system
  - 4.4 Success Factors for the Use of SCM Software
- 5. Tools of Controlling in the Supply Chain
  - 5.1 Activity-Based Costing
  - 5.2 Benchmarking
- 6. Risk Management in the Supply Chain
  - 6.1 Risks in the Supply Chain
  - 6.2 Sources of risk in the supply chain
  - 6.3 Risks and Business Success
- 7. Risk policy strategies in the supply chain
  - 7.1 Risk Management within the Supply Chain
  - 7.2 Risk Analysis
  - 7.3 Risk Assessment
  - 7.4 Risk provisioning
- 8. Organizational design through systems thinking and simulation approaches
  - 8.1 Fundamentals of organizational design
  - 8.2 System Dynamics: System thinking and simulation
  - 8.3 Active Data Warehousing as a technological approach for supply chain controlling and risk management

## Literature

## **Compulsory Reading**

## **Further Reading**

- Chopra, S./Meindl, P. (2007): Supply Chain Management. Strategy, Planning and Operation. 3rd edition, Pearson, New Jersey.
- Cohen, S./Roussel, J. (2006): Strategic Supply Chain Management. Springer, Berlin/ Heidelberg.
- Corsten, H./Gössinger, R. (2008): Introduction to Supply Chain Management. 2nd edition, Oldenbourg, Munich.
- Handfield, R. B./Nichols, E. L. (2008): Introduction to Supply Chain Management. Prentice Hall, Upper Saddle River, NJ.
- Petry, T. (2006): Network strategy. Core of an integrated management of corporate networks. Gabler, Wiesbaden.
- Pfohl, H. C. (2009): Logistics systems. Fundamentals of Business Administration. 8th edition, Springer, Berlin.
- Schulte, C. (2009): Logistics. Ways to optimize the supply chain. 5th edition, Vahlen, Munich.
- Simchi-Levi, D./Kaminsky, P./Simchi-Levi, E. (2008): Designing and Managing the Supply Chain. Concepts, Strategies and Case Studies. 3rd edition, McGraw-Hill, Boston.

## **Study Format Fernstudium**

Study Format	Course Type
Fernstudium	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☑ Vodcast	☐ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Aspects of International Management

Module Code: DLMBAEAIM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Jürgen Matthias Seeler (Managing in a Global Economy) / Prof. Dr. Markus Prandini (Seminar: Current Issues in International Management)

## **Contributing Courses to Module**

- Managing in a Global Economy (DLMBGE01)
- Seminar: Current Issues in International Management (DLMINTSATIM01\_E)

Module Exam Type			
Module Exam	Split Exam		
	<ul> <li>Managing in a Global Economy</li> <li>Study Format "myStudies": Exam, 90 Minutes</li> <li>Study Format "Distance Learning": Exam, 90 Minutes</li> <li>Seminar: Current Issues in International Management</li> <li>Study Format "myStudies": Written Assessment: Research Essay</li> <li>Study Format "Distance Learning": Written Assessment: Research Essay</li> </ul>		
Weight of Module			
see curriculum			

## **Module Contents**

## Managing in a Global Economy

- 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

## Seminar: Current Issues in International Management

In the seminar "Current Issues in International Management", students deal with the opportunities and challenges facing internationally operating companies. The focus is on management and leadership skills that are important and necessary for successful work in an international environment.

## **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.

## Seminar: Current Issues in International Management

On successful completion, students will be able to

- purpose fully apply management and leadership skills for work in an international environment.
- classify significant developments and trends in the international environment and to derive objectives for the international strategic positioning of a company.
- develop internationalization strategies in an appropriate and effective way for companies of different sizes and in different sectors.
- describe internationalization processes in an effective and efficient way on the functional level of a company.
- justify suitable market selection and market entry strategies in foreign markets on the basis of existing capacities and resources of a company.
- to recognize intercultural characteristics and business practices in international business and to harmonize them with their own values and norms.

# 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 IU International University of Applied Sciences

All Master Programs in the Business & Management fields.

## Managing in a Global Economy

**Course Code: DLMBGE01** 

Study Level	Language of Instruction	Contact Hours	СР	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., & Rosenzwig, 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	Course Type
myStudies	Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Seminar: Current Issues in International Management

Course Code: DLMINTSATIM01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

The international orientation of economies and enterprises has steadily increased since the 1950s. This has also increased the demands on managers to operate successfully not only in their home market, but also in an ever more globalized economy. The expansion into international markets poses a number of challenges for companies which, in most cases, cannot be mastered with the business practices tried and tested in the home market. The seminar "Current Issues in International Management" promotes the development of students' competencies to understand the cultural, social, economic and political context of other countries in all its diversity and complexity as the basis for successful international business activities and to incorporate this knowledge into business management decisions.

## **Course Outcomes**

On successful completion, students will be able to

- purpose fully apply management and leadership skills for work in an international environment.
- classify significant developments and trends in the international environment and to derive objectives for the international strategic positioning of a company.
- develop internationalization strategies in an appropriate and effective way for companies of different sizes and in different sectors.
- describe internationalization processes in an effective and efficient way on the functional level of a company.
- justify suitable market selection and market entry strategies in foreign markets on the basis of existing capacities and resources of a company.
- to recognize intercultural characteristics and business practices in international business and to harmonize them with their own values and norms.

#### **Contents**

In the seminar "Current Issues in International Management", students deal with the opportunities and challenges facing internationally operating companies. The focus is on management and leadership skills that are important and necessary for successful work in an international environment. Thematically, the seminar focuses on developments and trends in the international business environment, strategies and processes of internationalization, market selection and market entry strategies in foreign markets, operative implementation of an internationalization strategy in individual functional areas as well as cultural and ethical conflict potential of international business activities.

## Literature

## **Compulsory Reading**

## **Further Reading**

- Cavusgil, S.T., Knight, G. & Riesenberger, J.R. (2019): International Business: The New Realities. 5th (Global) Edition. Pearson, Harlow England.
- Collinson, S., Rugman, A. M., & Narula, R. (2017): International business. Pearson, Harlow England.
- Deresky, H. (2017): International Management: Managing Across Borders and Cultures. 9th Edition, Pearson Education Limited, Harlow.
- Khanna, T. (2014): Contextual Intelligence. Harvard Business Review. https://hbr.org/2014/09/contextual-intelligence [letzter Zugriff: 10.12.2020].
- Thomas, D.C. & Inkson, K. (2017): Cultural Intelligence: Surviving and Thriving in the Global Village. 3rd Edition, Berrett-Koehler Publishers, Oakland.

## **Study Format myStudies**

Study Format	Course Type
myStudies	Seminar

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☐ Course Book ☐ Vodcast ☐ Shortcast ☐ Audio ☐ Exam Template	<ul><li>□ Review Book</li><li>□ Creative Lab</li><li>☑ Guideline</li><li>□ Live Tutorium/Course Feed</li></ul>

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Seminar

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☐ Shortcast ☐ Audio	☐ Live Tutorium/Course Feed
☐ Exam Template	

# Entrepreneurial Ecosystems

Module Code: DLMBAEEES

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

### **Module Coordinator**

Prof. Dr. Markus Prandini (Innovation and Entrepreneurship Ecosystems) / Prof. Dr. Markus Prandini (Entre- and Intrapreneurship)

### **Contributing Courses to Module**

- Innovation and Entrepreneurship Ecosystems (DLMIEEIEE01)
- Entre- and Intrapreneurship (DLMIEEEIS01)

Module Exam Type					
Module Exam Split Exam					
	Innovation and Entrepreneurship Ecosystems				
	• Study Format "Distance Learning": Exam, 90 Minutes (100)				
	Entre- and Intrapreneurship				
	• Study Format "Distance Learning": Exam, 90 Minutes (100)				
Weight of Module					
see curriculum					

### **Module Contents**

### **Innovation and Entrepreneurship Ecosystems**

- Fundamentals of Innovation and Entrepreneurship
- Significance of Innovation for Growth and Prosperity
- Significance of Entrepreneurship for Growth and Prosperity
- Fundamentals of Innovation and Entrepreneurship Ecosystems
- Sectoral Innovation and Entrepreneurship Ecosystems
- Geographical Innovation and Entrepreneurship Ecosystems

### **Entre- and Intrapreneurship**

- Fundamentals of Entrepreneurship
- Fundamentals of Intrapreneurship
- Entrepreneurs and Intrapreneurs
- Corporate Innovation Management
- Methods of Innovation Management
- Innovation Management in Practice

### **Learning Outcomes**

### **Innovation and Entrepreneurship Ecosystems**

On successful completion, students will be able to

- define and explain the main characteristics, functions and drivers of innovation and entrepreneurship.
- determine the significance and role of innovation and entrepreneurship for the growth and prosperity of a society and of businesses.
- explain the goals, characteristics and actors of innovation and entrepreneurship ecosystems as a driver to generate new ideas and bring these to commercial reality.
- illustrate the functions and potentials of innovation and entrepreneurship ecosystems in the industry and service sector as well as in the digital economy.
- analyze the historical background and the characteristics of main geographical innovation and entrepreneurship ecosystems.

### **Entre- and Intrapreneurship**

On successful completion, students will be able to

- define the motives, goals and relevance of entrepreneurship as a driver for economic wealth and social prosperity.
- determine the motives, goals and relevance of intrapreneurship as a driver for creating a competitive advantage for an organization.
- analyze the preconditions and determinants that shape an entre- and intrapreneurial mindset.
- explain the types, drivers and success factors of corporate innovation as well as the management practices to foster innovation.
- apply main management methods to create, discover and realize business opportunities.
- derive best-practice learnings from the innovation management of existing companies for own business ventures and innovation activities.

### 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 IU International University of Applied Sciences

All Master Programs in the Business & Management field

## Innovation and Entrepreneurship Ecosystems

**Course Code: DLMIEEIEE01** 

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

Innovation and entrepreneurship are main drivers for economic growth and prosperity. Both are closely interrelated to one another. It is the entrepreneurial mindset that builds the foundation for the continued creation of all forms and dimensions of innovation. Innovation and entrepreneurship ecosystems have proven to be a powerful catalyst for both innovation and entrepreneurship. An ecosystem is like a complex multi-actor network where the dynamic interaction of human capital, financial resources, physical and non-physical infrastructure and regulatory policies play a vital role to generate new ideas and bring these to commercial reality. This course provides the students with an in-depth view on the significance and role of innovation and entrepreneurship for the growth and prosperity of a society. The course highlights the general characteristics and functionalities of innovation and entrepreneurship ecosystems and illustrates the concept of ecosystems on a sectoral and geographical level. Upon completion of this course the students will be able to make use of ecosystems for their own entrepreneurial ventures or the innovation activities of the organizations where they are active.

### **Course Outcomes**

On successful completion, students will be able to

- define and explain the main characteristics, functions and drivers of innovation and entrepreneurship.
- determine the significance and role of innovation and entrepreneurship for the growth and prosperity of a society and of businesses.
- explain the goals, characteristics and actors of innovation and entrepreneurship ecosystems as a driver to generate new ideas and bring these to commercial reality.
- illustrate the functions and potentials of innovation and entrepreneurship ecosystems in the industry and service sector as well as in the digital economy.
- analyze the historical background and the characteristics of main geographical innovation and entrepreneurship ecosystems.

### **Contents**

- 1. Fundamentals of Innovation and Entrepreneurship
  - 1.1 Definition, Functions and Characteristics of Innovation
  - 1.2 Definition, Functions and Characteristics of Entrepreneurship
  - 1.3 Economic, Technological and Social Drivers of Innovation and Entrepreneurship

- 2. Significance of Innovation for Growth and Prosperity
  - 2.1 Macro Perspective: Significance and Role of Innovation for Society
  - 2.2 Micro Perspective: Significance and Role of Innovation for Businesses
  - 2.3 Assessment and Measurement of Innovation
- 3. Significance of Entrepreneurship for Growth and Prosperity
  - 3.1 Macro Perspective: Significance and Role of Entrepreneurship for Society
  - 3.2 Micro Perspective: Significance and Role of Entrepreneurship for Businesses
  - 3.3 Assessment and Measurement of Entrepreneurship
- 4. Fundamentals of Innovation and Entrepreneurship Ecosystems
  - 4.1 Goals and Objectives of Innovation and Entrepreneurship Ecosystems
  - 4.2 Characteristics of Innovation and Entrepreneurship Ecosystems
  - 4.3 Actors in Innovation and Entrepreneurship Ecosystems
- 5. Sectoral Innovation and Entrepreneurship Ecosystems
  - 5.1 Industry Innovation and Entrepreneurship Ecosystems
  - 5.2 Service Innovation and Entrepreneurship Ecosystems
  - 5.3 Digital Innovation and Entrepreneurship Ecosystems
- 6. Geographical Innovation and Entrepreneurship Ecosystems
  - 6.1 Silicon Valley (USA)
  - 6.2 Greater Bay Area (China)
  - 6.3 Tel Aviv (Israel)

### **Compulsory Reading**

- Drucker, P. (2006). Innovation and Entrepreneurship. Reprint edition, Harper Business, New York
- Engel, J. S. (2016). Global Clusters of Innovation: Entrepreneurial Engines of Economic Growth Around the World. Reprint edition, Edward Elgar Publishing, Cheltenham Glos.
- Mazzarol, T. & Reboud, S. (2020). Entrepreneurship and Innovation. Theory, Practice and Context. Springer, Singapore.
- Schwarzkopf, C. (2016). Fostering Innovation and Entrepreneurship: Entrepreneurial Ecosystem and Entrepreneurial Fundamentals in the USA and Germany. Springer Fachmedien, Wiesbaden.
- World Economic Forum (2019). Accelerating the Emergence and Development of Innovation Ecosystems through Procurement: A Toolkit. WEF, Geneva.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	

## Entre- and Intrapreneurship

Course Code: DLMIEEEIS01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

Entre- and intrapreneurship are the engine for economic wealth and social progress and a core element of the innovation capacity of a company. Whereas entrepreneurship refers to entrepreneurs who design and build up an own business, intrapreneurship is related to individuals who work on developing new ideas and products within the confines of the business that they already work at. Intrapreneurs include any person within the company that applies entrepreneurial skills, vision, and forward thinking into the role that they have in the company. Both entrepreneurs and intrapreneurs have a drive to foster innovation whenever possible, which is why they share many traits between them, such as persistence, determination, goal orientation, opportunity seeking and hard working. A main difference lies in the risk involved in being an entrepreneur or intrapreneur. Entrepreneurs are required to take on all of the risk that comes along with developing a business, which means that the losses can be significant if failure occurs. However, the rewards can also be practically incalculable. As for intrapreneurs, the risks are minimal, which is also true of the rewards. This course introduces the students to these commonalities and differences of entre- and intrapreneurship. The course is designed to support the students in finding and determining their own motives and goals of becoming an entre- or intrapreneur. The main characteristics of entre- and intrapreneurship are discussed and related to the methods and practices of innovation management. An insight into the innovation management of well-known companies fosters the transfer of the theoretical concepts of entreand intrapreneurship to a practical context.

### **Course Outcomes**

On successful completion, students will be able to

- define the motives, goals and relevance of entrepreneurship as a driver for economic wealth and social prosperity.
- determine the motives, goals and relevance of intrapreneurship as a driver for creating a competitive advantage for an organization.
- analyze the preconditions and determinants that shape an entre- and intrapreneurial mindset.
- explain the types, drivers and success factors of corporate innovation as well as the management practices to foster innovation.
- apply main management methods to create, discover and realize business opportunities.
- derive best-practice learnings from the innovation management of existing companies for own business ventures and innovation activities.

### Contents

- 1. Fundamentals of Entrepreneurship
  - 1.1 Definition of Entrepreneurship
  - 1.2 Motives, Goals and Relevance of Entrepreneurship
  - 1.3 Relation of Entrepreneurship and Innovation
- 2. Fundamentals of Intrapreneurship
  - 2.1 Definition of Intrapreneurship
  - 2.2 Motives, Goals and Relevance of Intrapreneurship
  - 2.3 Relation of Intrapreneurship and Innovation
- 3. Entrepreneurs and Intrapreneurs
  - 3.1 Characteristics of Entrepreneurs
  - 3.2 Characteristics of Intrapreneurs
  - 3.3 Types of Entrepreneurs and Intrapreneurs
- 4. Corporate Innovation Management
  - 4.1 Types of Corporate Innovations
  - 4.2 Drivers and Success Factors of Corporate Innovations
  - 4.3 Management of Corporate Innovation
- 5. Methods of Innovation Management
  - 5.1 Creation of Business Ideas
  - 5.2 Discovery of Business Opportunities
  - 5.3 Realization of Business Ventures
- 6. Innovation Management in Practice
  - 6.1 Innovation Management at Google
  - 6.2 Innovation Management at Siemens
  - 6.3 Innovation Management at Xiaomi

### **Compulsory Reading**

- Barringer, B.R. & Ireland, R.D. (2015). Entrepreneurship: Successfully Launching New Ventures. 5th Edition, Pearson, New York.
- Bessant, J. & Tidd, J. (2015). Innovation and Entrepreneurship. 3rd Edition, John Wiley & Sons, Chichester.
- Grant, A. (2016). Originals: How Non-Conformists Move the World. Viking, New York.
- Kaplan, J.M. & McGourty, J. (2020). Patterns of Entrepreneurship Management. 6th Edition, John Wiley & Sons, Chichester.
- Kuratko, D.F., Hornsby, J.S. & Goldsby, M.G. (2011). Innovation Acceleration: Transforming Organizational Thinking, Prentice Hall, Upper Saddle River.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	

# Innovation and Design Lab

Module Code: DLMBAEIDL

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

### **Module Coordinator**

Prof. Dr. Mario Boßlau (Business Model Design) / Prof. Dr. Leonardo Riccardi (Design Thinking)

### **Contributing Courses to Module**

- Business Model Design (DLMIEEBMD01)
- Design Thinking (DLMBPDDT02)

Module Exam Type		
Module Exam	Split Exam	
	Business Model Design	
	Study Format "Distance Learning": Written     Assessment: Written Assignment (100)	
	Design Thinking	
	Study Format "Distance Learning": Written     Assessment: Project Report	
Weight of Module		
see curriculum		

### **Module Contents**

### **Business Model Design**

- Business Models and Business Modelling
- Selected Methods aiding Business Model Design
- Essential Elements of Business Models
- Specifics of Digital Business Models
- The Business Model Canvas by Osterwalder and Pigneur

### **Design Thinking**

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.

### **Learning Outcomes**

### **Business Model Design**

On successful completion, students will be able to

- remember the definitions and processes dealing with business modelling.
- understand and apply methods that are used for business model design.
- understand the essential elements of business models.
- remember and evaluate the specifics of digital business models.
- understand the business model canvas by Osterwalder and Pigneur and to develop and describe their "own" business model canvas in the course of their written assignment.

### **Design Thinking**

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.

# Links to other Modules within the Study Program

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

### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Business & Management and Design, Architecture & Construction fields

# Business Model Design

Course Code: DLMIEEBMD01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

The digital economy, encompassing topics like internet of things, business networks, digital platforms, platform-as-a-service offerings, etc. has led to the rise of new business models. Business models that were established in the past are often no longer suitable, as the way in which products are created, how customers are addressed, the sales model and cost structure and much more have changed in the course of digital transformation. This module therefore focusses on the elements of business models, and the methods how business models can be designed. The specifics of digital business models are outlined in a dedicated section as is the introduction of the business model canvas by Osterwalder and Pigneur.

#### **Course Outcomes**

On successful completion, students will be able to

- remember the definitions and processes dealing with business modelling.
- understand and apply methods that are used for business model design.
- understand the essential elements of business models.
- remember and evaluate the specifics of digital business models.
- understand the business model canvas by Osterwalder and Pigneur and to develop and describe their "own" business model canvas in the course of their written assignment.

### Contents

- 1. Business Models and Business Modelling
  - 1.1 Definitions: Use Case, Business Case and Business Model
  - 1.2 Introduction to Business Models
  - 1.3 The Process of Business Model Development
- 2. Selected Methods Aiding Business Model Design
  - 2.1 Design Thinking
  - 2.2 Open Innovation
  - 2.3 Customer Journey and Customer Experience
  - 2.4 Prototyping
  - 2.5 Multidisciplinary Teams

- 3. Essential Elements of Business Models
  - 3.1 Customer Segments
  - 3.2 Value Propositions
  - 3.3 Value Architecture: Offer, Distribution and Communication Channels, Customer Relationship, Value Chain, Core Capabilities, Key Activities, Key Partnerships
  - 3.4 Revenue Model: Revenue Sources, Cost Structure
- 4. Specifics of Digital Business Models
  - 4.1 Success Drivers of Digital Business Models
  - 4.2 Key Components of Digital Business Models
  - 4.3 Selling Results (instead of Products)
  - 4.4 Overcoming Previous Industry Boundaries
  - 4.5 Acting as a Network in the Market
  - 4.6 Availability instead of Ownership
  - 4.7 Digitization of Products and Services
- 5. The Business Model Canvas by Osterwalder and Pigneur
  - 5.1 The Business Model Canvas
  - 5.2 Similarities in Business Models
  - 5.3 Designing Business Models
  - 5.4 Strategic Areas of Business Models
  - 5.5 The Business Model Design Process

### **Compulsory Reading**

- Aagaard, Annabeth (Hg.) (2018): Digital Business Models. Driving Transformation and Innovation. Springer International Publishing. 1st edition 2019. Cham: Springer International Publishing; Palgrave Macmillan, Basingstoke (UK).
- Osterwalder, Alexander; Pigneur, Yves (2013): Business Model Generation. A Handbook for Visionaries, Game Changers, and Challengers. 1st edition. John Wiley & Sons, New York, NY.
- Oswald, Gerhard; Kleinemeier, Michael (Hg.) (2018): Shaping the Digital Enterprise. Trends and Use Cases in Digital Innovation and Transformation. Springer International Publishing. Softcover reprint of the original 1st edition 2017. Cham: Springer International Publishing; Springer, Basel.
- Wirtz, Bernd W. (2019): Digital Business Models. Concepts, Models, and the Alphabet Case Study (Progress in IS). Springer International Publishing, Basel.
- Wirtz, Bernd W. (2020): Business Model Management. Design Process Instruments. 2nd edition 2020. Cham: Springer International Publishing (Springer Texts in Business and Economics), Basel.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
□ Exam Template	

# Design Thinking

Course Code: DLMBPDDT02

Study Level	Language of Instruction	Contact Hours	СР	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.

### **Compulsory Reading**

- IDEO.org. (2015). The Field Guide to Human-Centered Design. A step-by-step guide that will get you solving prob-lems 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 pro-duce change, drive new ideas, and deliver meaningful solutions.
- Lewrick, M., Link, P., Leifer, L. J., & Langensand, N. (2018). The design thinking playbook: mindful digital transfor-mation of teams, products, services, businesses and ecosystems. John Wiley & Sons.

Study Format	Course Type
Distance Learning	Project

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☐ Shortcast ☐ Audio	☐ Live Tutorium/Course Feed
☐ Exam Template	

# E-Sports-Management

### Module Code: DLMBAEESM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

### **Module Coordinator**

N.N. (Introduction to E-Sports Management) / N.N. (Project: E-Sports Management)

### Contributing Courses to Module

- Introduction to E-Sports Management (DLMBAEESM01)
- Project: E-Sports Management (DLMBAEESM02)

Module Exam Type	
Module Exam	Split Exam
	<ul> <li>Introduction to E-Sports Management</li> <li>Study Format "Distance Learning": Exam or Written Assessment: Written Assignment, 90 Minutes</li> </ul>
	<ul><li><u>Project: E-Sports Management</u></li><li>Study Format "Distance Learning": Written Assessment: Project Report</li></ul>
Weight of Module	
see curriculum	

### **Module Contents**

### **Introduction to E-Sports Management**

- Classification of E-Sports in Sports Management
- Organization of E-Sports in Germany and Globally
- Financing E-Sports
- Media Exploitation of E-Sports
- Role of Individual Stakeholders in E-Eports
- Relationship between Sport and E-Sport and the Possible Role of the DOSB

### **Project: E-Sports Management**

### **Learning Outcomes**

### **Introduction to E-Sports Management**

On successful completion, students will be able to

- understand the scope of duties of an e-sports manager.
- apply the most important tools and mechanisms of e-sports management.
- embed e-sports management in the overall context of sport.
- apply the methods of e-sports management in practice.
- distinguish the actors in e-sports management from one another.
- adapt the theoretical fundamentals into practice.

### **Project: E-Sports Management**

On successful completion, students will be able to

- use the theoretical basics of project management in the practice of project management.
- use the basic instruments and methods of e-sports management.
- structure and approach and implement a scientific project.
- grasp the facets of e-sports and to develop solution-oriented and strategic measures.

# 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 IU International University of Applied Sciences

All Master Programs in the Business & Management field

## Introduction to E-Sports Management

Course Code: DLMBAEESM01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

### **Course Description**

In this course the most important basics of e-sports management are shown. E-sports management is an area of sports management that is currently growing rapidly. Current developments in particular mean that e-sports management will become an important pillar in future fields of work. E-sports management is an essential part of sports management. In the past few years, e-sports has developed into a strong and growing market. The organizational form of e-sports differs greatly from classic sports and therefore a separate consideration of the possibilities of organizing e-sports is required. Professional e-sports are subject to high financial requirements that must be met. Similar to professional sport, e-sport is also about refinancing and marketing the product. In turn, a distinction can be made between the marketing of e-sports and marketing through e-sports. Various actors play an important role in this construct, and these roles and their influence are also considered.

### **Course Outcomes**

On successful completion, students will be able to

- understand the scope of duties of an e-sports manager.
- apply the most important tools and mechanisms of e-sports management.
- embed e-sports management in the overall context of sport.
- apply the methods of e-sports management in practice.
- distinguish the actors in e-sports management from one another.
- adapt the theoretical fundamentals into practice.

### Contents

- 1. Classification of E-Sports in Sports Management
  - 1.1 Development and Definition of E-Sports
  - 1.2 E-Sports in the Context of Classic Sports
  - 1.3 Evolution of E-Sports within Sports Management
- 2. Organization of E-Sports in Germany and Globally
  - 2.1 The Structures of E-Sports in Germany
  - 2.2 The Structures of E-Sports in Selected Countries
  - 2.3 Relevant Forms of Organization in Professional E-Sports

- 3. Financing E-Sports
  - 3.1 The Possibilities of Refinancing E-Sports in Practice
  - 3.2 Perspectives for E-Sports Funding or Sanctioning by the Public Sector
- 4. Media Exploitation of E-Sports
  - 4.1 Marketing Forms in Sport
  - 4.2 Marketing Opportunities for E-Sports
  - 4.3 E-Sports as an Advertising Medium
- 5. Role of Individual Stakeholders in E-Eports
  - 5.1 Players in the E-Sports Market
  - 5.2 Opportunities and Risks for the Individual Actors
  - 5.3 The Professional Field of the E-Sports Manager
- 6. Relationship between Sport and E-Sport and the Possible Role of the DOSB
  - 6.1 E-Sports Management in Popular Sports
  - 6.2 E-Sports Management in Professional Sports
  - 6.3 E-Sports in the View of the DOSB

### **Compulsory Reading**

- Collis, W. (2020). The Book of Esports: The Definitive Guide to Competitive Video. Rosetta Books, New York.
- Diegel, M. (2021). Markenerweiterungsstrategien professioneller Sportvereine im eSport. Springer Gabler, Wiesbaden.
- Hoffmann, A. (2020). Das Phänomen E-Sport. Meyer und Meyer Verlag., Aachen.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam or Written Assessment: Written Assignment, 90 Minutes

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
100 h	0 h	25 h	25 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	☐ Reader
☑ Exam Template	☐ Slides

# Project: E-Sports Management

Course Code: DLMBAEESM02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

### **Course Description**

E-Sports Management lives from being close to practice. Due to the constant developments and the diverse possibilities that arise on the e-sports market, a practical view is of particular relevance. The course includes various tasks from e-sports management. The topics are dealt with as part of the project, as they have an outstanding priority for e-sports management. The funding of e-sports is an important issue that can be looked at from different perspectives. The marketing of e-sports and the associated planning and organization of e-sports events are also of particular importance. Another focus is on the implementation of e-sports in classic sports in Germany.

#### **Course Outcomes**

On successful completion, students will be able to

- use the theoretical basics of project management in the practice of project management.
- use the basic instruments and methods of e-sports management.
- structure and approach and implement a scientific project.
- grasp the facets of e-sports and to develop solution-oriented and strategic measures.

### **Contents**

The course includes various tasks from e-sports management. The topics are dealt with as part of the project, as they have an outstanding priority for e-sports management. The funding of e-sports is an important issue that can be looked at from different perspectives. The marketing of e-sports and the associated planning and organization of e-sports events are also of particular importance. Another focus is on the implementation of e-sports in classic sports in Germany.

### Literature

### **Compulsory Reading**

- Collis, W. (2020). The Book of Esports: The Definitive Guide to Competitive Video. Rosetta Books, New York.
- Diegel, M. (2021). Markenerweiterungsstrategien professioneller Sportvereine im eSport. Springer Gabler, Wiesbaden.
- Hoffmann, A. (2020). Das Phänomen E-Sport. Meyer und Meyer Verlag, Aachen.

Study Format	Course Type
Distance Learning	Project

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☐ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	☐ Reader
☐ Exam Template	□ Slides

# E-Sports Marketing and Event Management

Module Code: DLMBAEESME

Modu	le Type	Admission Requirements	Study Level	СР	Student Workload
see cu	urriculum	none	MBA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

### **Module Coordinator**

N.N. (Media and Marketing Management in E-Sports) / N.N. (E-Sports Event Management)

### **Contributing Courses to Module**

- Media and Marketing Management in E-Sports (DLMBAEESME01)
- E-Sports Event Management (DLMBAEESME02)

Module Exam Type			
Module Exam	Split Exam		
	<ul> <li>Media and Marketing Management in E-Sports</li> <li>Study Format "Distance Learning": Exam or Written Assessment: Written Assignment, 90 Minutes</li> </ul>		
	<ul> <li>E-Sports Event Management</li> <li>Study Format "Distance Learning": Exam or Written Assessment: Written Assignment, 90 Minutes</li> </ul>		
Weight of Module see curriculum			

### **Module Contents**

### **Media and Marketing Management in E-Sports**

- Basics of Sports Marketing in the Context of E-Sports
- Media and their Management with Consideration of E-Sports
- Brand Management in Sports
- Importance of Digital Media and their Development
- Mobile and Social Media Management

### **E-Sports Event Management**

- Event Marketing Basics
- Relationship Management
- Planning Process for Strategic Event Marketing
- Companies as Sports Sponsors
- The Sponsor as a Provider of Communication Services

### **Learning Outcomes**

### **Media and Marketing Management in E-Sports**

On successful completion, students will be able to

- deal independently and reflectively with the field of sports marketing in relation to e-sports.
- highlight the important aspects of the media market with respect to sports as well as the esports market.
- monitor and evaluate the development of digital media and draw conclusions for the sports and e-sports market.
- outline the importance of brand management in line with any public relations activities.
- outline the concepts of mobile, social and influencer management and highlight the implications for e-sports.

### **E-Sports Event Management**

On successful completion, students will be able to

- independently express the importance of event marketing with regard to sporting events.
- present relationship management as an essential interface between the practice of sport and the generation of public interest.
- not only reproduce the planning process for strategic event marketing, but also classify it using practical examples.
- highlight the importance of companies as sports sponsors, thereby outlining another important pillar of the revenue structure alongside the media market.
- classify the organizers and athletes of e-sports events as providers of communication services.

# Links to other Modules within the Study Program

This module is similar to other modules in the fields of Marketing & Sales and Event Management

### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Marketing & Communication and Hospitality, Tourism & Event fields

# Media and Marketing Management in E-Sports

Course Code: DLMBAEESME01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

### **Course Description**

Firstly, the course provides the students with an introduction to the essential characteristics of the sports market and sports management. This is intended to sensitize students to the special features of the sports industry, from which the further focal points of the course result. Following on from this, students are given an introduction to media management, from which the general importance of obtaining information via the media, as well as the diversity and constant development of media, are presented. Furthermore, the different and diverse rights within the sports market are presented, which are not only intended to enable the live experience of sports, but also provide a large source of income for the sports at the same time. However, this is also based on a sustainable and long-term brand environment that needs to be created. The e-sports sector in particular is faced with the challenge of creating a brand, resulting from the different game variants, but also compositions of competitions and/or leagues. The aspects of brand and branded community are also considered here. A major driver of the general sports market, but also in particular of the e-sports market, is the development of digital media and the importance of these media. In the context of e-sports, however, this must be considered in harmony with digital media, but also their development, from which the topic of digital touchpoints is elaborated. This in turn leads into the aspects of mobile, social and influencer management.

#### **Course Outcomes**

On successful completion, students will be able to

- deal independently and reflectively with the field of sports marketing in relation to e-sports.
- highlight the important aspects of the media market with respect to sports as well as the esports market.
- monitor and evaluate the development of digital media and draw conclusions for the sports and e-sports market.
- outline the importance of brand management in line with any public relations activities.
- outline the concepts of mobile, social and influencer management and highlight the implications for e-sports.

### **Contents**

- 1. Basics of Sports Marketing in the Context of E-Sports
  - 1.1 Introduction to Sports Marketing
  - 1.2 Special Features in the Sports Sector
  - 1.3 Model of Sports Marketing

- 2. Media and their Management with Consideration of E-Sports
  - 2.1 Media Management in the Context of the Marketing Mix
  - 2.2 Classification of Rights and their Marketing
  - 2.3 The Media Market
- 3. Brand Management in Sports
  - 3.1 General Brand Management
  - 3.2 The Identity-based Brand Management Approach
  - 3.3 Brand Management with Regard to E-Sports
- 4. Importance of Digital Media and their Development
  - 4.1 Digital Media and their Development
  - 4.2 Digital Touchpoints and Cross Media
  - 4.3 Brand and Branded Communities
- 5. Mobile and Social Media Management
  - 5.1 Mobile Media Management
  - 5.2 Social Media Management
  - 5.3 Influencer Management

### **Compulsory Reading**

- Aaker, D., & Joachimsthaler, E. (2000). Brand Leadership. New York.
- Brown, J., Broderick, A., & Lee, N.. (2007). Word of Mouth. Communication within online communities: conceptualizing the online social networt. In: JOURNAL OF INTERACTIVE MARKETING VOLUME 21. Wiley Periodicals, Inc. and Direct Marketing Educational Foundation, Inc. In
- Carl, W. (2008). The role of disclosure in organized word of mouth marketing programs. In Journal of Marketing Communications; No: 14, 2008 (pp. 225 241).
- DeChernatony, L., & McDonald, M. (2003). Creating Powerful Brands in Consumer, Service and Industrial Markets. In G. Nufer & A. Bühler (Eds.), Marketing in sport (pp. 120). Berlin: Erich Schmidt Verlag.
- Fullerton, S., & Merz, G. R.. (2008). The four domains of sports marketing: A conceptual framework. Sport Marketing Quarterly, 17 (2), 90-108.
- Hedlund, D./ Fried, G. / Smith, R. (2020): Esports Business Management. Human Kinetics. Champaign.
- Scholz, T. M. (2019): eSports is Business. Management in the World of competitive Gaming.
   Palgrave Pivot. Siegen.
- Sterne, J., & Scott, D. (2010). Social Media Metrics. How to Measure and Optimize Your Marketing Investment. New York.
- Wellmann, B. (1997). An Electronic Group is Virtually a Social Network. In S. Kiesler (Ed.), Culture of the Internet (pp. 179-205). Mahwah .
- Williams, R., & Cothrel, L. (2000). Four smart ways to run online communities. In: Sloan Management Review, Vol. 41. no. 4/2000, pp. 81-92.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination		
Examination Admission Requirements	BOLK: yes Course Evaluation: no	
Type of Exam	Exam or Written Assessment: Written Assignment, 90 Minutes	

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
100 h	0 h	25 h	25 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# E-Sports Event Management

Course Code: DLMBAEESME02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

## **Course Description**

The course qualifies the students to create a transfer between event marketing, sponsoring and brand management, from which essential aspects should be classified and reflected with regard to e-sports. First, the basics in the field of event marketing are conveyed, from which the essential reasons for the use of events in marketing can be concluded. These in turn relate particularly to relationship management in the context of e-sports. This leads over into the general area of event marketing such as the planning process, which extends from situation analysis to target group planning and implementation. It should be noted, however, that sport events also have a strong dependence on sponsors, so that the respective events, tournaments and also leagues can operate at all economically profitable and at the same time offer an attractiveness for a large target group. For this reason, not only companies as sponsors are examined, but also the sponsored parties as providers of various communication services.

## **Course Outcomes**

On successful completion, students will be able to

- independently express the importance of event marketing with regard to sporting events.
- present relationship management as an essential interface between the practice of sport and the generation of public interest.
- not only reproduce the planning process for strategic event marketing, but also classify it using practical examples.
- highlight the importance of companies as sports sponsors, thereby outlining another important pillar of the revenue structure alongside the media market.
- classify the organizers and athletes of e-sports events as providers of communication services.

### **Contents**

- 1. Event Marketing Basics
  - 1.1 Development of Event Marketing
  - 1.2 Event and Event Marketing
  - 1.3 Essential Aspects for the Use of Event Marketing
- 2. Relationship Management
  - 2.1 Consumer Relations
  - 2.2 Societal Relations

- 3. Planning Process for Strategic Event Marketing
  - 3.1 Situation Analysis and Definition of Event Marketing Objectives
  - 3.2 Target Group Planning and Definition of the Event Marketing Strategy
  - 3.3 Integration, Budgeting and Action Planning
- 4. Companies as Sports Sponsors
  - 4.1 Classification of Sports Sponsorship
  - 4.2 The Sports Sponsorship Market
  - 4.3 Sports Sponsorship as Part of Corporate Communications
- 5. The Sponsored Party as a Provider of Communication Services
  - 5.1 Positioning in the Sports Sponsorship Market
  - 5.2 Application of the Marketing Mix
  - 5.3 Realization and Use of Potentials

## Literature

## **Compulsory Reading**

- Bornemark, W. (2013): Success Factors for E-Sport Games. Proceedings of Ume°a's 16th Student Conference in Computing Science. UMEA UNIVERSITY Department of Computing Science. Pp. 1-13.
- Cornwell, T.B./ Amis, J. (2005): Global Sport Sponsorship. Berg Publishers. University of Michigan.
- Cornwell, B. T. (2014): Sponsorship in Marketing. Routledge. London and New York.
- Hutchins, B. (2008): Signs of meta-change in second modernity: the growth of e-sport and the World Cyber Games. In: New Media & Society, Vol. 10 Issue 6, pp.851-869.
- Lunt, T./ Nicotra, E. (2019): Event Sponsorship and Fundraising. Kogan Page. London.
- Shone, A./ Parry, B. (2010): Successful Event Management. Cengage Learning Emea. Hampshire, UK.
- Tum, J./Norton, P./Wright, J. N. (2005): Management of Event Operations. Routledge. London and New York.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination		
Examination Admission Requirements	BOLK: yes Course Evaluation: no	
Type of Exam	Exam or Written Assessment: Written Assignment, 90 Minutes	

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
100 h	0 h	25 h	25 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Artificial Intelligence

Module Code: DLMIMWKI

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimaldauer: 1 Semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Ulrich Kerzel (Artificial Intelligence) / Prof. Dr. Tim Schlippe (Seminar: AI and Society)

## **Contributing Courses to Module**

- Artificial Intelligence (DLMAIAI01)
- Seminar: Al and Society (DLMAISAIS01)

Module Exam Type	
Module Exam	Split Exam
	<ul> <li>Artificial Intelligence</li> <li>Study Format "Distance Learning": Exam,</li> <li>90 Minutes</li> <li>Study Format "myStudies": Exam, 90 Minutes</li> </ul>
	<ul> <li>Seminar: Al and Society</li> <li>Study Format "Distance Learning": Written Assessment: Research Essay</li> </ul>
Weight of Module see curriculum	

## **Module Contents**

## **Artificial Intelligence**

- History of Al
- Al application areas
- Expert systems
- Neuroscience
- Modern Al systems

## **Seminar: AI and Society**

In this module, students will reflect on current societal and political implications of artificial intelligence. To this end, pertinent topics will be introduced via articles that are then critically evaluated by the students in the form of a written essay.

## **Learning Outcomes**

## **Artificial Intelligence**

On successful completion, students will be able to

- remember the historical developments in the field of artificial intelligence.
- analyze the different application areas of artificial intelligence.
- comprehend expert systems.
- apply Prolog to simple expert systems.
- comprehend the brain and cognitive processes from a neuro-scientific point of view.
- understand modern developments in artificial intelligence.

## **Seminar: AI and Society**

On successful completion, students will be able to

- name selected current societal topics and issues in artificial intelligence.
- explain the influence and impact of artificial intelligence on societal, economic, and polital topics.
- transfer theoretically-acquired knowledge to real-world cases.
- treat in a scientific manner a select topic in the form of a written essay.
- critically question and discuss current societal and political issues arising from the recent advances in artificial intelligence methodology.
- develop own problem-solving skills and processes through reflection on the possible impact of their future occupation in the sector of artificial intelligence.

# Links to other Modules within the Study Program

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

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the IT & Technology field.

# Artificial Intelligence

Course Code: DLMAIAI01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

The quest for artificial intelligence has captured humanity's interest for many decades and has been an active research area since the 1960s. This course will give a detailed overview of the historical developments, successes, and set-backs in AI, as well as the development and use of expert systems in early AI systems. In order to understand cognitive processes, the course will give a brief overview of the biological brain and (human) cognitive processes and then focus on the development of modern AI systems fueled by recent developments in hard- and software. Particular focus will be given to discussion of the development of "narrow AI" systems for specific use cases vs. the creation of general artificial intelligence. The course will give an overview of a wide range of potential application areas in artificial intelligence, including industry sectors such as autonomous driving and mobility, medicine, finance, retail, and manufacturing.

## **Course Outcomes**

On successful completion, students will be able to

- remember the historical developments in the field of artificial intelligence.
- analyze the different application areas of artificial intelligence.
- comprehend expert systems.
- apply Prolog to simple expert systems.
- comprehend the brain and cognitive processes from a neuro-scientific point of view.
- understand modern developments in artificial intelligence.

## Contents

- 1. History of Al
  - 1.1 Historical Developments
  - 1.2 Al Winter
  - 1.3 Notable Advances in AI
- 2. Expert Systems
  - 2.1 Overview Over Expert Systems
  - 2.2 Introduction to Prolog
- 3. Neuroscience
  - 3.1 The (Human) Brain
  - 3.2 Cognitive Processes

- 4. Modern Al Systems
  - 4.1 Recent Developments in Hard- and Software
  - 4.2 Narrow vs General AI
  - 4.3 NLP and Computer Vision
- 5. Al Application Areas
  - 5.1 Autonomous Vehicles & Mobility
  - 5.2 Personalized Medicine
  - 5.3 FinTech
  - 5.4 Retail & Industry

## Literature

## **Compulsory Reading**

- Russell, S. & Norvig, P. (2010). Artificial intelligence: a modern approach (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Lucas, P.J.F & Van der Gaag, L. (1991). Principles of expert systems. Amsterdam: Addison Wesley (copyright returned to author).
- Clocksin, W.F. & Mellish, C.S. (2003). Programming in Prolog (4th ed.). Berlin: Springer-Verlag.
- Ward, J. (2015). The student's guide to cognitive neuroscience. (3rd ed.). New York, NY: Psychology Press.
- Frankish, K & Ramsey, W.M. (Eds.) (2012). The Cambridge handbook of cognitive science. Cambridge: Cambridge University Press.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

## **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods		
☐ Learning Sprints® ☑ Course Book	☐ Review Book	
☐ Vodcast	☐ Creative Lab ☐ Guideline	
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed	
☑ Exam Template		

# Seminar: Al and Society

Course Code: DLMAISAIS01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

In the current decade, impressive advances have been achieved in the field of artificial intelligence. Several cognitive tasks like object recognition in images and video, natural language processing, game strategy, and autonomous driving and robotics are now being performed by machines at unprecedented levels of ability. This course will examine some of societal, economic, and political implications of these developments.

## **Course Outcomes**

On successful completion, students will be able to

- name selected current societal topics and issues in artificial intelligence.
- explain the influence and impact of artificial intelligence on societal, economic, and polital topics.
- transfer theoretically-acquired knowledge to real-world cases.
- treat in a scientific manner a select topic in the form of a written essay.
- critically question and discuss current societal and political issues arising from the recent advances in artificial intelligence methodology.
- develop own problem-solving skills and processes through reflection on the possible impact of their future occupation in the sector of artificial intelligence.

### Contents

• The seminar covers current topics concerning the societal impact of artificial intelligence. Each participant must create a seminar paper on a topic assigned to him/her. A current list of topics is given in the Learning Management System.

## Literature

## **Compulsory 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

Study Format	Course Type
Distance Learning	Seminar

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
☐ Exam Template	

# Al in Practice

Module Code: DLMBAEAIP

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Ulrich Kerzel (Use Case and Evaluation) / Prof. Dr. Tim Schlippe (Seminar: Current Topics in AI)

## **Contributing Courses to Module**

- Use Case and Evaluation (DLMDSUCE01)
- Seminar: Current Topics in AI (DLMAISCTAI01)

Module Exam Type		
Module Exam	Split Exam	
	<u>Use Case and Evaluation</u>	
	Study Format "Distance Learning": Oral     Assignment	
	Seminar: Current Topics in Al	
	Study Format "Distance Learning": Written     Assessment: Research Essay	
Weight of Module		
see curriculum		

## **Module Contents**

## **Use Case and Evaluation**

- Use case evaluation
- Model-centric evaluation
- Business-centric evaluation
- Monitoring
- Avoiding common fallacies
- Change management

## **Seminar: Current Topics in AI**

In this module, students will reflect on current developments in AI. To this end, pertinent topics will be introduced via articles that are then critically evaluated by the students in the form of a written essay.

## **Learning Outcomes**

## **Use Case and Evaluation**

On successful completion, students will be able to

- analyze use cases and their requirements regarding the project objectives.
- apply common metrics to evaluate predictions.
- evaluate key performance indicators to asses projects from a business perspective.
- create monitoring tools that can be used to constantly evaluate the status quo of a project.
- understand common fallacies and how to avoid them.

## **Seminar: Current Topics in AI**

On successful completion, students will be able to

- discuss current research trends and topics in Al.
- compose a theoretical essay exploring a selected topic in Al.
- expound upon apposite assumptions and design choices pertaining to the topic of choice.
- link the chosen topic to analogous approaches.
- identify and delineate potential uses for the chosen topic's concepts.

# Links to other Modules within the Study Program

This module is similar to other modules in the fields of Data Science & Artificial Intelligence

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the IT & Technology fields

## Use Case and Evaluation

Course Code: DLMDSUCE01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

The evaluation and definition of use cases is the fundamental groundwork from which the projects can be defined. This does not only include the scope and technical requirements of a project but also how value can be derived from the project. A crucial aspect is the definition of what makes a project successful, both in terms of a technical evaluation as well as a business centric perspective and how the status quo can be monitored effectively during the progress of a project. The course also discusses how to avoid common fallacies and understand the implications of introducing data-driven decisions into traditional management structures.

#### **Course Outcomes**

On successful completion, students will be able to

- analyze use cases and their requirements regarding the project objectives.
- apply common metrics to evaluate predictions.
- evaluate key performance indicators to asses projects from a business perspective.
- create monitoring tools that can be used to constantly evaluate the status quo of a project.
- understand common fallacies and how to avoid them.

### Contents

- 1. Use Case Evaluation
  - 1.1 Identification of Use Cases
  - 1.2 Specifying Use Case Requirements
  - 1.3 Data Sources and Data Handling Classification
- 2. Model-centric Evaluation
  - 2.1 Common Metrics for Regression and Classification
  - 2.2 Visual Aides
- 3. Business-centric Evaluation
  - 3.1 Cost Function and Optimal Point Estimators
  - 3.2 Evaluation Using KPIs
  - 3.3 A/B Test

- 4. Monitoring
  - 4.1 Visual Monitoring Using Dashboards
  - 4.2 Automated Reporting and Alerting
- 5. Avoiding Common Fallacies
  - 5.1 Cognitive Biases
  - 5.2 Statistical Effects
  - 5.3 Change Management: Transformation to a Data-driven Company

## Literature

## **Compulsory Reading**

- Few, S. (2013). Information dashboard design: Displaying data for at-a-glance monitoring (2nd ed.). Burlingame, CA: Analytics Press.
- Gilliland, M., Tashman, L., & Sglavo, U. (2016). Business forecasting: Practical problems and solutions. Hoboken, NJ: John Wiley & Sons.
- Hyndman, R. (2018). Forecasting: Principles and practices (2nd ed.). Melbourne: OTexts.
- Kahneman, D. (2012). Thinking, fast and slow. New York, NY: Penguin Books.
- Osterwalder, A., & Pigneur, Y. (2010). Business model generation. Hoboken, NJ: Wiley.
- Parmenter, D. (2015). Key performance indicators: Developing, implementing, and using winning KPIs. Hoboken, NJ: John Wiley & Sons.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Oral Assignment

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# Seminar: Current Topics in Al

**Course Code: DLMAISCTAI01** 

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

The topic of artificial Intelligence (AI) has been addressed in computer science and cognitive science research since the 1950s; however, the meaning associated with the term has changed considerably over time. Having once been predominantly associated with logical calculus, reasoning, and planning, AI is now primarily interpreted in the context of deep networks of computational units. Despite these changes in approach, the important characteristic of AI continues to be the understanding and reproduction of cognitive abilities and functions by machines. This seminar strives to elucidate current research trends in AI. The students learn to independently analyze selected topics and case studies and link them with well-known concepts, as well as critically question and discuss them.

### **Course Outcomes**

On successful completion, students will be able to

- discuss current research trends and topics in Al.
- compose a theoretical essay exploring a selected topic in Al.
- expound upon apposite assumptions and design choices pertaining to the topic of choice.
- link the chosen topic to analogous approaches.
- identify and delineate potential uses for the chosen topic's concepts.

### Contents

• The seminar covers current topics in artificial intelligence. Each participant must write a seminar paper on a topic assigned to him/her.

## Literature

## **Compulsory 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

Study Format	Course Type
Distance Learning	Seminar

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	□ Review Book □ Creative Lab
☐ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
□ Exam Template	

# Salesforce Consultant Specialization

Module Code: DLMSFCS

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

N.N. (Salesforce Administrator and Service Cloud Consultant) / N.N. (Salesforce Sales Cloud Consultant )

## **Contributing Courses to Module**

- Salesforce Administrator and Service Cloud Consultant (DLMSFCS01)
- Salesforce Sales Cloud Consultant (DLMSFCS02)

Module Exam Type			
Module Exam	Split Exam		
	Salesforce Administrator and Service Cloud Consultant		
	Study Format "Distance Learning": Written     Assessment: Project Report		
	Salesforce Sales Cloud Consultant		
	Study Format "Distance Learning": Oral     Project Report		
Weight of Module			
see curriculum			

#### **Module Contents**

## **Salesforce Administrator and Service Cloud Consultant**

Using the learning platform Trailhead students will learn to administer the Salesforce platform. At the end of the course the students will be able to manage the Salesforce service cloud. This course is the preparation for the Salesforce Administrator Certification and Salesforce Service Cloud Certification.

## **Salesforce Sales Cloud Consultant**

Using the learning platform Trailhead students will learn how to manage sales processes with Salesforce platform. At the end of the course the students will be able to manage the Salesforce sales cloud. This course prepares for the Salesforce Sales Cloud Consultant Certification.

## **Learning Outcomes**

## **Salesforce Administrator and Service Cloud Consultant**

On successful completion, students will be able to

- define what Salesforce and customer relationship management is.
- describe and compare the different options for importing and exporting data in Salesforce.
- create reports and visualize key business metrics in real-time in Salesforce.
- setup customer service with Salesforce service cloud.
- lead a customer service team in the digital era.
- define service cloud goals and metrics.

## **Salesforce Sales Cloud Consultant**

On successful completion, students will be able to

- setup sales management with Salesforce sales cloud.
- lead a sales team in the digital era.
- create digital engagement on multiple channels.
- define sales cloud goals and metrics.
- deploy sales processes for gathering competitive insights.

# 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 IU International University of Applied Sciences

All Master Programs in the Marketing & Communication field

# Salesforce Administrator and Service Cloud Consultant

Course Code: DLMSFCS01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

Salesforce is the most used software solution for customer relationship management worldwide. Using the learning platform Trailhead students will learn independently the fundamentals of Salesforce. The course explains how to administrate Salesforce and how to create processes to help supporting teams become more efficient and manage large data volumes within Salesforce. This course prepares students for the Salesforce Administrator Certification and Salesforce Service Cloud Certification.

#### **Course Outcomes**

On successful completion, students will be able to

- define what Salesforce and customer relationship management is.
- describe and compare the different options for importing and exporting data in Salesforce.
- create reports and visualize key business metrics in real-time in Salesforce.
- setup customer service with Salesforce service cloud.
- lead a customer service team in the digital era.
- define service cloud goals and metrics.

### Contents

The content on the learning platform focuses on the features and functionality used to maintain a Salesforce implementation. The content provides general knowledge of the features available to end users and the configuration options available to a Salesforce Administrator. Furthermore, the content enables to perform administrative functions using current Salesforce features design solutions using the Service Cloud functionality and to lead the implementation of these solutions within a customer organization.

### Literature

## **Compulsory Reading**

## **Further Reading**

According to the Information given on the learning platform

Study Format	Course Type
Distance Learning	Project

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio ☐ Exam Template	

# Salesforce Sales Cloud Consultant

Course Code: DLMSFCS02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

This course facilitates key aspects of setting up sales management with Salesforce sales cloud on the learning platform Trailhead. The course describes how to implement Salesforce sales cloud and manage it. It enables to make better business decisions based on customer data and to create a sales metrics strategy. The course shows how to create processes to help sales teams become more efficient and manage large data volumes within Salesforce. This course prepares students for the Salesforce Sales Cloud Consultant Certification.

#### **Course Outcomes**

On successful completion, students will be able to

- setup sales management with Salesforce sales cloud.
- lead a sales team in the digital era.
- create digital engagement on multiple channels.
- define sales cloud goals and metrics.
- deploy sales processes for gathering competitive insights.

### **Contents**

• The content on the learning platform focuses on designing and deploying solutions that support sales teams and sales processes using Salesforce applications. The content enables to design solutions using the Salesforce sales cloud functionality and to lead the implementation of these solutions within an organization.

## Literature

## **Compulsory Reading**

### **Further Reading**

According to the Information given on the learning platform

Study Format	Course Type
Distance Learning	Project

Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Oral Project Report

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☐ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
☐ Exam Template	

# Salesforce Sales Specialization

Module Code: DLMSFSS

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Anke Haag (Sales Management I) / N. N. (Salesforce Sales Skills)

## **Contributing Courses to Module**

- Sales Management I (DLMWSA01\_E)
- Salesforce Sales Skills (DLMSFSS01)

Module Exam Type		
Module Exam	Split Exam	
	Sales Management I	
	Study Format "Fernstudium": Written     Assessment: Case Study	
	Salesforce Sales Skills	
	Study Format "Distance Learning": Written     Assessment: Project Report	
Weight of Module		
see curriculum		

### **Module Contents**

## Sales Management I

- Strategic framework and concepts of sales management
- Organizational and process options for sales and distribution in the company
- General conditions and design options for successful sales force management

#### Salesforce Sales Skills

Students will learn and understand the process of selling web-based software that customers access through an online portal. At the end of the course the students will know the different stages of the software as a service sales process as well as value based selling and will be able to translate these findings into the Salesforce products and services environment.

## **Learning Outcomes**

## Sales Management I

On successful completion, students will be able to

- know of the strategic basics of sales management and understand the basic approaches to designing alternative sales models.
- understand core ideas of customer driven organizations and recognize the consequences and design options for structure and process in the sales division of the company.
- familiarize themselves with the functions and challenges of project organization in sales.
- organize and manage a sales team/sales force independently.
- actively meet future challenges in sales management.

## Salesforce Sales Skills

On successful completion, students will be able to

- understand the SaaS sales process and sales cycle, value based selling and solutions sales.
- customize different frameworks to a firm's specific needs.
- learn how to drive the buying decision through executive engagement.
- bring consistency in the way selling is conducted.
- identify, analyse and drive the most important sales KPIs.
- use the Salesforce platform to enhance the sales process.

# Links to other Modules within the Study Program

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

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Marketing & Communication fields

# Sales Management I

Course Code: DLMWSA01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

Students learn the strategic essentials and design options of sales management. In addition to basic strategic directions of sales management, they learn how to categorize alternative sales strategies and critically deal with the challenges of multi-channel sales. In addition, the concept of customer driven organization is explained and deepened, and based on this, consequences for the design of the sales organization and strategic or operative sales force management are derived. The course ends with a discussion on future challenges in sales.

#### **Course Outcomes**

On successful completion, students will be able to

- know of the strategic basics of sales management and understand the basic approaches to designing alternative sales models.
- understand core ideas of customer driven organizations and recognize the consequences and design options for structure and process in the sales division of the company.
- familiarize themselves with the functions and challenges of project organization in sales.
- organize and manage a sales team/sales force independently.
- actively meet future challenges in sales management.

## **Contents**

- 1. Introduction to Sales
  - 1.1 Theory of Sales
  - 1.2 Strategic Distribution
  - 1.3 Sales in Practice
  - 1.4 The Elements of the Sales Policy at a Glance
- 2. Basics of the Sales Organization
  - 2.1 Single-Level (Direct Sales) Versus Multi-Level Sales
  - 2.2 Distribution to Business Customers or Industrial Goods Distribution
  - 2.3 Cooperative Sales Forms
  - 2.4 Sales Partners: Distributors and Sales Agents

- 3. Sales Concept
  - 3.1 Push Versus Pull
  - 3.2 Distribution Intensity Ubiquitous, Intensive, Selective, Exclusive
  - 3.3 Key Account Management
  - 3.4 Small Customers Care
- 4. Multi-Channel Management
  - 4.1 Basics
  - 4.2 Definition and Integration of the Channel Stages and Processes
  - 4.3 Control and Evaluation of the Sales Channels
  - 4.4 Success Factors and Conflict Potential in Multi-Channel Systems
- 5. Sales and Contact Forms
  - 5.1 Personal Sale
  - 5.2 Media-Supported Sale
  - 5.3 Media-Led Sales
- 6. Principles of the Sales Organization
  - 6.1 Customer-Oriented Sales Organization
  - 6.2 Sales Organization by Products or Regions
  - 6.3 Sales Organization by Sales Channels or Customers
  - 6.4 Central or Decentralized Sales Organization
- 7. Sales Force Management I
  - 7.1 Recruitment of Employees for Sales
  - 7.2 Qualification of Employees in Sales
  - 7.3 Shift Planning of Employees in Sales
- 8. Sales Force Management II
  - 8.1 Sales Management and Sales Culture
  - 8.2 Remuneration and Incentive Systems
  - 8.3 Performance Evaluation and Monitoring
- 9. Sales Controlling
  - 9.1 Content and Tasks of Sales Controlling
  - 9.2 Strategic Sales Controlling
  - 9.3 Operational Sales Controlling
  - 9.4 Sales Information Systems

- 10. Future Developments
  - 10.1 Digitization and Social Media
  - 10.2 Globalization and Internationalization
  - 10.3 Big Data and System Integration

## Literature

## **Compulsory Reading**

- Guenzi, P./Geiger, P. (2010): Sales Management: A multinational perspective. Macmillan Education UK, Houndmills, Basingstoke, Hampshire.
- Hair, J. F. et al. (2008): Sales Management. Building Customer Relationships and Partnerships. Cengage, Boston.Homburg, C./Schäfer, H./Schneider, J. (2012): Sales Excellence. Systematic Sales Management. Springer, Wiesbaden.
- Ingram, T. N. et al. (2015): Sales Management. Analysis and Decision Making. 9. Auflage, Routledge, Abingdon.
- Johnston, M. W./Marshall, G.W. (2016): Sales Force Management. Leadership, Innovation, Technology. 12. Auflage, Routledge, Abingdon.

## **Study Format Fernstudium**

Study Format	Course Type
Fernstudium	Case Study

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# Salesforce Sales Skills

Course Code: DLMSFSS01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

## **Course Description**

Software as a service (SaaS) is a way of delivering applications over the internet. Salesforce is the leading SaaS provider with its flagship CRM platform. Using different methods including the learning platform Trailhead, students will learn the different frameworks and concepts of SaaS sales in order to know how they can customize the adequate approach to a company's specific needs and organizational structure. Furthermore, this course prepares students to use the Salesforce platform to drive their KPIs and accelerate their sales.

#### **Course Outcomes**

On successful completion, students will be able to

- understand the SaaS sales process and sales cycle, value based selling and solutions sales.
- customize different frameworks to a firm's specific needs.
- learn how to drive the buying decision through executive engagement.
- bring consistency in the way selling is conducted.
- identify, analyse and drive the most important sales KPIs.
- use the Salesforce platform to enhance the sales process.

### Contents

The content of this module focuses on the engagement with customers, and particularly with executives, and how to increase impact when selling SaaS products and services. The content enables students to generate new business through inbound and outbound opportunities and to sell effectively to executives and decision makers at prospect companies. Furthermore, knowledge is provided for the SaaS sales methodology, value based selling and different approaches and frameworks on how to approach each phase of the sales process. It is elaborated how purchasing decisions are made and how these can be influenced by selling centers effectively. Consequently, the content of this course enables students to analyse and drive KPIs using adequate frameworks and processes as well as the Salesforce platform.

## Literature

## **Compulsory Reading**

- Arli, D./ Bauer, C./ Palmatier, R.W. (2018): Relational selling: Past, present and future. Industrial Marketing Management, 69, 169-184.
- McFarland, R.G., Challagalla, G.N., & Shervani, T.A. (2006). Influence tactics for effective adaptive selling. Journal of Marketing, 70(4), 103-117.

Study Format	Course Type
Distance Learning	Project

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods		
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab	
☐ Vodcast	☐ Guideline	
☐ Shortcast ☐ Audio	☐ Live Tutorium/Course Feed	
☐ Exam Template		





# 3. Semester



## Corporate Finance and Investment

Module Code: DLMBCFIE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	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				
	Advanced Corporate Finance			
	Study Format "Distance Learning": Exam			
	Investment Analysis & Portfolio Management			
	• 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.

#### Links to other Modules within the Study Program

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

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the Business & Management field

## Advanced Corporate Finance

Course Code: DLMBCFIE01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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

#### **Compulsory 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., Dallocchio, 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	Course Type
Distance Learning	Online Lecture

Information about the examination				
Examination Admission Requirements	BOLK: yes Course Evaluation: no			
Type of Exam	Exam			

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®	☑ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	□ Reader
☑ Exam Template	□ Slides

## Investment Analysis & Portfolio Management

**Course Code: DLMBCFIE02** 

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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

#### **Compulsory 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.). UpperSaddle 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 SaddleRiver, NJ: Pearson. (Database: EBSCO).

#### **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

## Accounting

### Module Code: DLMBACCE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	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 IU International University of Applied Sciences

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

## Advanced Management Accounting & Control

Course Code: DLMBACCE01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 1. Controllership and the CFO: Core Competencies, Organization, and Strategies
  - 1.1 Management Accounting and Control
  - 1.2 Core Competencies of CFOs and Controllers
  - 1.3 Controllership 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

#### **Compulsory 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	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☐ Live Tutorium/Course Feed
☑ Exam Template	

## Current Issues in Accounting

Course Code: DLMBACCE02

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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 Ouick 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

#### **Compulsory 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	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	<ul><li>□ Review Book</li><li>□ Creative Lab</li><li>□ Guideline</li><li>□ Live Tutorium/Course Feed</li></ul>

## Sales, Pricing and Brand Management

Module Code: DLMBSPBE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimaldauer: 1 Semester	WiSe/SoSe	English

#### **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	odule 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.

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.

#### **Sales and Pricing**

#### **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(s) of Marketing & Sales

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the Marketing field(s)

### Global Brand Management

Course Code: DLMBSPBE01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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

#### **Compulsory 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	Course Type
Distance Learning	Online Lecture

nformation about the examination		
Examination Admission Requirements	BOLK: yes Course Evaluation: no	
Type of Exam	Exam, 90 Minutes	

Student Work	Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>☑ Vodcast</li> <li>□ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	<ul><li>□ Review Book</li><li>□ Creative Lab</li><li>□ Guideline</li><li>□ Live Tutorium/Course Feed</li></ul>

## Sales and Pricing

Course Code: DLMBSPBE02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	DLMBSPBE01

#### **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 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.

#### **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.

- 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

#### **Compulsory 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: Myilibrary).
- 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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>☑ Vodcast</li> <li>□ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

# Consumer Behavior and Research

Module Code: DLMBCBR

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimaldauer: 1 Semester	WiSe/SoSe	English

#### **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 "Distance Learning": Exam, 90 Minutes	
	Applied Marketing Research	
	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 ethics 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 IU International University of Applied Sciences

All Master Programmes in the Marketing field(s)

### International Consumer Behavior

Course Code: DLMBCBR01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book □ Vodcast	☐ Creative Lab ☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio ☑ Exam Template	

# Applied Marketing Research

Course Code: DLMBCBR02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	DLMBCBR01

#### **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 ethics 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.

- 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	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# IT Project and Architecture Management

Module Code: DLMBITPAM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Inga Schlömer (IT Project Management) / Prof. Dr. Inga Schlömer (IT Architecture Management)

#### **Contributing Courses to Module**

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

Module Exam Type				
Module Exam Split Exam				
	IT Project Management			
	Study Format "Distance Learning": Exam			
	IT Architecture Management			
	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.

# 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 IU International University of Applied Sciences

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

# IT Project Management

Course Code: DLMBITPAM01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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	Course Type
Distance Learning	Online Lecture

Information about the examination			
Examination Admission Requirements	BOLK: yes Course Evaluation: no		
Type of Exam	Exam		

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	□ Reader
☑ Exam Template	□ Slides

# IT Architecture Management

Course Code: DLMBITPAM02

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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	Course Type
Distance Learning	Case Study

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	□ Review Book □ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# IT Governance and Service Management

Module Code: DLMBITGSM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	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	
	<u>IT Service Management</u>	
	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 IU International University of Applied Sciences

All Master Programmes in the IT & Technology field

# IT Service Management

Course Code: DLMBITGSM01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# IT Governance and Compliance

Course Code: DLMBITGSM02

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	□ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Manufacturing Methods Industry 4.0 and Internet of Things

#### Module Code: DLMBMMIIT

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Leonardo Riccardi (Internet of Things) / Prof. Dr. Leonardo Riccardi (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		
	<ul><li>Internet of Things</li><li>Study Format "Distance Learning": Exam,</li></ul>		
	90 Minutes • Study Format "myStudies": Exam, 90 Minutes		
	Manufacturing Methods Industry 4.0		
	<ul> <li>Study Format "myStudies": Exam, 90 Minutes</li> <li>Study Format "Distance Learning": Exam, 90 Minutes</li> </ul>		
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 IU International University of Applied Sciences

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

# Internet of Things

Course Code: DLMBMMIIT01

Study Level	Language of Instruction	Contact Hours	СР	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.

- 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

#### **Compulsory 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	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study Presence Tutorial Self Test Practical Experience Hours Total						
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

# **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Manufacturing Methods Industry 4.0

Course Code: DLMBMMIIT02

Study Level	Language of Instruction	Contact Hours	СР	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

# **Compulsory 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	Course Type
myStudies	Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☐ Live Tutorium/Course Feed
☑ Exam Template	

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

# Product Development and Design Thinking

**Module Code: DLMBPDDT** 

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Leonardo Riccardi (Product Development) / Prof. Dr. Leonardo Riccardi (Design Thinking)

# **Contributing Courses to Module**

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

Module Exam Type	
Module Exam	Split Exam
	Product Development
	<ul> <li>Study Format "Distance Learning": Exam,</li> <li>90 Minutes</li> <li>Study Format "myStudies": Exam, 90 Minutes</li> </ul>
	<u>Design Thinking</u>
	Study Format "Distance Learning": Written     Assessment: Project Report
Weight of Module	
see curriculum	

#### **Module Contents**

#### **Product Development**

- Production planning techniques
- Design tasks
- Product development approaches
- Digital product development and organizational aspects

#### **Design Thinking**

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.

#### **Learning Outcomes**

#### **Product Development**

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.

#### **Design Thinking**

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.

Links to other Modul	es within the Study
Program	•

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

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Design, Architecture & Construction fields

# Product Development

Course Code: DLMBPDDT01

Study Level	Language of Instruction	Contact Hours	СР	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

#### 408

#### DLMBPDDT01

- 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**

- Kahn, K. B., Kay, S. E., Slotegraaf, R. J., & Uban, S. (Eds.). (2012). The PDMA handbook of new productdevelopment (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	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☐ Live Tutorium/Course Feed
☑ Exam Template	

# **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

# Design Thinking

Course Code: DLMBPDDT02

Study Level	Language of Instruction	Contact Hours	СР	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.

#### **Compulsory Reading**

- IDEO.org. (2015). The Field Guide to Human-Centered Design. A step-by-step guide that will get you solving prob-lems 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 pro-duce change, drive new ideas, and deliver meaningful solutions.
- Lewrick, M., Link, P., Leifer, L. J., & Langensand, N. (2018). The design thinking playbook: mindful digital transfor-mation of teams, products, services, businesses and ecosystems. John Wiley & Sons.

Study Format	Course Type
Distance Learning	Project

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
120 h	0 h	30 h	0 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☐ Shortcast ☐ Audio	☐ Live Tutorium/Course Feed
☐ Exam Template	

# Data Science and Analytics

Module Code: DLMBDSA

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Ulrich Kerzel (Data Science) / Prof. Dr. Ulrich Kerzel (Analytical Software and Frameworks)

# **Contributing Courses to Module**

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

Module Exam Type		
Module Exam	Split Exam	
	<u>Data Science</u>	
	Study Format "Distance Learning": Exam, 90 Minutes	
	Analytical Software and Frameworks	
	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
- 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.

# 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 IU International University of Applied Sciences

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

# Data Science

Course Code: DLMBDSA01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

#### **Course Description**

The course Data Science 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. 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
- 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

#### **Compulsory 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	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Analytical Software and Frameworks

Course Code: DLMBDSA02

Study Level	Language of Instruction	Contact Hours	СР	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.

#### **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.

#### 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

#### **Compulsory Reading**

- Elmasri, R., & Navathe, S. (2010). Fundamentals of database systems. Boston, MA: Addison-WesleyPublishing 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-orientedfoundations 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 knowabout cloud computing. Hoboken, NJ: John Wiley & Sons.
- Jackson, J. C., Vijayakumar, V., Quadir, M. A., & Bharathi, C. (2015). Survey on programming modelsand environments for cluster, cloud, and grid computing that defends big data. ProcediaComputer Science, 50, 517–523.
- Jukic, N., Vrbsky, S., & Nestorov, S. (2016). Database systems: Introduction to databases and datawarehouses. 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 bigdata. Birmingham: Packt Publishing.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination		
Examination Admission Requirements  BOLK: no  Course Evaluation: no		
Type of Exam	Written Assessment: Written Assignment	

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	□ Review Book □ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# Big Data

# Module Code: DLMBBD-01

Module Type	Admission Requirements	Study Level	СР	Student Workload
see curriculum	<ul><li>none</li></ul>	MA	10	300 h
	■ DLMBBD01			

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	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		
	<u>Data Utilization</u>		
	• Study Format "Distance Learning": Exam, 90 Minutes		
	Application Scenarios and Case Studies		
	Study Format "Distance Learning": Written     Assessment: Case Study		
Weight of Module	·		
see curriculum			

#### **Module Contents**

#### **Data Utilization**

- Pattern recognition
- Natural language processing
- Image recognition
- Detection and sensing
- Problem-solving
- Decision-making

#### **Application Scenarios and Case Studies**

- Agile development
- Workflow overview
- Fields of application
- Sprint Planning: Sprint
- Sprint Retrospective
- Committee presentation

#### **Learning Outcomes**

#### **Data Utilization**

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.

#### **Application Scenarios and Case Studies**

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.

# Links to other Modules within the Study Program

This module is similar to other modules in the fields of Data Science & Artificial Intelligence

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the IT & Technology fields

# Data Utilization

Course Code: DLMBBD01

Study Level	Language of Instruction	Contact Hours	СР	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.

#### 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, GPDR

#### **Compulsory 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	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Application Scenarios and Case Studies

Course Code: DLMBBD02-01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	DLMBBD01

### **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

#### **Compulsory 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	Course Type
Distance Learning	Case Study

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
110 h	0 h	20 h	20 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
□ Exam Template	

# Health Systems and Policy

Module Code: DLMBAEHSP

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Michael Thiede (International Health Systems) / Prof. Dr. Michael Thiede (Health Policy and Planning)

## **Contributing Courses to Module**

- International Health Systems (DLMIHMIHS01)
- Health Policy and Planning (DLMIHMHPP01)

Module Exam Type			
Module Exam	Split Exam		
	<u>International Health Systems</u>		
	• Study Format "Distance Learning": Exam, 90 Minutes (100)		
	Health Policy and Planning		
	Study Format "Distance Learning": Written     Assessment: Case Study		
Weight of Module			
see curriculum			

#### **Module Contents**

#### **International Health Systems**

- Aims and Principles of Health Care Systems
- Structural Features of Health Care Systems
- Health System Building Blocks
- Health System Efficiency
- Health Equity
- Country Case Studies

#### **Health Policy and Planning**

- Policy Making and Health Policy Making
- Agenda Setting
- The role of Interest Groups
- Comparative Health Policy
- Leadership in Health Policy

#### **Learning Outcomes**

#### **International Health Systems**

On successful completion, students will be able to

- understand various healthcare system delivery models.
- develop analytical skills in healthcare market drivers.
- identify and make a synthesis of national and international healthcare policies.
- interpret decision making processes in health care from an international perspective.

#### **Health Policy and Planning**

On successful completion, students will be able to

- reflect on the complexity of health policy processes at national and international level.
- identify and strategically respond to the roles of stakeholders and stakeholder groups in policy processes.
- understand how and by whom policy agendas are set and how these processes can in turn be influenced.
- assess and analyse the formation and the influence of different interest groups in terms of political economy.
- compare health policies internationally and to consider lessons learned.

# Links to other Modules within the Study Program

This module is similar to other modules in the field of Healthcare Management

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the field of Health Affairs

## International Health Systems

Course Code: DLMIHMIHS01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	None

#### **Course Description**

This course addresses the health system perspective of international healthcare management. It emphasizes the system view and introduces the principles of good governance, equity, efficiency and sustainability as well as building blocks for health care systems design and management. The course conveys concepts, skills and core competencies in key areas as required by different stakeholder groups. By means of a structured comparative approach, the course analyzes different health systems that have long served as "prototypes" in the discussion, such as the UK's National Health Service and the German Statutory Health Insurance. The course builds on concepts from health policy, health economics, insurance economics and broader health systems research.

#### **Course Outcomes**

On successful completion, students will be able to

- understand various healthcare system delivery models.
- develop analytical skills in healthcare market drivers.
- identify and make a synthesis of national and international healthcare policies.
- interpret decision making processes in health care from an international perspective.

- 1. Health Care Systems Internationally: Politics, Economics, and Policy
  - 1.1 Aims and Principles of Health Care Systems
  - 1.2 Structural Features of Health Care Systems
  - 1.3 Health System Building Blocks
  - 1.4 Contextual Factors
  - 1.5 Health System Governance
- 2. Organizing the Provision of Services
  - 2.1 Primary Care
  - 2.2 Specialist Care
  - 2.3 Hospital Care
  - 2.4 Pharmaceutical Care

- 3. Managing the Health Workforce
  - 3.1 Medical Education
  - 3.2 Supply and Distribution of Health Workers
  - 3.3 Health Workforce Governance
  - 3.4 Health Worker Migration
- 4. Health System Efficiency
  - 4.1 Measuring and Comparing Health System Outputs
  - 4.2 Cross-National Efficiency Comparisons of Health Systems
- 5. Health Equity
  - 5.1 Equity in Health Care Delivery
  - 5.2 Equity in Health Financing
- 6. Health Systems by Country An Analytical Approach
  - 6.1 Germany
  - 6.2 United Kingdom
  - 6.3 United States
  - 6.4 Health Systems in Other Parts of the World

#### **Compulsory Reading**

#### **Further Reading**

- Cylus, J./Papanicolas, I./Smith, P. (2016). Health system efficiency. How to make measurement matter for policy and management. Copenhagen, European Observatory on Health Systems and Policies/World Health Organization.
- Johnson, J., Stoskopf, C. & Shi, L. (2018). Comparative Health Systems: A Global Perspective, 2nd edition. Burlington MA: Jones & Bartlett.
- Mills, A./Martinez-Álvarez, M./Ranson, M.K. (2020). The design of health systems. In: Merson, M./Black, R./Mills, A. (eds.): Global health: Diseases, programs, systems, and policies. 4th edition, Jones & Bartlett, Burlington, MA.
- Rice, T. (2021). Health insurance systems. Academic Press, Cambridge, MA.
- World Health Organization (n.d.). Health in transition (HITs). Health system reviews. (URL: http://www.searo.who.int/entity/asia\_pacific\_observatory/publications/hits/hit\_home/en/&

https://eurohealthobservatory.who.int/).

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	

## Health Policy and Planning

Course Code: DLMIHMHPP01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	None

#### **Course Description**

This course provides a sound introduction to health policy design and planning processes. The individual stakeholders, their respective incentive systems and communication channels are discussed against the background of national, international and global agendas in health policy. The institutional and legal framework plays just as much a role as, for example, the formation and influence of different interest groups. The course also deals with the comparative analysis of national health policies. The course emphasizes the relevance and role of leadership in health policy and planning.

#### **Course Outcomes**

On successful completion, students will be able to

- reflect on the complexity of health policy processes at national and international level.
- identify and strategically respond to the roles of stakeholders and stakeholder groups in policy processes.
- understand how and by whom policy agendas are set and how these processes can in turn be influenced.
- assess and analyse the formation and the influence of different interest groups in terms of political economy.
- compare health policies internationally and to consider lessons learned.

- 1. Policy-Making and Health Policy-Making
  - 1.1 Making Policy in a Complex World
  - 1.2 Policy Public Policy Health Policy
  - 1.3 Stakeholders in Health Policy
  - 1.4 The Private Sector
  - 1.5 The Policy Process

- 2. Agenda Setting
  - 2.1 The "Right to Health"
  - 2.2 Legitimacy, Feasibility and Support
  - 2.3 Governments as Agenda-Setters
  - 2.4 Legislature, Executive and Judicative
  - 2.5 Mass Media as Agenda Setters
- 3. Evidence-Based Policy Making
  - 3.1 Sources of Evidence
  - 3.2 Paradigms in Policy Research
  - 3.3 Limitations
- 4. The Role of Interest Groups
  - 4.1 Types of Interest Groups
  - 4.2 Civil-Society Groups
  - 4.3 Private Sector Interest Groups
  - 4.4 Public-Private Health Partnerships
- 5. Comparative Health Policy
  - 5.1 Globalizing the Policy Process
  - 5.2 Health Policies within the Health System Context
  - 5.3 Public Health Policies Internationally
  - 5.4 Cross National Learning
- 6. Leadership in Health Policy
  - 6.1 Characterizing Public Leadership
  - 6.2 Levels of Leadership

#### **Compulsory Reading**

- Blank, R./Burau, V./Kuhlmann, E. (2018): Comparative health policy. 5th edition, London, Red Globe Press.
- Buse, K./Mays, N./Walt, G. (2012): Making health policy. 2nd edition, Maidenhead, Open University Press.
- Forman, L. (2017): What do human rights bring to discussions of power and politics in health policy and systems?. Global Public Health, 14(4), 489-502, doi: 10.1080/17441692.2017.1405457.
- Gilson, L. (2016): Everyday politics and the leadership of health policy implementation. Health Systems & Reform, 2(3), 187-193, doi: 10.1080/23288604.2016.1217367.
- Gore, R./Parker, R. (2019): Analysing power and politics in health policies and systems. Global Public Health, 14(4), 481-488, doi: 10.1080/17441692.2019.1575446.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
110 h	0 h	20 h	20 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
□ Exam Template	

# **Economics of Health**

## Module Code: DLMBAEEOH

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Michael Thiede (Health Economics) / Prof. Dr. Michael Thiede (Healthcare Financing)

## **Contributing Courses to Module**

- Health Economics (DLMIHMHE01)
- Healthcare Financing (DLMIHMHF01)

Module Exam Type		
Module Exam	Split Exam	
	<ul><li>Health Economics</li><li>Study Format "Distance Learning": Exam, 90 Minutes</li></ul>	
	<ul><li>Healthcare Financing</li><li>Study Format "Distance Learning": Oral Assignment</li></ul>	
Weight of Module see curriculum		

#### **Module Contents**

#### **Health Economics**

- Economic Peculiarities of the Healthcare Market
- Equality and Fairness
- Delivering Healthcare
- Economic Evaluation and Priority Setting

#### **Healthcare Financing**

- Health Expenditure as a Key Input for Health Financing
- Revenue Collection
- Risk Pooling Mechanisms
- Provider Payment Mechanisms
- Trends in Healthcare Financing

#### **Learning Outcomes**

#### **Health Economics**

On successful completion, students will be able to

- analyze demand and supply on health markets from an economic perspective and to derive consequences.
- substantiate the necessity to focus on distributive goals with the help of theories of distributive justice.
- explore economic scope for action from the perspective of service providers in the health
- reflect on the principles of health economic evaluation and to use and appraise them against the background of allocation decisions.

#### **Healthcare Financing**

On successful completion, students will be able to

- interpret health care financing in the light of health expenditure trends.
- explain the health financing functions and illustrate them with real world examples.
- analyze the quality incentives associated with provider payment mechanisms.
- showcase the strengths and weaknesses of pay for performance models.
- dissect DRG based payments for hospital services and evaluate alternative approaches.

#### Links to other Modules within the Study **Program**

This module is similar to other modules in the field of Healthcare Management

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the field of Health **Affairs** 

## Health Economics

Course Code: DLMIHMHE01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	None

#### **Course Description**

This course addresses the economic peculiarities of the healthcare market, with a particular focus on the requirements for decision-makers in the healthcare sector. Students are sensitized to economic thinking and are confronted in particular with the tension between efficiency and equity in healthcare. While the module content draws on economic theory, the policy implications are evident in each section of the module.

#### **Course Outcomes**

On successful completion, students will be able to

- analyze demand and supply on health markets from an economic perspective and to derive consequences.
- substantiate the necessity to focus on distributive goals with the help of theories of distributive justice.
- explore economic scope for action from the perspective of service providers in the health sector.
- reflect on the principles of health economic evaluation and to use and appraise them against the background of allocation decisions.

- 1. The Peculiar Market for Healthcare
  - 1.1 Demand and Need
  - 1.2 Supply: Resources, Production and Costs
  - 1.3 Asymmetric Information and the Agency Relationship
  - 1.4 Externalities
  - 1.5 Market Failure and its Consequences
- 2. Government Intervention in Healthcare Markets
  - 2.1 Economic Rationale for Government Intervention
  - 2.2 Forms of Government Intervention
  - 2.3 Government Involvement in Healthcare
  - 2.4 Government Failure
  - 2.5 Competitive Strategies

- **Equality and Fairness** 
  - 3.1 Distributive Preferences
  - 3.2 Concepts of Health Equity
  - 3.3 Theories of Distributive Justice
  - 3.4 Exogenous Determinants of Health
  - 3.5 Policy Lessons
- Delivering Healthcare
  - 4.1 The Physician as a Supplier of Medical Services
  - 4.2 Supplier-Induced Demand
  - 4.3 Economics of Hospital Care
- Economic Evaluation and Priority Setting
  - 5.1 Benefits and the Measurement of Health Benefits
  - 5.2 Costing Healthcare
  - 5.3 Types of Economic Evaluation
  - 5.4 QALYs and the Cost-Effectiveness Threshold
  - 5.5 Policy Implications
- Health Econometrics
  - 6.1 Introduction to Applied Health Econometrics
  - 6.2 Methods for Causal Analysis

#### **Compulsory Reading**

- Drummond, M. et al. (2015): Methods for the economic evaluation of health care programmes. 4th edition, Oxford, Oxford University Press.
- McPake, B. et al. (2020): Health economics an international perspective. 4th edition, Abingdon, Routledge.
- Olsen, J. (2017): Principles in health economics and policy. 2nd edition. Oxford, Oxford University Press.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	

## Healthcare Financing

Course Code: DLMIHMHF01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	None

#### **Course Description**

This course breaks down challenges in health financing from a systems perspective. The course investigates how health financing supports the achievement of national and international health goals. Health expenditure analysis is linked to different approaches of health financing. The course agenda follows different stakeholders' perspectives. It also showcases trends in health financing and analyzes dominant provider payment mechanisms.

#### **Course Outcomes**

On successful completion, students will be able to

- interpret health care financing in the light of health expenditure trends.
- explain the health financing functions and illustrate them with real world examples.
- analyze the quality incentives associated with provider payment mechanisms.
- showcase the strengths and weaknesses of pay for performance models.
- dissect DRG based payments for hospital services and evaluate alternative approaches.

- Health Expenditure Analysis
  - Global Trends in Health Spending
  - 1.2 Burden of Disease and Domestic Health Spending
  - Government Health Spending
- Financing Healthcare
  - 2.1 Revenue Raising
  - 2.2 Risk Pooling
  - 2.3 Resource Allocation
  - 2.4 Service Provision
- Provider Payment Systems and Associated Quality Incentives
  - 3.1 Fee-for-Service
  - 3.2 Capitation
  - 3.3 Global Budget
  - 3.4 Diagnosis-Related Groups (DRGs)
  - 3.5 Deductibles, Coinsurance and Co-Payments

- 4. Health Financing Globally
  - 4.1 Health Spending Scenarios
  - 4.2 Global Financing Mechanisms
  - 4.3 Alignment
- 5. Pay-for-Performance
  - 5.1 Pay-for-Performance and Quality of Care
  - 5.2 Pay-for-Performance at the Primary Care Level
  - 5.3 Pay-for-Performance at the Hospital Level
- 6. The Evolution of DRGs
  - 6.1 Principles of DRG Payment
  - 6.2 DRG-Based Payment for Hospital Services: Country Case Studies

#### **Compulsory Reading**

- Cashin, C. et al. (eds.)(2014). Paying for performance in healthcare. European Observatory on Health Systems and Policies/World Health Organization. Maidenhead, Open University Press.
- Cleverley, W./Cleverley, J. (2018). Essentials of health care finance. 8th edition. Burlington, MA, Jones & Bartlett.
- Feldhaus, I./Mathauer, I. (2018). Effects of mixed provider payment systems and aligned cost sharing practices on expenditure growth management, efficiency, and equity: a structured review of the literature. BMC Health Services Research, 18: 996. doi: 10.1186/s12913-018-3779-1
- Global Burden of Disease Health Financing Collaborator Network (2019). Past, present, and future of global health financing: a review of development assistance, government, out-of-pocket, and other private spending on health for 195 countries, 1995-2050. Lancet, 393, pp. 2233-2260.
- Kutzin, J. et al. (2017) Developing a national health financing strategy: a reference guide. Geneva, World Health Organization.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination		
Examination Admission Requirements  BOLK: yes  Course Evaluation: no		
Type of Exam	Oral Assignment	

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
110 h	0 h	20 h	20 h	0 h	150 h	

Instructional Methods			
☐ Learning Sprints®	☐ Review Book		
☑ Course Book	☐ Creative Lab		
☐ Vodcast	☑ Guideline		
☑ Shortcast	☑ Live Tutorium/Course Feed		
☑ Audio			
☐ Exam Template			

# Human Resource Management: Theory

Module Code: MWPM-01\_E

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Michaela Moser (Human Resource Management I) / Prof. Dr. Michaela Moser (Human Resource Management II)

## Contributing Courses to Module

- Human Resource Management I (MWPM01-01\_E)
- Human Resource Management II (MWPM02-01\_E)

Module Exam Type		
Module Exam	Split Exam	
	Human Resource Management I	
	Study Format "Distance Learning": Exam, 90 Minutes	
	Human Resource Management II	
	Study Format "Distance Learning": Exam, 90 Minutes	
Weight of Module		
see curriculum		

#### **Module Contents**

#### **Human Resource Management I**

- HR Strategy
- Strategic and Operational Human Resource Management
- Personnel Planning
- Personnel Adjustment
- Assessment, Remuneration and Development of Personnel

#### **Human Resource Management II**

- Organizational Behavior
- Basics of Individual Behavior
- Group Behavior
- Behavioral Influence at the Organizational Level through Organizational Structure and Culture
- Role of Human Resource Management in Change Processes
- Content and Process Theories of Motivation

#### **Learning Outcomes**

#### **Human Resource Management I**

On successful completion, students will be able to

- assess the challenges of strategic human resources management.
- explain basic issues and sub-issues of workforce planning.
- explain workforce adjustment with the subcases of recruitment, selection, and release.
- explain the importance of employer branding and HR marketing.
- comprehend occasions and procedures of personnel appraisal, compensation issues as well
  as the subject and process of personnel development.

#### **Human Resource Management II**

On successful completion, students will be able to

- analyze the behavior of all stakeholders in organizations and underlying theories.
- explain the basics of individual behavior.
- explain behavior at the group level.
- understand the impact of organizational structure and culture on employee behavior and the role of human resource management in change processes.
- explain content and process theories of motivation.

# Links to other Modules within the Study Program

This module is similar to other modules in the field of Human Resources

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programms in the Human Resources field

## Human Resource Management I

Course Code: MWPM01-01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

#### **Course Description**

Human resources have become an essential strategic success factor for all companies. The Human Resource Management major allows to deepen the business knowledge in this area, which is crucial for a company's competitiveness. This course teaches the challenges of modern Human Resource Management in the areas of human resource strategy, human resource planning, human resource adjustment, human resource evaluation, remuneration as well as human resource development.

#### **Course Outcomes**

On successful completion, students will be able to

- assess the challenges of strategic human resources management.
- explain basic issues and sub-issues of workforce planning.
- explain workforce adjustment with the subcases of recruitment, selection, and release.
- explain the importance of employer branding and HR marketing.
- comprehend occasions and procedures of personnel appraisal, compensation issues as well as the subject and process of personnel development.

- 1. Personnel Management and Human Resource Management
  - 1.1 Delimitation of the Terms Used
  - 1.2 Influencing Factors and Perspectives of HRM
  - 1.3 Lines of Development of HRM
- 2. Strategic Human Resources Management
  - 2.1 Strategic Aspects of HRM
  - 2.2 Theory Models of Strategic HRM
  - 2.3 Strategic HRM in Corporate Practice
- 3. Personnel Planning
  - 3.1 Basic Questions of Personnel Planning
  - 3.2 Personnel Requirements Planning
  - 3.3 Staff Scheduling
  - 3.4 Personnel Cost Planning

- 4. Personnel Adjustment
  - 4.1 Recruitment
  - 4.2 Personnel Selection
  - 4.3 Staff Release
- 5. Assessment, Remuneration and Development of Personnel
  - 5.1 Personnel Appraisal
  - 5.2 Incentive and Remuneration
  - 5.3 Human Resources Development

#### **Compulsory Reading**

- Collings, D. G./Scullion, H. (2011): Global talent management. Routledge, New York.
- Dessler, G. (2015): Human Resource Management. Pearson Prentice Hall, New Jersey.
- Dowling, P. J./Engle, A. D./Festing, M. (2017): International Human Resource Management. Andover Cengage Learning, Hampshire.
- Mayrhofer, W./Farndale, E./Brewster, C. (2018): Handbook of Research on Comparative Human Resource Management. 2nd edition, Edward Elgar Publishing, Cheltenham.
- Wilkinson, A. (2009): The SAGE Handbook of Human Resource Management. SAGE Publications Ltd, Thousand Oaks, California.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods				
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab			
☐ Vodcast	☐ Guideline			
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed			
☑ Exam Template				

## Human Resource Management II

Course Code: MWPM02-01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

#### **Course Description**

In this course, relevant topics of Organizational Behavior are studied in depth. In the Anglo-Saxon world, Organizational Behavior is a natural part of the basic curriculum of social and economic science courses. Accordingly, the basic model and lines of development of Organizational Behavior are first dealt with in an overview. Furthermore, behavior is examined at the level of the individual, the group and the organization. The role of Human Resource Management in organizational change is also addressed. Finally, motivational foundations are considered in the form of content and process theories of motivation.

#### **Course Outcomes**

On successful completion, students will be able to

- analyze the behavior of all stakeholders in organizations and underlying theories.
- explain the basics of individual behavior.
- explain behavior at the group level.
- understand the impact of organizational structure and culture on employee behavior and the role of human resource management in change processes.
- explain content and process theories of motivation.

- Organizational Behavior
  - Basic Model of Organizational Behavior
  - Development Lines of the Organizational Behavior 1.2
  - Basic Assumptions of Organizational Behavior
- Fundamentals of Individual Behavior
  - Biographical Characteristics and Personality 2.1
  - 2.2 Emotions
  - Values and Attitudes
- Group and Team
  - 3.1 Groups and Teams
  - 3.2 Group Processes
  - 3.3 Explanatory Approaches for Behavior in Groups

- 4. The Organization
  - 4.1 Design Variables of the Organization
  - 4.2 Organizational Culture and Climate
  - 4.3 The Role of Human Resource Management in Organizational Change
- 5. Motives, Motivation and Motivation Theories
  - 5.1 Motives and Motivation
  - 5.2 Content Theories
  - 5.3 Process Theories

#### **Compulsory Reading**

- Buchanan, D. A./Huczynski, A. A. (2016): Organizational Behaviour. 9th edition, Pearson, Harlow (UK).
- Dessler, G. (2015): Human Resource Management. Pearson Prentice Hall, New Jersey.
- King, D./Lawley, S. (2016): Organizational Behaviour. 2nd edition, Oxford University Press, Oxford.
- Mayrhofer, W./Farndale, E./Brewster, C. (2018): Handbook of Research on Comparative Human Resource Management. Edward Elgar Publishing, Cheltenham.
- Robbins, S. P./Judge, T. A./Campbell, T. T. (2017): Organizational Behaviour. 2nd edition, Pearson, Harlow (UK).

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints®	□ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Human Resource Management: Practice

Module Code: DLMBAEHRMP

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

#### **Module Coordinator**

Prof. Dr. Michaela Moser (Talent Management & HR Development) / Dr. Anna Meindl (Project: Human Resources Management)

## **Contributing Courses to Module**

- Talent Management & HR Development (DLMTUP01\_E)
- Project: Human Resources Management (DLMFPM01\_E)

Module Exam Type				
Module Exam Split Exam				
	Talent Management & HR Development			
	Study Format "Distance Learning": Written     Assessment: Case Study			
	<ul> <li>Project: Human Resources Management</li> <li>Study Format "Distance Learning": Written</li> </ul>			
Weight of Module	Assessment: Project Report			
see curriculum				

#### **Module Contents**

#### Talent Management & HR Development

- Theoretical Models of Organizational Development
- Theoretical Models of Change Management
- Tools and Methods
- The Praxis of Talent Management and its Organizational Implementation
- The Process of Success Control
- Talent Management in International Companies a comparative Analysis

#### **Project: Human Resources Management**

Project tasks on operational and strategic HR management in small, medium-sized and large companies on selected topics from the areas of HR planning, recruitment, staff deployment, HR marketing & employer branding, staff deployment, talent management and HR development, compensation & benefits, staff retention, staff release, HR controlling, ethics in HR management, international HR management and digitalization in HR management.

#### **Learning Outcomes**

#### **Talent Management & HR Development**

On successful completion, students will be able to

- put talent management and HR development in the overall context of human resources management.
- define the ethical framework of talent management and HR development.
- explain the goals, methods and tools of talent management and HR development.
- identify the current challenges and changes of talent management and HR development both within the national as well as international context.
- understand the various ways of talent management and HR development.
- explain the tools that measure talent management and people development success, as well as the difficulties involved.
- describe specific examples as well as best practices of the application of talent management and HR development.

#### **Project: Human Resources Management**

On successful completion, students will be able to

- analyze and solve operational and strategic issues of human resource management in small, medium and large enterprises and develop recommendations for actionsand implementation.
- apply existing theoretical knowledge of human resource management within a project work on the topics of human resource planning, recruitment, staff deployment, human resource marketing & employer branding, staff deployment, talent management and human resource development, compensation & benefits, staff retention, staff release, human resource controlling, ethics in human resource management, international human resource management and digitalization in human resource management.
- assess the internal and external challenges facing the company with respect to the project and derive as well as implement recommendations for action.
- assess the discrepancy between theory and practical application of human resource management models, tools, methods and strategies.
- justify the elaboration of the human resource project in a conclusive manner in a project report on the basis of a concrete entrepreneurial initial situation.
- assess central instruments and methods of human resource management with regard to their suitability and applicability in a corporate context and, in a further step, transfer them to a company within the framework of a project.
- use their acquired methodological skills to design and implement a concrete
- project.

# Links to other Modules within the Study Program

This module is similar to other modules in the field of Human Resources

#### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Human Resources field

## Talent Management & HR Development

Course Code: DLMTUP01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

#### **Course Description**

Demographic change has forced companies to find, nurture, develop and retain their talent. As a result, the HR manager must continuously revise and organize talent management and development as efficiently as possible. The course is designed to help students understand the importance of talent management and human resource management and to teach them the tools necessary to implement activities related to talent management and human resource development.

#### **Course Outcomes**

On successful completion, students will be able to

- put talent management and HR development in the overall context of human resources management.
- define the ethical framework of talent management and HR development.
- explain the goals, methods and tools of talent management and HR development.
- identify the current challenges and changes of talent management and HR development both within the national as well as international context.
- understand the various ways of talent management and HR development.
- explain the tools that measure talent management and people development success, as well as the difficulties involved.
- describe specific examples as well as best practices of the application of talent management and HR development.

- 1. Fundamentals of Talent Management and Human Resources Development
  - 1.1 Concepts and Definitions
  - 1.2 Basic Legal Regulations
  - 1.3 The Challenge of Demographic Change
  - 1.4 Ethical Frameworks
- 2. Competence and Performance Management
  - 2.1 Competence and Skills Management
  - 2.2 Performance and Potential

- 3. E-learning and Blended Learning
  - 3.1 Special Characteristics and Framework Conditions
  - 3.2 Planning, Design and Control
  - 3.3 IT Basics
- 4. Management Development
  - 4.1 Leadership Development
  - 4.2 360° Feedbacks
  - 4.3 Coaching and Mentoring
- 5. Talent Relationship Management
  - 5.1 Target Group Definition
  - 5.2 Employer Branding and Employer Promise
  - 5.3 Search Strategies
  - 5.4 Candidate Experience and Engagement
- 6. Organizational Implementation
  - 6.1 Responsibilities and Structure
  - 6.2 The Role of Managers
  - 6.3 IT Systems for Talent Management and HR Development
  - 6.4 Talent Management and Human Resources Development in Large Companies and SMEs Using the Example of Financial Institutions/Banks
- 7. Monitoring the Success of Talent Management and HR Development
  - 7.1 Key Figures and KPIs
  - 7.2 The Problem of Success Control
- 8. International Talent Management and International Human Resources Development
  - 8.1 International HR Development
- 9. An Application Example: ABB
  - 9.1 Talent Management and Human Resources Development at ABB

#### **Compulsory Reading**

- Berger, L. A./Berger, D. A. (2010): The Talent Management Handbook. 2nd edition, McGraw-Hill,
   New York
- Boxall, P./Purcell, J. (2008): Strategy and Human Resource Management, 2nd edition, Palgrave Macmillan, Hampshire.
- Collings, D. G./ Scullion, H. (2011): Global talent management. Routledge, New York.
- Dessler, G. (2013): Human Resource Management. 13th edition, Prentice Hall, Boston.
- Fuentes, D. G. (2020): Rethinking Approaches to Succession Planning and Developing a Leadership Pipeline in Academic Pharmacy. American Journal of Pharmaceutical Education, 84(12), 1564–1566. Marchington, M./Wilkinson, A. (2008): Human Resource Management at Work, 4th edition, CIPD, London.
- Redman, T./Wilkinson, A. (2009): Contemporary Human Resource Management, 3rd edition. Harlow FT Prentice Hall, New Jersey.
- Scullion, H./Collings, D. G. (Hrsg.) (2011): Global Talent Management. Routledge, New York.
- Younas, M./Bari, M. W. (2020): The relationship between talent management practices and retention of generation "Y" employees: mediating role of competency development. Economic Research-Ekonomska Istrazivanja, 33(1), 1330–1353.

Study Format	Course Type
Distance Learning	Case Study

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
110 h	0 h	20 h	20 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

## Project: Human Resources Management

Course Code: DLMFPM01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

#### **Course Description**

On the basis of a selected project from company HR practice, students are enabled to deal with the current strategic and operational challenges of modern HR management. In doing so, the students' competencies are to be sharpened in terms of technical, methodological and also social aspects for initiating, designing and implementing reality and application-related projects in small, medium-sized and large companies in the field of strategic and operational HR management. With the help of a specific project, participants will be challenged to put themselves in the role of responsible human resources managers or speakers, to understand problems and to solve them using the concepts and methods of modern human resources and project management.

#### **Course Outcomes**

On successful completion, students will be able to

- analyze and solve operational and strategic issues of human resource management in small, medium and large enterprises and develop recommendations for actionsand implementation.
- apply existing theoretical knowledge of human resource management within a project work on the topics of human resource planning, recruitment, staff deployment, human resource marketing & employer branding, staff deployment, talent management and human resource development, compensation & benefits, staff retention, staff release, human resource controlling, ethics in human resource management, international human resource management and digitalization in human resource management.
- assess the internal and external challenges facing the company with respect to the project and derive as well as implement recommendations for action.
- assess the discrepancy between theory and practical application of human resource management models, tools, methods and strategies.
- justify the elaboration of the human resource project in a conclusive manner in a project report on the basis of a concrete entrepreneurial initial situation.
- assess central instruments and methods of human resource management with regard to their suitability and applicability in a corporate context and, in a further step, transfer them to a company within the framework of a project.
- use their acquired methodological skills to design and implement a concrete
- project.

#### Contents

Project report on operational and strategic human resource management in small, mediumsized and large companies on the topics of human resource planning, human resource recruitment, human resource deployment, human resource marketing & employer branding, talent management and human resource development, compensation & benefits, human resource retention, human resource release, human resource controlling, ethics in human resource management, international human resource management and digitalization in human resource management.

#### Literature

#### **Compulsory Reading**

- Dessler, G. (2015): Human resource management. Pearson Prentice Hal, New Jersey.
- Dowling, P. J./Engle, A. D./Festing, M. (2017): International human resource management. Andover Cengage Learning, Hampshire.
- Kerzner, H. (2013): Project Management Case Studies. 4th edition, John Wiley & Sons, New Jersey.
- Mayrhofer, W./Farndale, E./Brewster, C. (2018): Handbook of Research on Comparative Human Resource Management. Edward Elgar Publishing, Cheltenham (UK).
- Pratt, D. (2015): Great Lessons in Project Management. O´Reilly, Newton (Massachusetts).

Study Format	Course Type
Distance Learning	Project

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	20 h	0 h	0 h	140 h

Instructional Methods	
☐ Learning Sprints® ☐ Course Book ☐ Vodcast ☐ Shortcast ☐ Audio ☐ Exam Template	<ul><li>□ Review Book</li><li>□ Creative Lab</li><li>☑ Guideline</li><li>□ Live Tutorium/Course Feed</li></ul>

# Supply Chain and Sourcing Management

Module Code: MWCH\_E

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Sebastian Stütz (Global Supply Chain Management) / Prof. Dr. Hubert Vogl (Supply Chain Risk Management and Controlling)

## **Contributing Courses to Module**

- Global Supply Chain Management (MWCH01\_E)
- Supply Chain Risk Management and Controlling (MWCH02\_E)

Module Exam Type			
Module Exam	Split Exam		
	Global Supply Chain Management		
	Study Format "Fernstudium": Exam,     90 Minutes		
	<ul><li>Supply Chain Risk Management and Controlling</li><li>Study Format "Fernstudium": Exam,</li><li>90 Minutes</li></ul>		
Weight of Module			
see curriculum			

## **Module Contents**

## **Global Supply Chain Management**

- Value networks motives, typologies, goals
- Directions of impact of SCM strategies

## **Supply Chain Risk Management and Controlling**

- SCM instruments
- Controlling systems in value networks
- Risk management in value networks

## **Learning Outcomes**

## **Global Supply Chain Management**

On successful completion, students will be able to

- specify the goals and tasks of supply chain management and how it differs from pure logistics management.
- specify the tools and instruments for designing SCM.
- list possible measures to avoid obstacles in the implementation and operation of supply chains
- assess the potential impact of coordinating collaborations on supply chain management.
- name the basic supply, disposal and recycling strategies and indicate their contents.
- indicate the motives for quality management in SCM and the methods and instruments used.
- assess which business software can support and control the functions of the supply chain.

## **Supply Chain Risk Management and Controlling**

On successful completion, students will be able to

- assess tasks of the controlling department and evaluate problems in implementation of controlling systems in supply chains.
- assess the significance of key figures in supply chain controlling and know how these are used.
- reflect on instruments of SC controlling and determine combinations of classical and innovative controlling instruments.
- determine when SCM software is used in controlling and what is required for their implementation.
- explain the tools of controlling and apply them in practice.
- name and explain options that influence the success of a supply chain, why risk management is carried out within supply chains and compatible strategies for supply chains.
- understand the organizational design with System Dynamics and the use in the supply chain management.

## Links to other Modules within the Study Program

This module is similar to other modules in the fields of Transportation & Logistics

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Transport & Logistics fields

# Global Supply Chain Management

Course Code: MWCH01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

A problem-centered understanding of global value networks requires knowledge of their motives and goals. Furthermore, in view of the apparent diversity, it seems particularly useful to systematize these networks in certain typologies. On the basis of such systematizations it is then possible to systematize the spectrum of strategically relevant questions and design options in the field of SCM in a differentiated form. In addition, this also makes it possible to present the instrumental categories of SCM that are particularly relevant in this context.

#### **Course Outcomes**

On successful completion, students will be able to

- specify the goals and tasks of supply chain management and how it differs from pure logistics management.
- specify the tools and instruments for designing SCM.
- list possible measures to avoid obstacles in the implementation and operation of supply chains.
- assess the potential impact of coordinating collaborations on supply chain management.
- name the basic supply, disposal and recycling strategies and indicate their contents.
- indicate the motives for quality management in SCM and the methods and instruments used.
- assess which business software can support and control the functions of the supply chain.

## **Contents**

- 1. Motives and Effects of Logistics Value Networks
  - 1.1 What does Supply Chain Management mean?
  - 1.2 What is logistics management?
  - 1.3 Service providers in the supply chain
  - 1.4 Importance of Supply Chain Management
- 2. Typologies of SCM and design models
  - 2.1 Supply chain strategy
  - 2.2 Instruments for supply chain strategies
  - 2.3 Inventory Reduction in Warehouse Management
  - 2.4 Freight cost reduction within the framework of the transport cost policy
  - 2.5 Efficient Replenishment

- 3. Problem-oriented concepts and corresponding management concepts
  - 3.1 Problems in the supply chain
  - 3.2 Interfaces in the Supply Chain
  - 3.3 The Bullwhip Effect
  - 3.4 Collaborative Planning, Forecasting and Replenishment (CPFR)
- 4. Tasks and goals of the SCM
  - 4.1 Tasks in Supply Chain Management
  - 4.2 Goals of Supply Chain Management
  - 4.3 Sustainable Supply Chain Management (SSCM
- 5. Cooperation and coordination
  - 5.1 The Corporate Strategy
  - 5.2 Sensible corporate strategies: Instruments and Methods
  - 5.3 Strategic alliances in the context of supply chain management
  - 5.4 Requirements for successful cooperation
  - 5.5 Bundling of activities and process adjustments in cooperations
- 6. Supply, disposal and recycling strategies
  - 6.1 Supply strategies
  - 6.2 Disposal strategies
  - 6.3 Recycling, reuse/recycling and the corresponding strategies
- 7. Quality assurance
  - 7.1 Quality management systems
  - 7.2 Quality Assurance in Supply Chain Management
  - 7.3 Methods in quality management
  - 7.4 Instruments in organizational design
- 8. Information retrieval
  - 8.1 Information Technology in Supply Chain Management
  - 8.2 Business Software
  - 8.3 The Balanced Scorecard as a control instrument

## Literature

## **Compulsory Reading**

## **Further Reading**

- Arndt, H. (2010): Supply Chain Management. Optimization of logistic processes. 5th edition, Gabler, Wiesbaden.
- Chopra, S./Meindl, P. (2007): Supply Chain Management. Strategy, Planning and Operation. 3rd edition, Pearson, New Jersey.
- Cohen, S./Roussel, J. (2006): Strategic Supply Chain Management. Springer, Berlin/ Heidelberg.
- Corsten, H./Gössinger, R. (2008): Introduction to Supply Chain Management. 2nd edition, Oldenbourg, Munich.
- Handfield, R. B./Nichols, E. L. (2008): Introduction to Supply Chain Management. Prentice Hall, Upper Saddle River, NJ.
- Petry, T. (2006): Network strategy. Core of an integrated management of corporate networks. Gabler, Wiesbaden.
- Pfohl, H. C. (2009): Logistics systems. Fundamentals of Business Administration. 8th Edition, Springer, Berlin.
- Schulte, C. (2009): Logistics. Ways to optimize the supply chain. 5th edition, Vahlen, Munich.
- Simchi-Levi, D./Kaminsky, P./Simchi-Levi, E. (2008): Designing and Managing the Supply Chain. Concepts, Strategies and Case Studies. 3rd edition, McGraw-Hill, Boston.
- Werner, H. (2010): Supply Chain Management. Basics, strategies, instruments. Springer, Berlin.

## **Study Format Fernstudium**

Study Format	Course Type
Fernstudium	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☑ Vodcast	☐ Guideline
☐ Shortcast ☑ Audio	☐ Live Tutorium/Course Feed
☑ Exam Template	

# Supply Chain Risk Management and Controlling

Course Code: MWCH02\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

Global value networks prove to be particularly dynamic and sometimes fragile constructions. This observation draws attention to two important aspects of SCM: On the one hand, the need to develop an effective and efficient controlling system for such supply chains. The controlling information generated via key figure systems can make important contributions to the stabilization and optimization of the value-added network. On the other hand, to the necessity of a systematic risk management, with the focus on early identification and future prospects.

#### **Course Outcomes**

On successful completion, students will be able to

- assess tasks of the controlling department and evaluate problems in implementation of controlling systems in supply chains.
- assess the significance of key figures in supply chain controlling and know how these are used.
- reflect on instruments of SC controlling and determine combinations of classical and innovative controlling instruments.
- determine when SCM software is used in controlling and what is required for their implementation.
- explain the tools of controlling and apply them in practice.
- name and explain options that influence the success of a supply chain, why risk
   management is carried out within supply chains and compatible strategies for supply chains.
- understand the organizational design with System Dynamics and the use in the supply chain management.

## Contents

- 1. Basics of controlling in and of supply chains
  - 1.1 Conceptual design of controlling in supply chain management systems
  - 1.2 The importance of controlling in the supply chain
  - 1.3 Cost Tracking
  - 1.4 Different types of supply chain controlling
- 2. Key figure systems in the supply chain 2.1 Meaning of key figures
  - 2.1 Types of key figures in the supply chain
  - 2.2 Visualization of key figures

- 3. Instruments in Supply Chain Controlling
  - 3.1 SCOR models as control instruments
  - 3.2 From traditional to innovative instruments
- 4. Controlling the Supply Chain in Connection with Information Technology
  - 4.1 ERP Systems
  - 4.2 CRM and SCM Systems
  - 4.3 Case study for the implementation of an SCM system
  - 4.4 Success Factors for the Use of SCM Software
- 5. Tools of Controlling in the Supply Chain
  - 5.1 Activity-Based Costing
  - 5.2 Benchmarking
- 6. Risk Management in the Supply Chain
  - 6.1 Risks in the Supply Chain
  - 6.2 Sources of risk in the supply chain
  - 6.3 Risks and Business Success
- 7. Risk policy strategies in the supply chain
  - 7.1 Risk Management within the Supply Chain
  - 7.2 Risk Analysis
  - 7.3 Risk Assessment
  - 7.4 Risk provisioning
- 8. Organizational design through systems thinking and simulation approaches
  - 8.1 Fundamentals of organizational design
  - 8.2 System Dynamics: System thinking and simulation
  - 8.3 Active Data Warehousing as a technological approach for supply chain controlling and risk management

## Literature

## **Compulsory Reading**

## **Further Reading**

- Chopra, S./Meindl, P. (2007): Supply Chain Management. Strategy, Planning and Operation. 3rd edition, Pearson, New Jersey.
- Cohen, S./Roussel, J. (2006): Strategic Supply Chain Management. Springer, Berlin/ Heidelberg.
- Corsten, H./Gössinger, R. (2008): Introduction to Supply Chain Management. 2nd edition, Oldenbourg, Munich.
- Handfield, R. B./Nichols, E. L. (2008): Introduction to Supply Chain Management. Prentice Hall, Upper Saddle River, NJ.
- Petry, T. (2006): Network strategy. Core of an integrated management of corporate networks. Gabler, Wiesbaden.
- Pfohl, H. C. (2009): Logistics systems. Fundamentals of Business Administration. 8th edition, Springer, Berlin.
- Schulte, C. (2009): Logistics. Ways to optimize the supply chain. 5th edition, Vahlen, Munich.
- Simchi-Levi, D./Kaminsky, P./Simchi-Levi, E. (2008): Designing and Managing the Supply Chain. Concepts, Strategies and Case Studies. 3rd edition, McGraw-Hill, Boston.

## **Study Format Fernstudium**

Study Format	Course Type
Fernstudium	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>☑ Vodcast</li> <li>□ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

# Aspects of International Management

Module Code: DLMBAEAIM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Jürgen Matthias Seeler (Managing in a Global Economy) / Prof. Dr. Markus Prandini (Seminar: Current Issues in International Management)

## **Contributing Courses to Module**

- Managing in a Global Economy (DLMBGE01)
- Seminar: Current Issues in International Management (DLMINTSATIM01\_E)

Module Exam Type				
Module Exam	Split Exam			
	<ul> <li>Managing in a Global Economy</li> <li>Study Format "myStudies": Exam, 90 Minutes</li> <li>Study Format "Distance Learning": Exam, 90 Minutes</li> <li>Seminar: Current Issues in International Management</li> <li>Study Format "myStudies": Written</li> </ul>			
	Assessment: Research Essay • Study Format "Distance Learning": Written Assessment: Research Essay			
Weight of Module				
see curriculum				

## **Module Contents**

## Managing in a Global Economy

- 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

## Seminar: Current Issues in International Management

In the seminar "Current Issues in International Management", students deal with the opportunities and challenges facing internationally operating companies. The focus is on management and leadership skills that are important and necessary for successful work in an international environment.

## **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.

## Seminar: Current Issues in International Management

On successful completion, students will be able to

- purpose fully apply management and leadership skills for work in an international environment.
- classify significant developments and trends in the international environment and to derive objectives for the international strategic positioning of a company.
- develop internationalization strategies in an appropriate and effective way for companies of different sizes and in different sectors.
- describe internationalization processes in an effective and efficient way on the functional level of a company.
- justify suitable market selection and market entry strategies in foreign markets on the basis of existing capacities and resources of a company.
- to recognize intercultural characteristics and business practices in international business and to harmonize them with their own values and norms.

# 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 IU International University of Applied Sciences

All Master Programs in the Business & Management fields.

# Managing in a Global Economy

Course Code: DLMBGE01

Study Level	Language of Instruction	Contact Hours	СР	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., & Rosenzwig, 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	Course Type
myStudies	Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
<ul> <li>□ Learning Sprints®</li> <li>☑ Course Book</li> <li>□ Vodcast</li> <li>☑ Shortcast</li> <li>☑ Audio</li> <li>☑ Exam Template</li> </ul>	☐ Review Book ☐ Creative Lab ☐ Guideline ☐ Live Tutorium/Course Feed

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload						
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h	

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Seminar: Current Issues in International Management

Course Code: DLMINTSATIM01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

The international orientation of economies and enterprises has steadily increased since the 1950s. This has also increased the demands on managers to operate successfully not only in their home market, but also in an ever more globalized economy. The expansion into international markets poses a number of challenges for companies which, in most cases, cannot be mastered with the business practices tried and tested in the home market. The seminar "Current Issues in International Management" promotes the development of students' competencies to understand the cultural, social, economic and political context of other countries in all its diversity and complexity as the basis for successful international business activities and to incorporate this knowledge into business management decisions.

## **Course Outcomes**

On successful completion, students will be able to

- purpose fully apply management and leadership skills for work in an international environment.
- classify significant developments and trends in the international environment and to derive objectives for the international strategic positioning of a company.
- develop internationalization strategies in an appropriate and effective way for companies of different sizes and in different sectors.
- describe internationalization processes in an effective and efficient way on the functional level of a company.
- justify suitable market selection and market entry strategies in foreign markets on the basis of existing capacities and resources of a company.
- to recognize intercultural characteristics and business practices in international business and to harmonize them with their own values and norms.

#### **Contents**

In the seminar "Current Issues in International Management", students deal with the opportunities and challenges facing internationally operating companies. The focus is on management and leadership skills that are important and necessary for successful work in an international environment. Thematically, the seminar focuses on developments and trends in the international business environment, strategies and processes of internationalization, market selection and market entry strategies in foreign markets, operative implementation of an internationalization strategy in individual functional areas as well as cultural and ethical conflict potential of international business activities.

## Literature

## **Compulsory Reading**

## **Further Reading**

- Cavusgil, S.T., Knight, G. & Riesenberger, J.R. (2019): International Business: The New Realities. 5th (Global) Edition. Pearson, Harlow England.
- Collinson, S., Rugman, A. M., & Narula, R. (2017): International business. Pearson, Harlow England.
- Deresky, H. (2017): International Management: Managing Across Borders and Cultures. 9th Edition, Pearson Education Limited, Harlow.
- Khanna, T. (2014): Contextual Intelligence. Harvard Business Review. https://hbr.org/2014/09/contextual-intelligence [letzter Zugriff: 10.12.2020].
- Thomas, D.C. & Inkson, K. (2017): Cultural Intelligence: Surviving and Thriving in the Global Village. 3rd Edition, Berrett-Koehler Publishers, Oakland.

## **Study Format myStudies**

Study Format	Course Type
myStudies	Seminar

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☐ Shortcast ☐ Audio	☐ Live Tutorium/Course Feed
☐ Exam Template	

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Seminar

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	□ Review Book □ Creative Lab
□ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
□ Exam Template	

# Entrepreneurial Ecosystems

Module Code: DLMBAEEES

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Markus Prandini (Innovation and Entrepreneurship Ecosystems) / Prof. Dr. Markus Prandini (Entre- and Intrapreneurship)

## Contributing Courses to Module

- Innovation and Entrepreneurship Ecosystems (DLMIEEIEE01)
- Entre- and Intrapreneurship (DLMIEEEIS01)

Module Exam Type			
Module Exam	Split Exam		
	Innovation and Entrepreneurship Ecosystems		
	• Study Format "Distance Learning": Exam, 90 Minutes (100)		
	Entre- and Intrapreneurship		
	• Study Format "Distance Learning": Exam, 90 Minutes (100)		
Weight of Module			
see curriculum			

## **Module Contents**

## **Innovation and Entrepreneurship Ecosystems**

- Fundamentals of Innovation and Entrepreneurship
- Significance of Innovation for Growth and Prosperity
- Significance of Entrepreneurship for Growth and Prosperity
- Fundamentals of Innovation and Entrepreneurship Ecosystems
- Sectoral Innovation and Entrepreneurship Ecosystems
- Geographical Innovation and Entrepreneurship Ecosystems

## **Entre- and Intrapreneurship**

- Fundamentals of Entrepreneurship
- Fundamentals of Intrapreneurship
- Entrepreneurs and Intrapreneurs
- Corporate Innovation Management
- Methods of Innovation Management
- Innovation Management in Practice

## **Learning Outcomes**

## **Innovation and Entrepreneurship Ecosystems**

On successful completion, students will be able to

- define and explain the main characteristics, functions and drivers of innovation and entrepreneurship.
- determine the significance and role of innovation and entrepreneurship for the growth and prosperity of a society and of businesses.
- explain the goals, characteristics and actors of innovation and entrepreneurship ecosystems as a driver to generate new ideas and bring these to commercial reality.
- illustrate the functions and potentials of innovation and entrepreneurship ecosystems in the industry and service sector as well as in the digital economy.
- analyze the historical background and the characteristics of main geographical innovation and entrepreneurship ecosystems.

## **Entre- and Intrapreneurship**

On successful completion, students will be able to

- define the motives, goals and relevance of entrepreneurship as a driver for economic wealth and social prosperity.
- determine the motives, goals and relevance of intrapreneurship as a driver for creating a competitive advantage for an organization.
- analyze the preconditions and determinants that shape an entre- and intrapreneurial mindset.
- explain the types, drivers and success factors of corporate innovation as well as the management practices to foster innovation.
- apply main management methods to create, discover and realize business opportunities.
- derive best-practice learnings from the innovation management of existing companies for own business ventures and innovation activities.

# 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 IU International University of Applied Sciences

All Master Programs in the Business & Management field

# Innovation and Entrepreneurship Ecosystems

**Course Code: DLMIEEIEE01** 

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

Innovation and entrepreneurship are main drivers for economic growth and prosperity. Both are closely interrelated to one another. It is the entrepreneurial mindset that builds the foundation for the continued creation of all forms and dimensions of innovation. Innovation and entrepreneurship ecosystems have proven to be a powerful catalyst for both innovation and entrepreneurship. An ecosystem is like a complex multi-actor network where the dynamic interaction of human capital, financial resources, physical and non-physical infrastructure and regulatory policies play a vital role to generate new ideas and bring these to commercial reality. This course provides the students with an in-depth view on the significance and role of innovation and entrepreneurship for the growth and prosperity of a society. The course highlights the general characteristics and functionalities of innovation and entrepreneurship ecosystems and illustrates the concept of ecosystems on a sectoral and geographical level. Upon completion of this course the students will be able to make use of ecosystems for their own entrepreneurial ventures or the innovation activities of the organizations where they are active.

## **Course Outcomes**

On successful completion, students will be able to

- define and explain the main characteristics, functions and drivers of innovation and entrepreneurship.
- determine the significance and role of innovation and entrepreneurship for the growth and prosperity of a society and of businesses.
- explain the goals, characteristics and actors of innovation and entrepreneurship ecosystems as a driver to generate new ideas and bring these to commercial reality.
- illustrate the functions and potentials of innovation and entrepreneurship ecosystems in the industry and service sector as well as in the digital economy.
- analyze the historical background and the characteristics of main geographical innovation and entrepreneurship ecosystems.

#### **Contents**

- 1. Fundamentals of Innovation and Entrepreneurship
  - 1.1 Definition, Functions and Characteristics of Innovation
  - 1.2 Definition, Functions and Characteristics of Entrepreneurship
  - 1.3 Economic, Technological and Social Drivers of Innovation and Entrepreneurship

- 2. Significance of Innovation for Growth and Prosperity
  - 2.1 Macro Perspective: Significance and Role of Innovation for Society
  - 2.2 Micro Perspective: Significance and Role of Innovation for Businesses
  - 2.3 Assessment and Measurement of Innovation
- 3. Significance of Entrepreneurship for Growth and Prosperity
  - 3.1 Macro Perspective: Significance and Role of Entrepreneurship for Society
  - 3.2 Micro Perspective: Significance and Role of Entrepreneurship for Businesses
  - 3.3 Assessment and Measurement of Entrepreneurship
- 4. Fundamentals of Innovation and Entrepreneurship Ecosystems
  - 4.1 Goals and Objectives of Innovation and Entrepreneurship Ecosystems
  - 4.2 Characteristics of Innovation and Entrepreneurship Ecosystems
  - 4.3 Actors in Innovation and Entrepreneurship Ecosystems
- 5. Sectoral Innovation and Entrepreneurship Ecosystems
  - 5.1 Industry Innovation and Entrepreneurship Ecosystems
  - 5.2 Service Innovation and Entrepreneurship Ecosystems
  - 5.3 Digital Innovation and Entrepreneurship Ecosystems
- 6. Geographical Innovation and Entrepreneurship Ecosystems
  - 6.1 Silicon Valley (USA)
  - 6.2 Greater Bay Area (China)
  - 6.3 Tel Aviv (Israel)

## Literature

## **Compulsory Reading**

## **Further Reading**

- Drucker, P. (2006). Innovation and Entrepreneurship. Reprint edition, Harper Business, New York
- Engel, J. S. (2016). Global Clusters of Innovation: Entrepreneurial Engines of Economic Growth Around the World. Reprint edition, Edward Elgar Publishing, Cheltenham Glos.
- Mazzarol, T. & Reboud, S. (2020). Entrepreneurship and Innovation. Theory, Practice and Context. Springer, Singapore.
- Schwarzkopf, C. (2016). Fostering Innovation and Entrepreneurship: Entrepreneurial Ecosystem and Entrepreneurial Fundamentals in the USA and Germany. Springer Fachmedien, Wiesbaden.
- World Economic Forum (2019). Accelerating the Emergence and Development of Innovation Ecosystems through Procurement: A Toolkit. WEF, Geneva.

## **Study Format Distance Learning**

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence Tutorial Self Test Practical Experience		Practical Experience	Hours Total	
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast ☑ Audio	☑ Live Tutorium/Course Feed
☑ Exam Template	

## Entre- and Intrapreneurship

**Course Code: DLMIEEEIS01** 

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

## **Course Description**

Entre- and intrapreneurship are the engine for economic wealth and social progress and a core element of the innovation capacity of a company. Whereas entrepreneurship refers to entrepreneurs who design and build up an own business, intrapreneurship is related to individuals who work on developing new ideas and products within the confines of the business that they already work at. Intrapreneurs include any person within the company that applies entrepreneurial skills, vision, and forward thinking into the role that they have in the company. Both entrepreneurs and intrapreneurs have a drive to foster innovation whenever possible, which is why they share many traits between them, such as persistence, determination, goal orientation, opportunity seeking and hard working. A main difference lies in the risk involved in being an entrepreneur or intrapreneur. Entrepreneurs are required to take on all of the risk that comes along with developing a business, which means that the losses can be significant if failure occurs. However, the rewards can also be practically incalculable. As for intrapreneurs, the risks are minimal, which is also true of the rewards. This course introduces the students to these commonalities and differences of entre- and intrapreneurship. The course is designed to support the students in finding and determining their own motives and goals of becoming an entre- or intrapreneur. The main characteristics of entre- and intrapreneurship are discussed and related to the methods and practices of innovation management. An insight into the innovation management of well-known companies fosters the transfer of the theoretical concepts of entreand intrapreneurship to a practical context.

## **Course Outcomes**

On successful completion, students will be able to

- define the motives, goals and relevance of entrepreneurship as a driver for economic wealth and social prosperity.
- determine the motives, goals and relevance of intrapreneurship as a driver for creating a competitive advantage for an organization.
- analyze the preconditions and determinants that shape an entre- and intrapreneurial mindset.
- explain the types, drivers and success factors of corporate innovation as well as the management practices to foster innovation.
- apply main management methods to create, discover and realize business opportunities.
- derive best-practice learnings from the innovation management of existing companies for own business ventures and innovation activities.

## Contents

- 1. Fundamentals of Entrepreneurship
  - 1.1 Definition of Entrepreneurship
  - 1.2 Motives, Goals and Relevance of Entrepreneurship
  - 1.3 Relation of Entrepreneurship and Innovation
- 2. Fundamentals of Intrapreneurship
  - 2.1 Definition of Intrapreneurship
  - 2.2 Motives, Goals and Relevance of Intrapreneurship
  - 2.3 Relation of Intrapreneurship and Innovation
- 3. Entrepreneurs and Intrapreneurs
  - 3.1 Characteristics of Entrepreneurs
  - 3.2 Characteristics of Intrapreneurs
  - 3.3 Types of Entrepreneurs and Intrapreneurs
- 4. Corporate Innovation Management
  - 4.1 Types of Corporate Innovations
  - 4.2 Drivers and Success Factors of Corporate Innovations
  - 4.3 Management of Corporate Innovation
- 5. Methods of Innovation Management
  - 5.1 Creation of Business Ideas
  - 5.2 Discovery of Business Opportunities
  - 5.3 Realization of Business Ventures
- 6. Innovation Management in Practice
  - 6.1 Innovation Management at Google
  - 6.2 Innovation Management at Siemens
  - 6.3 Innovation Management at Xiaomi

## Literature

## **Compulsory Reading**

## **Further Reading**

- Barringer, B.R. & Ireland, R.D. (2015). Entrepreneurship: Successfully Launching New Ventures. 5th Edition, Pearson, New York.
- Bessant, J. & Tidd, J. (2015). Innovation and Entrepreneurship. 3rd Edition, John Wiley & Sons, Chichester.
- Grant, A. (2016). Originals: How Non-Conformists Move the World. Viking, New York.
- Kaplan, J.M. & McGourty, J. (2020). Patterns of Entrepreneurship Management. 6th Edition, John Wiley & Sons, Chichester.
- Kuratko, D.F., Hornsby, J.S. & Goldsby, M.G. (2011). Innovation Acceleration: Transforming Organizational Thinking, Prentice Hall, Upper Saddle River.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	□ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Innovation and Design Lab

Module Code: DLMBAEIDL

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

### **Module Coordinator**

Prof. Dr. Mario Boßlau (Business Model Design) / Prof. Dr. Leonardo Riccardi (Design Thinking)

### **Contributing Courses to Module**

- Business Model Design (DLMIEEBMD01)
- Design Thinking (DLMBPDDT02)

Module Exam Type		
Module Exam	Split Exam	
	<u>Business Model Design</u>	
	• Study Format "Distance Learning": Written Assessment: Written Assignment (100)	
	Design Thinking	
	Study Format "Distance Learning": Written     Assessment: Project Report	
Weight of Module		
see curriculum		

### **Module Contents**

### **Business Model Design**

- Business Models and Business Modelling
- Selected Methods aiding Business Model Design
- Essential Elements of Business Models
- Specifics of Digital Business Models
- The Business Model Canvas by Osterwalder and Pigneur

### **Design Thinking**

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.

### **Learning Outcomes**

### **Business Model Design**

On successful completion, students will be able to

- remember the definitions and processes dealing with business modelling.
- understand and apply methods that are used for business model design.
- understand the essential elements of business models.
- remember and evaluate the specifics of digital business models.
- understand the business model canvas by Osterwalder and Pigneur and to develop and describe their "own" business model canvas in the course of their written assignment.

### **Design Thinking**

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.

# Links to other Modules within the Study Program

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

### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Business & Management and Design, Architecture & Construction fields

# Business Model Design

Course Code: DLMIEEBMD01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

The digital economy, encompassing topics like internet of things, business networks, digital platforms, platform-as-a-service offerings, etc. has led to the rise of new business models. Business models that were established in the past are often no longer suitable, as the way in which products are created, how customers are addressed, the sales model and cost structure and much more have changed in the course of digital transformation. This module therefore focusses on the elements of business models, and the methods how business models can be designed. The specifics of digital business models are outlined in a dedicated section as is the introduction of the business model canvas by Osterwalder and Pigneur.

#### **Course Outcomes**

On successful completion, students will be able to

- remember the definitions and processes dealing with business modelling.
- understand and apply methods that are used for business model design.
- understand the essential elements of business models.
- remember and evaluate the specifics of digital business models.
- understand the business model canvas by Osterwalder and Pigneur and to develop and describe their "own" business model canvas in the course of their written assignment.

### Contents

- 1. Business Models and Business Modelling
  - 1.1 Definitions: Use Case, Business Case and Business Model
  - 1.2 Introduction to Business Models
  - 1.3 The Process of Business Model Development
- 2. Selected Methods Aiding Business Model Design
  - 2.1 Design Thinking
  - 2.2 Open Innovation
  - 2.3 Customer Journey and Customer Experience
  - 2.4 Prototyping
  - 2.5 Multidisciplinary Teams

- 3. Essential Elements of Business Models
  - 3.1 Customer Segments
  - 3.2 Value Propositions
  - 3.3 Value Architecture: Offer, Distribution and Communication Channels, Customer Relationship, Value Chain, Core Capabilities, Key Activities, Key Partnerships
  - 3.4 Revenue Model: Revenue Sources, Cost Structure
- 4. Specifics of Digital Business Models
  - 4.1 Success Drivers of Digital Business Models
  - 4.2 Key Components of Digital Business Models
  - 4.3 Selling Results (instead of Products)
  - 4.4 Overcoming Previous Industry Boundaries
  - 4.5 Acting as a Network in the Market
  - 4.6 Availability instead of Ownership
  - 4.7 Digitization of Products and Services
- 5. The Business Model Canvas by Osterwalder and Pigneur
  - 5.1 The Business Model Canvas
  - 5.2 Similarities in Business Models
  - 5.3 Designing Business Models
  - 5.4 Strategic Areas of Business Models
  - 5.5 The Business Model Design Process

### Literature

### **Compulsory Reading**

- Aagaard, Annabeth (Hg.) (2018): Digital Business Models. Driving Transformation and Innovation. Springer International Publishing. 1st edition 2019. Cham: Springer International Publishing; Palgrave Macmillan, Basingstoke (UK).
- Osterwalder, Alexander; Pigneur, Yves (2013): Business Model Generation. A Handbook for Visionaries, Game Changers, and Challengers. 1st edition. John Wiley & Sons, New York, NY.
- Oswald, Gerhard; Kleinemeier, Michael (Hg.) (2018): Shaping the Digital Enterprise. Trends and Use Cases in Digital Innovation and Transformation. Springer International Publishing. Softcover reprint of the original 1st edition 2017. Cham: Springer International Publishing; Springer, Basel.
- Wirtz, Bernd W. (2019): Digital Business Models. Concepts, Models, and the Alphabet Case Study (Progress in IS). Springer International Publishing, Basel.
- Wirtz, Bernd W. (2020): Business Model Management. Design Process Instruments. 2nd edition 2020. Cham: Springer International Publishing (Springer Texts in Business and Economics), Basel.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

# Design Thinking

Course Code: DLMBPDDT02

Study Level	Language of Instruction	Contact Hours	СР	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**

- IDEO.org. (2015). The Field Guide to Human-Centered Design. A step-by-step guide that will get you solving prob-lems 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 pro-duce change, drive new ideas, and deliver meaningful solutions.
- Lewrick, M., Link, P., Leifer, L. J., & Langensand, N. (2018). The design thinking playbook: mindful digital transfor-mation of teams, products, services, businesses and ecosystems. John Wiley & Sons.

Study Format	Course Type	
Distance Learning	Project	

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

Student Workload  Self Study Presence Tutorial Self Test Practical Experience Hours Total							

Instructional Methods				
☐ Learning Sprints®☐ Course Book	□ Review Book □ Creative Lab			
□ Vodcast	☑ Guideline			
☐ Shortcast	☐ Live Tutorium/Course Feed			
☐ Audio				
□ Exam Template				

# E-Sports-Management

### Module Code: DLMBAEESM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

### **Module Coordinator**

N.N. (Introduction to E-Sports Management) / N.N. (Project: E-Sports Management)

### Contributing Courses to Module

- Introduction to E-Sports Management (DLMBAEESM01)
- Project: E-Sports Management (DLMBAEESM02)

Module Exam Type	odule Exam Type			
Module Exam	Split Exam			
	<ul> <li>Introduction to E-Sports Management</li> <li>Study Format "Distance Learning": Exam or Written Assessment: Written Assignment, 90 Minutes</li> </ul>			
	Project: E-Sports Management  • Study Format "Distance Learning": Written Assessment: Project Report			
Weight of Module see curriculum				

### **Module Contents**

### **Introduction to E-Sports Management**

- Classification of E-Sports in Sports Management
- Organization of E-Sports in Germany and Globally
- Financing E-Sports
- Media Exploitation of E-Sports
- Role of Individual Stakeholders in E-Eports
- Relationship between Sport and E-Sport and the Possible Role of the DOSB

### **Project: E-Sports Management**

### **Learning Outcomes**

### **Introduction to E-Sports Management**

On successful completion, students will be able to

- understand the scope of duties of an e-sports manager.
- apply the most important tools and mechanisms of e-sports management.
- embed e-sports management in the overall context of sport.
- apply the methods of e-sports management in practice.
- distinguish the actors in e-sports management from one another.
- adapt the theoretical fundamentals into practice.

### **Project: E-Sports Management**

On successful completion, students will be able to

- use the theoretical basics of project management in the practice of project management.
- use the basic instruments and methods of e-sports management.
- structure and approach and implement a scientific project.
- grasp the facets of e-sports and to develop solution-oriented and strategic measures.

# 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 IU International University of Applied Sciences

All Master Programs in the Business & Management field

# Introduction to E-Sports Management

Course Code: DLMBAEESM01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

### **Course Description**

In this course the most important basics of e-sports management are shown. E-sports management is an area of sports management that is currently growing rapidly. Current developments in particular mean that e-sports management will become an important pillar in future fields of work. E-sports management is an essential part of sports management. In the past few years, e-sports has developed into a strong and growing market. The organizational form of e-sports differs greatly from classic sports and therefore a separate consideration of the possibilities of organizing e-sports is required. Professional e-sports are subject to high financial requirements that must be met. Similar to professional sport, e-sport is also about refinancing and marketing the product. In turn, a distinction can be made between the marketing of e-sports and marketing through e-sports. Various actors play an important role in this construct, and these roles and their influence are also considered.

### **Course Outcomes**

On successful completion, students will be able to

- understand the scope of duties of an e-sports manager.
- apply the most important tools and mechanisms of e-sports management.
- embed e-sports management in the overall context of sport.
- apply the methods of e-sports management in practice.
- distinguish the actors in e-sports management from one another.
- adapt the theoretical fundamentals into practice.

### Contents

- 1. Classification of E-Sports in Sports Management
  - 1.1 Development and Definition of E-Sports
  - 1.2 E-Sports in the Context of Classic Sports
  - 1.3 Evolution of E-Sports within Sports Management
- 2. Organization of E-Sports in Germany and Globally
  - 2.1 The Structures of E-Sports in Germany
  - 2.2 The Structures of E-Sports in Selected Countries
  - 2.3 Relevant Forms of Organization in Professional E-Sports

- 3. Financing E-Sports
  - 3.1 The Possibilities of Refinancing E-Sports in Practice
  - 3.2 Perspectives for E-Sports Funding or Sanctioning by the Public Sector
- 4. Media Exploitation of E-Sports
  - 4.1 Marketing Forms in Sport
  - 4.2 Marketing Opportunities for E-Sports
  - 4.3 E-Sports as an Advertising Medium
- 5. Role of Individual Stakeholders in E-Eports
  - 5.1 Players in the E-Sports Market
  - 5.2 Opportunities and Risks for the Individual Actors
  - 5.3 The Professional Field of the E-Sports Manager
- 6. Relationship between Sport and E-Sport and the Possible Role of the DOSB
  - 6.1 E-Sports Management in Popular Sports
  - 6.2 E-Sports Management in Professional Sports
  - 6.3 E-Sports in the View of the DOSB

### Literature

### **Compulsory Reading**

- Collis, W. (2020). The Book of Esports: The Definitive Guide to Competitive Video. Rosetta Books, New York.
- Diegel, M. (2021). Markenerweiterungsstrategien professioneller Sportvereine im eSport. Springer Gabler, Wiesbaden.
- Hoffmann, A. (2020). Das Phänomen E-Sport. Meyer und Meyer Verlag., Aachen.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination	
Examination Admission Requirements	BOLK: yes Course Evaluation: no
Type of Exam	Exam or Written Assessment: Written Assignment, 90 Minutes

Student Workload								
Self Study Presence Tutorial Self Test Practical Experience Hours Total								
100 h	0 h	25 h	25 h	0 h	150 h			

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	☐ Reader
☑ Exam Template	□ Slides

# Project: E-Sports Management

Course Code: DLMBAEESM02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

### **Course Description**

E-Sports Management lives from being close to practice. Due to the constant developments and the diverse possibilities that arise on the e-sports market, a practical view is of particular relevance. The course includes various tasks from e-sports management. The topics are dealt with as part of the project, as they have an outstanding priority for e-sports management. The funding of e-sports is an important issue that can be looked at from different perspectives. The marketing of e-sports and the associated planning and organization of e-sports events are also of particular importance. Another focus is on the implementation of e-sports in classic sports in Germany.

#### **Course Outcomes**

On successful completion, students will be able to

- use the theoretical basics of project management in the practice of project management.
- use the basic instruments and methods of e-sports management.
- structure and approach and implement a scientific project.
- grasp the facets of e-sports and to develop solution-oriented and strategic measures.

### **Contents**

The course includes various tasks from e-sports management. The topics are dealt with as part of the project, as they have an outstanding priority for e-sports management. The funding of e-sports is an important issue that can be looked at from different perspectives. The marketing of e-sports and the associated planning and organization of e-sports events are also of particular importance. Another focus is on the implementation of e-sports in classic sports in Germany.

### Literature

### **Compulsory Reading**

- Collis, W. (2020). The Book of Esports: The Definitive Guide to Competitive Video. Rosetta Books, New York.
- Diegel, M. (2021). Markenerweiterungsstrategien professioneller Sportvereine im eSport. Springer Gabler, Wiesbaden.
- Hoffmann, A. (2020). Das Phänomen E-Sport. Meyer und Meyer Verlag, Aachen.

Study Format	Course Type
Distance Learning	Project

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☐ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	☐ Reader
☐ Exam Template	☐ Slides

# E-Sports Marketing and Event Management

Module Code: DLMBAEESME

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

### **Module Coordinator**

N.N. (Media and Marketing Management in E-Sports) / N.N. (E-Sports Event Management)

### **Contributing Courses to Module**

- Media and Marketing Management in E-Sports (DLMBAEESME01)
- E-Sports Event Management (DLMBAEESME02)

Module Exam Type		
Module Exam	Split Exam	
	<ul> <li>Media and Marketing Management in E-Sports</li> <li>Study Format "Distance Learning": Exam or Written Assessment: Written Assignment, 90 Minutes</li> </ul>	
	<ul> <li>E-Sports Event Management</li> <li>Study Format "Distance Learning": Exam or Written Assessment: Written Assignment, 90 Minutes</li> </ul>	
Weight of Module	-1	
see curriculum		

### **Module Contents**

### **Media and Marketing Management in E-Sports**

- Basics of Sports Marketing in the Context of E-Sports
- Media and their Management with Consideration of E-Sports
- Brand Management in Sports
- Importance of Digital Media and their Development
- Mobile and Social Media Management

### **E-Sports Event Management**

- Event Marketing Basics
- Relationship Management
- Planning Process for Strategic Event Marketing
- Companies as Sports Sponsors
- The Sponsor as a Provider of Communication Services

### **Learning Outcomes**

### **Media and Marketing Management in E-Sports**

On successful completion, students will be able to

- deal independently and reflectively with the field of sports marketing in relation to e-sports.
- highlight the important aspects of the media market with respect to sports as well as the esports market.
- monitor and evaluate the development of digital media and draw conclusions for the sports and e-sports market.
- outline the importance of brand management in line with any public relations activities.
- outline the concepts of mobile, social and influencer management and highlight the implications for e-sports.

### **E-Sports Event Management**

On successful completion, students will be able to

- independently express the importance of event marketing with regard to sporting events.
- present relationship management as an essential interface between the practice of sport and the generation of public interest.
- not only reproduce the planning process for strategic event marketing, but also classify it using practical examples.
- highlight the importance of companies as sports sponsors, thereby outlining another important pillar of the revenue structure alongside the media market.
- classify the organizers and athletes of e-sports events as providers of communication services.

# Links to other Modules within the Study Program

This module is similar to other modules in the fields of Marketing & Sales and Event Management

### Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Marketing & Communication and Hospitality, Tourism & Event fields

# Media and Marketing Management in E-Sports

Course Code: DLMBAEESME01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

### **Course Description**

Firstly, the course provides the students with an introduction to the essential characteristics of the sports market and sports management. This is intended to sensitize students to the special features of the sports industry, from which the further focal points of the course result. Following on from this, students are given an introduction to media management, from which the general importance of obtaining information via the media, as well as the diversity and constant development of media, are presented. Furthermore, the different and diverse rights within the sports market are presented, which are not only intended to enable the live experience of sports, but also provide a large source of income for the sports at the same time. However, this is also based on a sustainable and long-term brand environment that needs to be created. The e-sports sector in particular is faced with the challenge of creating a brand, resulting from the different game variants, but also compositions of competitions and/or leagues. The aspects of brand and branded community are also considered here. A major driver of the general sports market, but also in particular of the e-sports market, is the development of digital media and the importance of these media. In the context of e-sports, however, this must be considered in harmony with digital media, but also their development, from which the topic of digital touchpoints is elaborated. This in turn leads into the aspects of mobile, social and influencer management.

#### **Course Outcomes**

On successful completion, students will be able to

- deal independently and reflectively with the field of sports marketing in relation to e-sports.
- highlight the important aspects of the media market with respect to sports as well as the esports market.
- monitor and evaluate the development of digital media and draw conclusions for the sports and e-sports market.
- outline the importance of brand management in line with any public relations activities.
- outline the concepts of mobile, social and influencer management and highlight the implications for e-sports.

### **Contents**

- 1. Basics of Sports Marketing in the Context of E-Sports
  - 1.1 Introduction to Sports Marketing
  - 1.2 Special Features in the Sports Sector
  - 1.3 Model of Sports Marketing

- 2. Media and their Management with Consideration of E-Sports
  - 2.1 Media Management in the Context of the Marketing Mix
  - 2.2 Classification of Rights and their Marketing
  - 2.3 The Media Market
- 3. Brand Management in Sports
  - 3.1 General Brand Management
  - 3.2 The Identity-based Brand Management Approach
  - 3.3 Brand Management with Regard to E-Sports
- 4. Importance of Digital Media and their Development
  - 4.1 Digital Media and their Development
  - 4.2 Digital Touchpoints and Cross Media
  - 4.3 Brand and Branded Communities
- 5. Mobile and Social Media Management
  - 5.1 Mobile Media Management
  - 5.2 Social Media Management
  - 5.3 Influencer Management

### Literature

### **Compulsory Reading**

- Aaker, D., & Joachimsthaler, E. (2000). Brand Leadership. New York.
- Brown, J., Broderick, A., & Lee, N.. (2007). Word of Mouth. Communication within online communities: conceptualizing the online social networt. In: JOURNAL OF INTERACTIVE MARKETING VOLUME 21. Wiley Periodicals, Inc. and Direct Marketing Educational Foundation, Inc. In
- Carl, W. (2008). The role of disclosure in organized word of mouth marketing programs. In Journal of Marketing Communications; No: 14, 2008 (pp. 225 241).
- DeChernatony, L., & McDonald, M. (2003). Creating Powerful Brands in Consumer, Service and Industrial Markets. In G. Nufer & A. Bühler (Eds.), Marketing in sport (pp. 120). Berlin: Erich Schmidt Verlag.
- Fullerton, S., & Merz, G. R.. (2008). The four domains of sports marketing: A conceptual framework. Sport Marketing Quarterly, 17 (2), 90-108.
- Hedlund, D./ Fried, G. / Smith, R. (2020): Esports Business Management. Human Kinetics.
   Champaign.
- Scholz, T. M. (2019): eSports is Business. Management in the World of competitive Gaming.
   Palgrave Pivot. Siegen.
- Sterne, J., & Scott, D. (2010). Social Media Metrics. How to Measure and Optimize Your Marketing Investment. New York.
- Wellmann, B. (1997). An Electronic Group is Virtually a Social Network. In S. Kiesler (Ed.), Culture of the Internet (pp. 179-205). Mahwah .
- Williams, R., & Cothrel, L. (2000). Four smart ways to run online communities. In: Sloan Management Review, Vol. 41. no. 4/2000, pp. 81-92.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination		
Examination Admission Requirements	BOLK: yes Course Evaluation: no	
Type of Exam	Exam or Written Assessment: Written Assignment, 90 Minutes	

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
100 h	0 h	25 h	25 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

## E-Sports Event Management

Course Code: DLMBAEESME02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

### **Course Description**

The course qualifies the students to create a transfer between event marketing, sponsoring and brand management, from which essential aspects should be classified and reflected with regard to e-sports. First, the basics in the field of event marketing are conveyed, from which the essential reasons for the use of events in marketing can be concluded. These in turn relate particularly to relationship management in the context of e-sports. This leads over into the general area of event marketing such as the planning process, which extends from situation analysis to target group planning and implementation. It should be noted, however, that sport events also have a strong dependence on sponsors, so that the respective events, tournaments and also leagues can operate at all economically profitable and at the same time offer an attractiveness for a large target group. For this reason, not only companies as sponsors are examined, but also the sponsored parties as providers of various communication services.

### **Course Outcomes**

On successful completion, students will be able to

- independently express the importance of event marketing with regard to sporting events.
- present relationship management as an essential interface between the practice of sport and the generation of public interest.
- not only reproduce the planning process for strategic event marketing, but also classify it using practical examples.
- highlight the importance of companies as sports sponsors, thereby outlining another important pillar of the revenue structure alongside the media market.
- classify the organizers and athletes of e-sports events as providers of communication services.

### **Contents**

- 1. Event Marketing Basics
  - 1.1 Development of Event Marketing
  - 1.2 Event and Event Marketing
  - 1.3 Essential Aspects for the Use of Event Marketing
- 2. Relationship Management
  - 2.1 Consumer Relations
  - 2.2 Societal Relations

- 3. Planning Process for Strategic Event Marketing
  - 3.1 Situation Analysis and Definition of Event Marketing Objectives
  - 3.2 Target Group Planning and Definition of the Event Marketing Strategy
  - 3.3 Integration, Budgeting and Action Planning
- 4. Companies as Sports Sponsors
  - 4.1 Classification of Sports Sponsorship
  - 4.2 The Sports Sponsorship Market
  - 4.3 Sports Sponsorship as Part of Corporate Communications
- 5. The Sponsored Party as a Provider of Communication Services
  - 5.1 Positioning in the Sports Sponsorship Market
  - 5.2 Application of the Marketing Mix
  - 5.3 Realization and Use of Potentials

### Literature

## **Compulsory Reading**

- Bornemark, W. (2013): Success Factors for E-Sport Games. Proceedings of Ume°a's 16th Student Conference in Computing Science. UMEA UNIVERSITY Department of Computing Science. Pp. 1-13.
- Cornwell, T.B./ Amis, J. (2005): Global Sport Sponsorship. Berg Publishers. University of Michigan.
- Cornwell, B. T. (2014): Sponsorship in Marketing. Routledge. London and New York.
- Hutchins, B. (2008): Signs of meta-change in second modernity: the growth of e-sport and the World Cyber Games. In: New Media & Society, Vol. 10 Issue 6, pp.851-869.
- Lunt, T./ Nicotra, E. (2019): Event Sponsorship and Fundraising. Kogan Page. London.
- Shone, A./ Parry, B. (2010): Successful Event Management. Cengage Learning Emea. Hampshire, UK.
- Tum, J./Norton, P./Wright, J. N. (2005): Management of Event Operations. Routledge. London and New York.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination		
Examination Admission Requirements	BOLK: yes Course Evaluation: no	
Type of Exam	Exam or Written Assessment: Written Assignment, 90 Minutes	

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
100 h	0 h	25 h	25 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☑ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

# Artificial Intelligence

Module Code: DLMIMWKI

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimaldauer: 1 Semester	WiSe/SoSe	English

### **Module Coordinator**

Prof. Dr. Ulrich Kerzel (Artificial Intelligence) / Prof. Dr. Tim Schlippe (Seminar: AI and Society)

### **Contributing Courses to Module**

- Artificial Intelligence (DLMAIAI01)
- Seminar: Al and Society (DLMAISAIS01)

Module Exam Type	
Module Exam	Split Exam
	Artificial Intelligence  • Study Format "Distance Learning": Exam, 90 Minutes  • Study Format "myStudies": Exam, 90 Minutes
	<ul><li>Seminar: Al and Society</li><li>Study Format "Distance Learning": Written Assessment: Research Essay</li></ul>
Weight of Module see curriculum	

### **Module Contents**

### **Artificial Intelligence**

- History of Al
- Al application areas
- Expert systems
- Neuroscience
- Modern Al systems

### **Seminar: AI and Society**

In this module, students will reflect on current societal and political implications of artificial intelligence. To this end, pertinent topics will be introduced via articles that are then critically evaluated by the students in the form of a written essay.

### **Learning Outcomes**

### **Artificial Intelligence**

On successful completion, students will be able to

- remember the historical developments in the field of artificial intelligence.
- analyze the different application areas of artificial intelligence.
- comprehend expert systems.
- apply Prolog to simple expert systems.
- comprehend the brain and cognitive processes from a neuro-scientific point of view.
- understand modern developments in artificial intelligence.

### **Seminar: AI and Society**

On successful completion, students will be able to

- name selected current societal topics and issues in artificial intelligence.
- explain the influence and impact of artificial intelligence on societal, economic, and polital topics.
- transfer theoretically-acquired knowledge to real-world cases.
- treat in a scientific manner a select topic in the form of a written essay.
- critically question and discuss current societal and political issues arising from the recent advances in artificial intelligence methodology.
- develop own problem-solving skills and processes through reflection on the possible impact of their future occupation in the sector of artificial intelligence.

# Links to other Modules within the Study Program

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

### Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the IT & Technology field.

# Artificial Intelligence

Course Code: DLMAIAI01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

The quest for artificial intelligence has captured humanity's interest for many decades and has been an active research area since the 1960s. This course will give a detailed overview of the historical developments, successes, and set-backs in AI, as well as the development and use of expert systems in early AI systems. In order to understand cognitive processes, the course will give a brief overview of the biological brain and (human) cognitive processes and then focus on the development of modern AI systems fueled by recent developments in hard- and software. Particular focus will be given to discussion of the development of "narrow AI" systems for specific use cases vs. the creation of general artificial intelligence. The course will give an overview of a wide range of potential application areas in artificial intelligence, including industry sectors such as autonomous driving and mobility, medicine, finance, retail, and manufacturing.

### **Course Outcomes**

On successful completion, students will be able to

- remember the historical developments in the field of artificial intelligence.
- analyze the different application areas of artificial intelligence.
- comprehend expert systems.
- apply Prolog to simple expert systems.
- comprehend the brain and cognitive processes from a neuro-scientific point of view.
- understand modern developments in artificial intelligence.

### Contents

- 1. History of Al
  - 1.1 Historical Developments
  - 1.2 Al Winter
  - 1.3 Notable Advances in Al
- 2. Expert Systems
  - 2.1 Overview Over Expert Systems
  - 2.2 Introduction to Prolog
- 3. Neuroscience
  - 3.1 The (Human) Brain
  - 3.2 Cognitive Processes

- 4. Modern Al Systems
  - 4.1 Recent Developments in Hard- and Software
  - 4.2 Narrow vs General AI
  - 4.3 NLP and Computer Vision
- 5. Al Application Areas
  - 5.1 Autonomous Vehicles & Mobility
  - 5.2 Personalized Medicine
  - 5.3 FinTech
  - 5.4 Retail & Industry

### Literature

### **Compulsory Reading**

- Russell, S. & Norvig, P. (2010). Artificial intelligence: a modern approach (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Lucas, P.J.F & Van der Gaag, L. (1991). Principles of expert systems. Amsterdam: Addison Wesley (copyright returned to author).
- Clocksin, W.F. & Mellish, C.S. (2003). Programming in Prolog (4th ed.). Berlin: Springer-Verlag.
- Ward, J. (2015). The student's guide to cognitive neuroscience. (3rd ed.). New York, NY: Psychology Press.
- Frankish, K & Ramsey, W.M. (Eds.) (2012). The Cambridge handbook of cognitive science. Cambridge: Cambridge University Press.

Study Format	Course Type
Distance Learning	Online Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

### **Study Format myStudies**

Study Format	Course Type
myStudies	Lecture

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
90 h	0 h	30 h	30 h	0 h	150 h

Instructional Methods		
☐ Learning Sprints® ☑ Course Book	☐ Review Book ☐ Creative Lab	
□ Vodcast	☐ Guideline	
☑ Shortcast	☑ Live Tutorium/Course Feed	
☑ Audio		
☑ Exam Template		

## Seminar: Al and Society

Course Code: DLMAISAIS01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

In the current decade, impressive advances have been achieved in the field of artificial intelligence. Several cognitive tasks like object recognition in images and video, natural language processing, game strategy, and autonomous driving and robotics are now being performed by machines at unprecedented levels of ability. This course will examine some of societal, economic, and political implications of these developments.

### **Course Outcomes**

On successful completion, students will be able to

- name selected current societal topics and issues in artificial intelligence.
- explain the influence and impact of artificial intelligence on societal, economic, and polital topics.
- transfer theoretically-acquired knowledge to real-world cases.
- treat in a scientific manner a select topic in the form of a written essay.
- critically question and discuss current societal and political issues arising from the recent advances in artificial intelligence methodology.
- develop own problem-solving skills and processes through reflection on the possible impact of their future occupation in the sector of artificial intelligence.

### Contents

• The seminar covers current topics concerning the societal impact of artificial intelligence. Each participant must create a seminar paper on a topic assigned to him/her. A current list of topics is given in the Learning Management System.

## 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

Study Format	Course Type
Distance Learning	Seminar

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

Student Workload							
Self Study Presence Tutorial Self Test Practical Experience Hours Total							
120 h	0 h	30 h	0 h	0 h	150 h		

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
☐ Exam Template	

# Al in Practice

Module Code: DLMBAEAIP

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Ulrich Kerzel (Use Case and Evaluation) / Prof. Dr. Tim Schlippe (Seminar: Current Topics in Al)

## Contributing Courses to Module

- Use Case and Evaluation (DLMDSUCE01)
- Seminar: Current Topics in AI (DLMAISCTAI01)

Module Exam Type				
Module Exam Split Exam				
	<u>Use Case and Evaluation</u>			
	Study Format "Distance Learning": Oral     Assignment			
	Seminar: Current Topics in Al			
	Study Format "Distance Learning": Written     Assessment: Research Essay			
Weight of Module				
see curriculum				

## **Module Contents**

### **Use Case and Evaluation**

- Use case evaluation
- Model-centric evaluation
- Business-centric evaluation
- Monitoring
- Avoiding common fallacies
- Change management

## **Seminar: Current Topics in Al**

In this module, students will reflect on current developments in AI. To this end, pertinent topics will be introduced via articles that are then critically evaluated by the students in the form of a written essay.

## **Learning Outcomes**

### **Use Case and Evaluation**

On successful completion, students will be able to

- analyze use cases and their requirements regarding the project objectives.
- apply common metrics to evaluate predictions.
- evaluate key performance indicators to asses projects from a business perspective.
- create monitoring tools that can be used to constantly evaluate the status quo of a project.
- understand common fallacies and how to avoid them.

## **Seminar: Current Topics in AI**

On successful completion, students will be able to

- discuss current research trends and topics in Al.
- compose a theoretical essay exploring a selected topic in Al.
- expound upon apposite assumptions and design choices pertaining to the topic of choice.
- link the chosen topic to analogous approaches.
- identify and delineate potential uses for the chosen topic's concepts.

# Links to other Modules within the Study Program

This module is similar to other modules in the fields of Data Science & Artificial Intelligence

### Links to other Study Programs of IU International University of Applied Sciences

All Master Programmes in the IT & Technology fields

## Use Case and Evaluation

Course Code: DLMDSUCE01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

The evaluation and definition of use cases is the fundamental groundwork from which the projects can be defined. This does not only include the scope and technical requirements of a project but also how value can be derived from the project. A crucial aspect is the definition of what makes a project successful, both in terms of a technical evaluation as well as a business centric perspective and how the status quo can be monitored effectively during the progress of a project. The course also discusses how to avoid common fallacies and understand the implications of introducing data-driven decisions into traditional management structures.

#### **Course Outcomes**

On successful completion, students will be able to

- analyze use cases and their requirements regarding the project objectives.
- apply common metrics to evaluate predictions.
- evaluate key performance indicators to asses projects from a business perspective.
- create monitoring tools that can be used to constantly evaluate the status quo of a project.
- understand common fallacies and how to avoid them.

### Contents

- 1. Use Case Evaluation
  - 1.1 Identification of Use Cases
  - 1.2 Specifying Use Case Requirements
  - 1.3 Data Sources and Data Handling Classification
- 2. Model-centric Evaluation
  - 2.1 Common Metrics for Regression and Classification
  - 2.2 Visual Aides
- 3. Business-centric Evaluation
  - 3.1 Cost Function and Optimal Point Estimators
  - 3.2 Evaluation Using KPIs
  - 3.3 A/B Test

- 4. Monitoring
  - 4.1 Visual Monitoring Using Dashboards
  - 4.2 Automated Reporting and Alerting
- 5. Avoiding Common Fallacies
  - 5.1 Cognitive Biases
  - 5.2 Statistical Effects
  - 5.3 Change Management: Transformation to a Data-driven Company

## Literature

## **Compulsory Reading**

## **Further Reading**

- Few, S. (2013). Information dashboard design: Displaying data for at-a-glance monitoring (2nd ed.). Burlingame, CA: Analytics Press.
- Gilliland, M., Tashman, L., & Sglavo, U. (2016). Business forecasting: Practical problems and solutions. Hoboken, NJ: John Wiley & Sons.
- Hyndman, R. (2018). Forecasting: Principles and practices (2nd ed.). Melbourne: OTexts.
- Kahneman, D. (2012). Thinking, fast and slow. New York, NY: Penguin Books.
- Osterwalder, A., & Pigneur, Y. (2010). Business model generation. Hoboken, NJ: Wiley.
- Parmenter, D. (2015). Key performance indicators: Developing, implementing, and using winning KPIs. Hoboken, NJ: John Wiley & Sons.

Study Format	Course Type
Distance Learning	Online Lecture

Information about the examination				
Examination Admission Requirements	BOLK: yes Course Evaluation: no			
Type of Exam	Oral Assignment			

Student Workload							
Self Study Presence Tutorial Self Test Practical Experience Hours Total							
110 h	0 h	20 h	20 h	0 h	150 h		

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☐ Exam Template	

## Seminar: Current Topics in Al

Course Code: DLMAISCTAI01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

The topic of artificial Intelligence (AI) has been addressed in computer science and cognitive science research since the 1950s; however, the meaning associated with the term has changed considerably over time. Having once been predominantly associated with logical calculus, reasoning, and planning, AI is now primarily interpreted in the context of deep networks of computational units. Despite these changes in approach, the important characteristic of AI continues to be the understanding and reproduction of cognitive abilities and functions by machines. This seminar strives to elucidate current research trends in AI. The students learn to independently analyze selected topics and case studies and link them with well-known concepts, as well as critically question and discuss them.

### **Course Outcomes**

On successful completion, students will be able to

- discuss current research trends and topics in Al.
- compose a theoretical essay exploring a selected topic in Al.
- expound upon apposite assumptions and design choices pertaining to the topic of choice.
- link the chosen topic to analogous approaches.
- identify and delineate potential uses for the chosen topic's concepts.

### Contents

• The seminar covers current topics in artificial intelligence. Each participant must write a seminar paper on a topic assigned to him/her.

## 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

Study Format	Course Type
Distance Learning	Seminar

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☐ Shortcast ☐ Audio	☐ Live Tutorium/Course Feed
☐ Exam Template	

# Salesforce Consultant Specialization

Module Code: DLMSFCS

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

N.N. (Salesforce Administrator and Service Cloud Consultant) / N.N. (Salesforce Sales Cloud Consultant )

## **Contributing Courses to Module**

- Salesforce Administrator and Service Cloud Consultant (DLMSFCS01)
- Salesforce Sales Cloud Consultant (DLMSFCS02)

Module Exam Type		
Module Exam	Split Exam	
	Salesforce Administrator and Service Cloud Consultant	
	Study Format "Distance Learning": Written     Assessment: Project Report	
	Salesforce Sales Cloud Consultant	
	Study Format "Distance Learning": Oral     Project Report	
Weight of Module		
see curriculum		

#### **Module Contents**

### **Salesforce Administrator and Service Cloud Consultant**

Using the learning platform Trailhead students will learn to administer the Salesforce platform. At the end of the course the students will be able to manage the Salesforce service cloud. This course is the preparation for the Salesforce Administrator Certification and Salesforce Service Cloud Certification.

## **Salesforce Sales Cloud Consultant**

Using the learning platform Trailhead students will learn how to manage sales processes with Salesforce platform. At the end of the course the students will be able to manage the Salesforce sales cloud. This course prepares for the Salesforce Sales Cloud Consultant Certification.

### **Learning Outcomes**

### **Salesforce Administrator and Service Cloud Consultant**

On successful completion, students will be able to

- define what Salesforce and customer relationship management is.
- describe and compare the different options for importing and exporting data in Salesforce.
- create reports and visualize key business metrics in real-time in Salesforce.
- setup customer service with Salesforce service cloud.
- lead a customer service team in the digital era.
- define service cloud goals and metrics.

### **Salesforce Sales Cloud Consultant**

On successful completion, students will be able to

- setup sales management with Salesforce sales cloud.
- lead a sales team in the digital era.
- create digital engagement on multiple channels.
- define sales cloud goals and metrics.
- deploy sales processes for gathering competitive insights.

# 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 IU International University of Applied Sciences

All Master Programs in the Marketing & Communication field

## Salesforce Administrator and Service Cloud Consultant

Course Code: DLMSFCS01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

Salesforce is the most used software solution for customer relationship management worldwide. Using the learning platform Trailhead students will learn independently the fundamentals of Salesforce. The course explains how to administrate Salesforce and how to create processes to help supporting teams become more efficient and manage large data volumes within Salesforce. This course prepares students for the Salesforce Administrator Certification and Salesforce Service Cloud Certification.

#### **Course Outcomes**

On successful completion, students will be able to

- define what Salesforce and customer relationship management is.
- describe and compare the different options for importing and exporting data in Salesforce.
- create reports and visualize key business metrics in real-time in Salesforce.
- setup customer service with Salesforce service cloud.
- lead a customer service team in the digital era.
- define service cloud goals and metrics.

### Contents

The content on the learning platform focuses on the features and functionality used to maintain a Salesforce implementation. The content provides general knowledge of the features available to end users and the configuration options available to a Salesforce Administrator. Furthermore, the content enables to perform administrative functions using current Salesforce features design solutions using the Service Cloud functionality and to lead the implementation of these solutions within a customer organization.

### Literature

## **Compulsory Reading**

## **Further Reading**

• According to the Information given on the learning platform

Study Format	Course Type
Distance Learning	Project

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

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
☐ Exam Template	

## Salesforce Sales Cloud Consultant

Course Code: DLMSFCS02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

This course facilitates key aspects of setting up sales management with Salesforce sales cloud on the learning platform Trailhead. The course describes how to implement Salesforce sales cloud and manage it. It enables to make better business decisions based on customer data and to create a sales metrics strategy. The course shows how to create processes to help sales teams become more efficient and manage large data volumes within Salesforce. This course prepares students for the Salesforce Sales Cloud Consultant Certification.

#### **Course Outcomes**

On successful completion, students will be able to

- setup sales management with Salesforce sales cloud.
- lead a sales team in the digital era.
- create digital engagement on multiple channels.
- define sales cloud goals and metrics.
- deploy sales processes for gathering competitive insights.

### **Contents**

• The content on the learning platform focuses on designing and deploying solutions that support sales teams and sales processes using Salesforce applications. The content enables to design solutions using the Salesforce sales cloud functionality and to lead the implementation of these solutions within an organization.

## Literature

## **Compulsory Reading**

### **Further Reading**

According to the Information given on the learning platform

Study Format	Course Type
Distance Learning	Project

Information about the examination		
Examination Admission Requirements  BOLK: no Course Evaluation: no		
Type of Exam	Oral Project Report	

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☐ Course Book	☐ Creative Lab
☐ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
☐ Exam Template	

# Salesforce Sales Specialization

Module Code: DLMSFSS

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Anke Haag (Sales Management I) / N. N. (Salesforce Sales Skills)

## **Contributing Courses to Module**

- Sales Management I (DLMWSA01\_E)
- Salesforce Sales Skills (DLMSFSS01)

Module Exam Type	
Module Exam	Split Exam
	Sales Management I
	Study Format "Fernstudium": Written     Assessment: Case Study
	Salesforce Sales Skills
	Study Format "Distance Learning": Written     Assessment: Project Report
Weight of Module	
see curriculum	

### **Module Contents**

### Sales Management I

- Strategic framework and concepts of sales management
- Organizational and process options for sales and distribution in the company
- General conditions and design options for successful sales force management

### Salesforce Sales Skills

Students will learn and understand the process of selling web-based software that customers access through an online portal. At the end of the course the students will know the different stages of the software as a service sales process as well as value based selling and will be able to translate these findings into the Salesforce products and services environment.

## **Learning Outcomes**

### Sales Management I

On successful completion, students will be able to

- know of the strategic basics of sales management and understand the basic approaches to designing alternative sales models.
- understand core ideas of customer driven organizations and recognize the consequences and design options for structure and process in the sales division of the company.
- familiarize themselves with the functions and challenges of project organization in sales.
- organize and manage a sales team/sales force independently.
- actively meet future challenges in sales management.

### Salesforce Sales Skills

On successful completion, students will be able to

- understand the SaaS sales process and sales cycle, value based selling and solutions sales.
- customize different frameworks to a firm's specific needs.
- learn how to drive the buying decision through executive engagement.
- bring consistency in the way selling is conducted.
- identify, analyse and drive the most important sales KPIs.
- use the Salesforce platform to enhance the sales process.

# Links to other Modules within the Study Program

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

## Links to other Study Programs of IU International University of Applied Sciences

All Master Programs in the Marketing & Communication fields

## Sales Management I

Course Code: DLMWSA01\_E

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		5	none

### **Course Description**

Students learn the strategic essentials and design options of sales management. In addition to basic strategic directions of sales management, they learn how to categorize alternative sales strategies and critically deal with the challenges of multi-channel sales. In addition, the concept of customer driven organization is explained and deepened, and based on this, consequences for the design of the sales organization and strategic or operative sales force management are derived. The course ends with a discussion on future challenges in sales.

#### **Course Outcomes**

On successful completion, students will be able to

- know of the strategic basics of sales management and understand the basic approaches to designing alternative sales models.
- understand core ideas of customer driven organizations and recognize the consequences and design options for structure and process in the sales division of the company.
- familiarize themselves with the functions and challenges of project organization in sales.
- organize and manage a sales team/sales force independently.
- actively meet future challenges in sales management.

### **Contents**

- 1. Introduction to Sales
  - 1.1 Theory of Sales
  - 1.2 Strategic Distribution
  - 1.3 Sales in Practice
  - 1.4 The Elements of the Sales Policy at a Glance
- 2. Basics of the Sales Organization
  - 2.1 Single-Level (Direct Sales) Versus Multi-Level Sales
  - 2.2 Distribution to Business Customers or Industrial Goods Distribution
  - 2.3 Cooperative Sales Forms
  - 2.4 Sales Partners: Distributors and Sales Agents

- 3. Sales Concept
  - 3.1 Push Versus Pull
  - 3.2 Distribution Intensity Ubiquitous, Intensive, Selective, Exclusive
  - 3.3 Key Account Management
  - 3.4 Small Customers Care
- 4. Multi-Channel Management
  - 4.1 Basics
  - 4.2 Definition and Integration of the Channel Stages and Processes
  - 4.3 Control and Evaluation of the Sales Channels
  - 4.4 Success Factors and Conflict Potential in Multi-Channel Systems
- 5. Sales and Contact Forms
  - 5.1 Personal Sale
  - 5.2 Media-Supported Sale
  - 5.3 Media-Led Sales
- 6. Principles of the Sales Organization
  - 6.1 Customer-Oriented Sales Organization
  - 6.2 Sales Organization by Products or Regions
  - 6.3 Sales Organization by Sales Channels or Customers
  - 6.4 Central or Decentralized Sales Organization
- 7. Sales Force Management I
  - 7.1 Recruitment of Employees for Sales
  - 7.2 Qualification of Employees in Sales
  - 7.3 Shift Planning of Employees in Sales
- 8. Sales Force Management II
  - 8.1 Sales Management and Sales Culture
  - 8.2 Remuneration and Incentive Systems
  - 8.3 Performance Evaluation and Monitoring
- 9. Sales Controlling
  - 9.1 Content and Tasks of Sales Controlling
  - 9.2 Strategic Sales Controlling
  - 9.3 Operational Sales Controlling
  - 9.4 Sales Information Systems

- 10. Future Developments
  - 10.1 Digitization and Social Media
  - 10.2 Globalization and Internationalization
  - 10.3 Big Data and System Integration

### Literature

## **Compulsory Reading**

## **Further Reading**

- Guenzi, P./Geiger, P. (2010): Sales Management: A multinational perspective. Macmillan Education UK, Houndmills, Basingstoke, Hampshire.
- Hair, J. F. et al. (2008): Sales Management. Building Customer Relationships and Partnerships. Cengage, Boston.Homburg, C./Schäfer, H./Schneider, J. (2012): Sales Excellence. Systematic Sales Management. Springer, Wiesbaden.
- Ingram, T. N. et al. (2015): Sales Management. Analysis and Decision Making. 9. Auflage, Routledge, Abingdon.
- Johnston, M. W./Marshall, G.W. (2016): Sales Force Management. Leadership, Innovation, Technology. 12. Auflage, Routledge, Abingdon.

## **Study Format Fernstudium**

Study Format	Course Type
Fernstudium	Case Study

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
110 h	0 h	20 h	20 h	0 h	150 h

Instructional Methods		
☐ Learning Sprints®	☐ Review Book	
☑ Course Book	☐ Creative Lab	
☐ Vodcast	☑ Guideline	
☑ Shortcast	☐ Live Tutorium/Course Feed	
☑ Audio		
☐ Exam Template		

## Salesforce Sales Skills

Course Code: DLMSFSS01

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MBA	English		5	none

### **Course Description**

Software as a service (SaaS) is a way of delivering applications over the internet. Salesforce is the leading SaaS provider with its flagship CRM platform. Using different methods including the learning platform Trailhead, students will learn the different frameworks and concepts of SaaS sales in order to know how they can customize the adequate approach to a company's specific needs and organizational structure. Furthermore, this course prepares students to use the Salesforce platform to drive their KPIs and accelerate their sales.

#### **Course Outcomes**

On successful completion, students will be able to

- understand the SaaS sales process and sales cycle, value based selling and solutions sales.
- customize different frameworks to a firm's specific needs.
- learn how to drive the buying decision through executive engagement.
- bring consistency in the way selling is conducted.
- identify, analyse and drive the most important sales KPIs.
- use the Salesforce platform to enhance the sales process.

### Contents

The content of this module focuses on the engagement with customers, and particularly with executives, and how to increase impact when selling SaaS products and services. The content enables students to generate new business through inbound and outbound opportunities and to sell effectively to executives and decision makers at prospect companies. Furthermore, knowledge is provided for the SaaS sales methodology, value based selling and different approaches and frameworks on how to approach each phase of the sales process. It is elaborated how purchasing decisions are made and how these can be influenced by selling centers effectively. Consequently, the content of this course enables students to analyse and drive KPIs using adequate frameworks and processes as well as the Salesforce platform.

## Literature

## **Compulsory Reading**

## **Further Reading**

- Arli, D./ Bauer, C./ Palmatier, R.W. (2018): Relational selling: Past, present and future. Industrial Marketing Management, 69, 169-184.
- McFarland, R.G., Challagalla, G.N., & Shervani, T.A. (2006). Influence tactics for effective adaptive selling. Journal of Marketing, 70(4), 103-117.

Study Format	Course Type
Distance Learning	Project

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

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
120 h	0 h	30 h	0 h	0 h	150 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
☐ Vodcast	☐ Guideline
☐ Shortcast ☐ Audio	☐ Live Tutorium/Course Feed
☐ Exam Template	

# Internship

## Module Code: OPTINTER1

Module Type	Admission Requirements	Study Level	СР	Student Workload
see curriculum	On campus offer only		10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimum 1 semester	WiSe/SoSe	English

## **Module Coordinator**

see MyCampus (Internship)

## **Contributing Courses to Module**

Internship (OPTINTER110)

Module Exam Type	
Module Exam	Split Exam
Study Format: On Campus Reflection (of Practical Work) / Group Reflection	
Weight of Module see curriculum	

## **Module Contents**

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

## **Learning Outcomes**

## Internship

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 comminication skills, socials 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.

Links to other Modules within the Study Program	Links to other Study Programs of IU International University of Applied Sciences
Builds on modules of the chosen degree	All on campus offered programs
program	

## Internship

**Course Code: OPTINTER110** 

Study Level Language of Instruction		Contact Hours	СР	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 comminication skills, socials 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	Course Type
On Campus	Practical work

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 Presence Tutorial Self Test Practical Experience					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).

# Capstone Project

## Module Code: MBCP

Module Type	Admission Requirements	Study Level	СР	Student Workload
see curriculum	<ul> <li>Submission of the</li> </ul>	MA	25	750 h
	Capstone Thesis			
	<ul> <li>Completion of</li> </ul>			
	modules totaling a			
	minimum of 50 ECTS			

Semester / Term	Duration	Regularly offered in	Language of Instruction
see curriculum	Minimaldauer: 1 Semester	WiSe/SoSe	English

## **Module Coordinator**

Prof. Dr. Holger Sommerfeldt (Capstone Thesis) / Degree Program Advisor (SGL) (Capstone Thesis Defense)

## **Contributing Courses to Module**

- Capstone Thesis (MBCP02)
- Capstone Thesis Defense (MBCP03)

Module Exam Type			
Module Exam	Split Exam		
	<ul> <li>Capstone Thesis</li> <li>Study Format "Distance Learning": Written         Assessment: Caspstone Thesis     </li> <li>Study Format "myStudies": Written         Assessment: Caspstone Thesis     </li> </ul>		
	<ul> <li>Capstone Thesis Defense</li> <li>Study Format "myStudies": Oral Assignment</li> <li>Study Format "Distance Learning": Oral Assignment</li> </ul>		

## Weight of Module

see curriculum

## **Module Contents**

## **Capstone Thesis**

- Capstone Thesis
- Capstone Thesis Defense

## **Capstone Thesis Defense**

## **Learning Outcomes**

## **Capstone Thesis**

On successful completion, students will be able to

- Produce an academic paper, demonstrate competencies acquired during their MBA studies as well as provide evidence of their acquired knowledge of a specific problem.
- reflect the current academic knowledge regarding the chosen topic.
- make use of respective theoretical knowledge specific to the chosen practical case, and culminate in a number of recommendations regarding practical courses of action.

## **Capstone Thesis Defense**

On successful completion, students will be able to

- to provide evidence of their ability to transfer professional and methodological expertise to a practical case.
- demonstrate that he/she can actively take part in a thematically oriented discussion with a subject area expert.
- display presentation-specific communication techniques in the context of a goal-oriented, academic interaction.

er Study Programs of IU International f Applied Sciences

## Capstone Thesis

Course Code: MBCP02

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		22.5	Completion of modules totaling a minimum of 50 ECTS

### **Course Description**

The students independently prepare the written capstone thesis. The aim of the capstone thesis is to effectively apply the knowledge acquired throughout the MBA course to an academic paper that has a thematic reference to the MBA course. The thesis can consist of a business plan or a consulting report. The thesis is an independent piece of work, that, with the guidance of a supervisor, seeks to scientifically analyze and critically discuss a chosen issue, and suggest possible solutions. The topic should be chosen from the student's area of specialization and the thesis should demonstrate their acquired competence in this area, whilst also enriching and rounding out the student's academic knowledge. Completion of this course is designed to prepare the student for the needs of their future career path.

## **Course Outcomes**

On successful completion, students will be able to

- Produce an academic paper, demonstrate competencies acquired during their MBA studies as well as provide evidence of their acquired knowledge of a specific problem.
- reflect the current academic knowledge regarding the chosen topic.
- make use of respective theoretical knowledge specific to the chosen practical case, and culminate in a number of recommendations regarding practical courses of action.

### Contents

- The content of the capstone project shall be decided upon by the MBA student, together with their supervisor. However, supervisors have the right to recommend specific topics for students. The capstone thesis can take the format of a business plan or consulting report.
- A business plan

should include, at least, the following points (Note: this is not a compulsory structure):

- 1 Summary
- 2 Description of the planned product/the service offer
- 3 Founding team
- 4 Market analysis
- 5 Marketing and sales planning
- 6 Company and organization
- 7 Financial planning
- 8 Literature
- A consulting report should include, at least, the following points (Note: this is not a compulsory structure):
  - 1 Summary
  - 2 Problem description and circumstances
  - 3 Advisory tasks:
    - 3.1 Goal setting and challenge
    - 3.2 Method
    - 3.3 Analysis
    - 3.4 Recommendation
  - 4 Literature

### Literature

## **Compulsory Reading**

## **Further Reading**

- Bailey, S. (2011). Academic writing for international students of business (3rd ed.). Abingdon: Routledge.
- Bender, S. L. (2003). Producing the capstone project. Dubuque, IA: Kendall Hunt Publishing.
- Swales, J. M., & Feak, C. R. (2012). Academic writing for graduate students: Essential tasks and skills (3rd ed.). Ann Arbor, MI: Michigan Series in English for Academic & Professional Purposes.

Study Format	Course Type
Distance Learning	Thesis

Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Caspstone Thesis

Student Workload							
Self Study Presence Tutorial Self Test Practical Experience Hours To							
675 h	0 h	0 h	0 h	0 h	675 h		

Instructional Methods	
☐ Learning Sprints®☐ Course Book	□ Review Book □ Creative Lab
□ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
□ Exam Template	

## **Study Format myStudies**

Study Format	Course Type
myStudies	Thesis

Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Written Assessment: Caspstone Thesis

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
675 h	0 h	0 h	0 h	0 h	675 h

Instructional Methods	
☐ Learning Sprints®	☐ Review Book
☐ Course Book	☐ Creative Lab
□ Vodcast	☑ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
☐ Exam Template	

## Capstone Thesis Defense

Course Code: MBCP03

Study Level	Language of Instruction	Contact Hours	СР	Admission Requirements
MA	English		2.5	Submission of the Capstone Thesis

## **Course Description**

The thesis defense is undertaken after handing in the capstone thesis. It will take place at the invitation of the supervisor. A second examiner will also be present alongside the supervisor. The students have to prove that they have independently produced the content in the capstone thesis by providing a detailed presentation of their project. The thesis defense should consist of the most relevant information from the report (including methodology, research, project outcomes, and recommendations), followed by a question-and-answer round led by the supervisor.

#### **Course Outcomes**

On successful completion, students will be able to

- to provide evidence of their ability to transfer professional and methodological expertise to a practical case.
- demonstrate that he/she can actively take part in a thematically oriented discussion with a subject area expert.
- display presentation-specific communication techniques in the context of a goal-oriented, academic interaction.

### Contents

• The capstone thesis defense consists of a presentation of the most important results of the capstone project followed by the student answering questions from the examiners/experts.

## Literature

## **Compulsory Reading**

### **Further Reading**

Subject specific chosen by the student

## **Study Format myStudies**

Study Format	Course Type
myStudies	Thesis Defense

Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Oral Assignment

Student Work	load				
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
75 h	0 h	0 h	0 h	0 h	75 h

Instructional Methods	
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab
□ Vodcast	☐ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☐ Audio	
☐ Exam Template	

Study Format	Course Type
Distance Learning	Thesis Defense

Information about the examination	
Examination Admission Requirements	BOLK: no Course Evaluation: no
Type of Exam	Oral Assignment

Student Workload					
Self Study	Presence	Tutorial	Self Test	Practical Experience	Hours Total
75 h	0 h	0 h	0 h	0 h	75 h

Instructional Methods				
☐ Learning Sprints®☐ Course Book	☐ Review Book ☐ Creative Lab			
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