MODULE HANDBOOK

Master of Arts

International Management (FS-MAINTE-120)

120 ECTS

Distance Learning or myStudies

INTERNATIONAL
UNIVERSITY OF
APPLIED SCIENCES

Contents

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3. Semester

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4. Semester

2021-08-15

1. Semester

Managing Across Borders

Module Code: DLMINTMAB_E

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

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

Module Coordinator

Prof. Dr. Andreas Herrmann (Managing Across Borders)

Contributing Courses to Module

- Managing Across Borders (DLMINTMAB01_E)

Module Exam Type

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

Weight of Module

see curriculum

Module Contents

- International economic and business environment
- Globalization and international competitiveness
- International Trade
- International financial and capital markets
- International organizations and economic integration
- Current hot spots in the international economic and business environment

Learning Outcomes

Managing Across Borders

On successful completion, students will be able to

- identify the main developments and trends in the global economic environment and use them as a basis for business decisions.
- demonstrate the development of globalization and world trade in the last decades.
- explain the causes and effects of protectionism on a country's economic development.
- understand the interrelationships of international financial and capital markets and assess them with regard to the handling of exchange rate risks.
- explain the importance of international organizations such as the World Trade Organization (WTO) or the International Monetary Fund (IMF) for global cooperation.
- form their own opinion on current issues of international economic policy.

Links to other Modules within the Study Program	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the fields of Business Administration & Management	All Master Programs in the Business & Management fields

Managing Across Borders

Course Code: DLMINTMAB01_E

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

Course Description

The interdependence of economies, markets and technologies has increased continuously over the past decades. In addition to the former three dominant economic areas of the USA, Europe and Japan, emerging markets have joined the group, which play an increasingly important role in world trade. Global networking creates both opportunities and risks for internationally active companies. In this course, students acquire a deeper understanding of global economic, political and technological interrelationships as a basis for strategic decisions of internationally operating companies. In addition to knowledge of international trade, international financial and capital markets, and international organizations, students will be able to form their own well-founded opinion on current developments and trends in the international economic and business environment by the end of this course.

Course Outcomes

On successful completion, students will be able to

- identify the main developments and trends in the global economic environment and use them as a basis for business decisions.
- demonstrate the development of globalization and world trade in the last decades.
- explain the causes and effects of protectionism on a country's economic development.
- understand the interrelationships of international financial and capital markets and assess them with regard to the handling of exchange rate risks.
- explain the importance of international organizations such as the World Trade Organization (WTO) or the International Monetary Fund (IMF) for global cooperation.
- form their own opinion on current issues of international economic policy.

Contents

1. International economic and business environment
   - 1.1 Economic environment
   - 1.2 Political environment
   - 1.3 Technological environment

2. Globalization and international competitiveness
   - 2.1 Definition and development of globalization
   - 2.2 Opportunities and threats of globalization
   - 2.3 International competitiveness

3. International Trade
   - 3.1 Theories and models of international trade
   - 3.2 Importance of international trade for an economy
   - 3.3 Protectionism as a threat to international business

4. International financial and capital markets
   - 4.1 Importance of international financial and capital markets for globally active companies
   - 4.2 International exchange rate regimes
   - 4.3 Hedging of exchange rate risks

5. International organizations and economic integration
   - 5.1 International organizations as the basis of the world economy (WTO, World Bank, IMF)
   - 5.2 Regional economic integration as driver for international business (EU, USMCA)

6. Current hot spots in the international economic and business environment
   - 6.1 USA-China: Struggle for political and economic supremacy
   - 6.2 Emerging Markets: new players in the global economy
   - 6.3 Agenda 2030: Sustainable Development Goals (SDG)

Literature

Compulsory Reading

Further Reading

- Asian Development Bank. https://www.adb.org/ [accessed on 17 August 2020].
- 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 [electronic resource]. Pearson, Harlow England.
- Global Edge. https://globaledge.msu.edu/ [accessed on 17 August 2020].
- Hill, C.W. / Hult, C.T. (2016): International Business. Competing in the International Marketplace. 11th Edition. McGraw-Hill Higher Education, New York.
- International Monetary Fund. https://www.imf.org/ [accessed on 17 August 2020].
- World Bank Group. https://www.worldbank.org/ [accessed on 17 August 2020].
- World Trade Organization. https://www.wto.org/ [accessed on 17 August 2020].

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®	☐ 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	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	

Advanced Research Methods

Module Code: DLMARM

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

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

Module Coordinator

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

Contributing Courses to Module

- Advanced Research Methods (DLMARM01)

Module Exam Type

Module Exam	Split Exam
Study Format: Distance Learning Written Assessment: Written Assignment Study Format: myStudies Written Assessment: Written Assignment	

Weight of Module

see curriculum

Module Contents

- Social science and research paradigms
- Case study research
- Specific topics of qualitative research
- Advanced issues of qualitative research conceptualization and data analysis
- Underlying assumptions of quantitative research: concepts and consequences
- Evaluation research

Learning Outcomes

Advanced Research Methods

On successful completion, students will be able to

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

Links to other Modules within the Study Program	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field of Methods	All Master Programmes in the Business & Management fields

Advanced Research Methods

Course Code: DLMARM01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

2. Case Study Research
   - 2.1 Types of Case Study Research
   - 2.2 Maintaining Quality in Case Study Research
   - 2.3 Case Study Design
   - 2.4 Implementing Case Studies
   - 2.5 Analyzing Case Studies

3. Specific Topics of Qualitative Research
   - 3.1 Idea Generation
   - 3.2 Critical Incident Technique
   - 3.3 Understanding Communication: Discourse Analysis
   - 3.4 Perceiving Perception: Interpretive Phenomenological Analysis

4. Advanced Issues of Qualitative Research Conceptualizing and Data Analysis
   - 4.1 Measurement Theory
   - 4.2 Index and Scale Construction
   - 4.3 Types of Scale Construction
   - 4.4 The Problem of Nonresponse and Missing Data
   - 4.5 Implications of IT for Research Strategies

5. Underlying Assumptions of Quantitative Research: Concepts and Consequences
   - 5.1 Classical Test Theory
   - 5.2 Probabilistic Test Theory
   - 5.3 Advanced Topics of Test Theory

6. Evaluation Research
   - 6.1 What is Evaluation Research?
   - 6.2 Types of Evaluation Research
   - 6.3 Meta-Analysis
   - 6.4 Meta-Evaluation

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

Study Format Distance Learning

Study Format	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	

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	

DLMARM01

Intercultural Management

Module Code: DLMINTIM_E

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

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

Module Coordinator

Prof. Dr. Markus Prandini (Intercultural Management)

Contributing Courses to Module

- Intercultural Management (DLMINTIM01_E)

Module Exam Type

Module Exam	Split Exam
Study Format: Fernstudium Exam, 90 Minutes	

Weight of Module

see curriculum

Module Contents

- Fundamentals and classification of intercultural management
- Role and importance of intercultural management for companies
- Diversity management in intercultural management
- Entrepreneurial aspects in decision-making for intercultural management
- Focal points of intercultural management
- Intercultural management in selected countries

Learning Outcomes

Intercultural Management

On successful completion, students will be able to

- recognize and classify intercultural management as an independent discipline in business administration.
- use important cultural theories and cultural dimensions as a basis for business decisions in an international context.
- analyze relevant core competencies of a company for successful intercultural management and apply them in concrete situations.
- identify and manage culture-specific influences on the strategy, marketing and human resources of internationally active companies.
- apply important aspects of intercultural management in leadership, communication and cooperation in international teams.
- demonstrate cultural sensitivity and deeper understanding of international cooperation with selected cultural regions (Germany, USA, China).

Links to other Modules within the Study Program	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the fields of Business Administration & Management	All Master Programs in the Business & Management fields

Intercultural Management

Course Code: DLMINTIM01_E

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

Course Description

With the ever growing globalization of the economy, the demands on managers and employees to operate successfully in an international environment have increased. An important core competence of internationally active companies is the skill to competently deal with the idiosyncrasies of other cultures. In business administration, an independent discipline of intercultural management has therefore been developed to examine the behavior and cooperation of people from countries and organizations around the world and to derive recommendations for successful interactions on a corporate and personal level. This course provides students with a conceptual framework for a systematic understanding of the concept of culture, cultural synergies and differences, and the convergence and divergence of cultural norms and values. Students acquire the knowledge and intercultural skills necessary to manage and work across borders and cultures in a changing global business environment.

Course Outcomes

On successful completion, students will be able to

- recognize and classify intercultural management as an independent discipline in business administration.
- use important cultural theories and cultural dimensions as a basis for business decisions in an international context.
- analyze relevant core competencies of a company for successful intercultural management and apply them in concrete situations.
- identify and manage culture-specific influences on the strategy, marketing and human resources of internationally active companies.
- apply important aspects of intercultural management in leadership, communication and cooperation in international teams.
- demonstrate cultural sensitivity and deeper understanding of international cooperation with selected cultural regions (Germany, USA, China).

Contents

1. Fundamentals and classification of intercultural management
   - 1.1 Intercultural management as an independent discipline in business administration
   - 1.2 Important cultural concepts as basis for intercultural management
   - 1.3 Important cultural dimensions as basis for intercultural understanding

2. Role and importance of intercultural management for companies
   - 2.1 International developments and contexts for enterprises
   - 2.2 Connection between national culture and corporate culture
   - 2.3 Entrepreneurial core competencies for successful intercultural management

3. Diversity management in intercultural management
   - 3.1 Working with diversity in companies
   - 3.2 Management styles in individualistic and collectivist cultures
   - 3.3 Reconciliation of cultural dilemmas

4. Entrepreneurial decision-making dimensions of intercultural management
   - 4.1 Strategy
   - 4.2 Marketing
   - 4.3 Human Resources Management (HRM)

5. Focal points of intercultural management
   - 5.1 Intercultural management and Corporate Governance
   - 5.2 Intercultural communication
   - 5.3 Intercultural teamwork

6. Intercultural management in selected countries
   - 6.1 Germany
   - 6.2 USA
   - 6.3 China

Literature

Compulsory Reading

Further Reading

- Browaeys, M-J. / Price, R. (2015): Understanding Cross-Cultural Management. 3rd Edition, Pearson, Upper Saddle River.
- Deresky, H. (2017): International Management: Managing Across Borders and Cultures. 9th Edition, Pearson Education Limited, Harlow.
- Steers, R. M. / Nardon, L. / Sanchez-Runde, C. J. (2016): Management across Cultures. Developing Global Competencies. Cambridge University Press, Cambridge.
- Thomas, D.C. / Inkson, K. (2017): Cultural Intelligence: Surviving and Thriving in the Global Village. 3rd Edition, Berrett-Koehler Publishers, Oakland.
- Trompenaars, F. (2012): Riding the Waves of Culture. Understanding Cultural Diversity in Global Business. 3rd Edition, N. Brealey Publishing, London/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

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

DLMINTIM01_E

Performance Measurement

Module Code: DLMBPM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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

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	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field of Business Administration & Management.	All Master Programmes in the Business & Management field.

Performance Measurement

Course Code: DLMBPM01

Study Level	Language of Instruction	Contact Hours	CP	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

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

Applied Statistics

Module Code: DLMAST-01_E

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

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

Module Coordinator

Prof. Dr. Cordula Kreuzenbeck (Applied Statistics)

Contributing Courses to Module

- Applied Statistics (MMET02-01_E)

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

- Data and statistics
- Bivariate analysis
- Probability distributions and measures
- Statistical estimation methods
- Hypothesis testing
- Single regressions

Learning Outcomes

Applied Statistics

On successful completion, students will be able to

- recognize and explain the role and importance of statistical methods in practical decision-making processes.
- understand the relevance of data to answer empirical questions.
- apply statistical methods in the overall context of concrete problems.
- solve statistical problems by using special statistical software.

Links to other Modules within the Study Program	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field of Methods	All Master Programs in the Business & Management fields

Applied Statistics

Course Code: MMET02-01_E

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

Course Description

In everyday working life, enormous amounts of data are continuously generated, for example in production processes, customer data or population statistics. In this context, the field of statistics is a useful discipline that enables the user to analyze and evaluate this data in order to get to the information content of the underlying data. This information can make a valuable contribution to the control or optimization of underlying processes and knowledge, or help to support strategic or social decisions. Methods of descriptive and inferential statistics are considered in uni-, bi- and multivariate ways and discussed with reference to probability theory.

Course Outcomes

On successful completion, students will be able to

- recognize and explain the role and importance of statistical methods in practical decision-making processes.
- understand the relevance of data to answer empirical questions.
- apply statistical methods in the overall context of concrete problems.
- solve statistical problems by using special statistical software.

Contents

1. Basics
   - 1.1 Descriptive statistics
   - 1.2 Closing statistics
   - 1.3 Probability calculation
2. Bivariate analyses
   - 2.1 Crosstabulations
   - 2.2 Mean comparison test
   - 2.3 Correlations
3. Probability distributions
   - 3.1 Random variables and their distributions
   - 3.2 Normal distribution
   - 3.3 t distribution

4. Statistical estimation methods
   - 4.1 Point estimation
   - 4.2 Interval estimation

5. Hypothesis Testing
   - 5.1 Expected value with known standard deviation (z-test)
   - 5.2 Expected value with unknown standard deviation (t-test)

6. Simple Linear Regression*
   - 6.1 Conceptual considerations
   - 6.2 Regression line
   - 6.3 Quality assessment
   - 6.4 Applications

Literature

Compulsory Reading

Further Reading

- Anderson, T.W. (2003): An Introduction to Multivariate Statistical Analysis. 3rd edition, Wiley-Interscience, New York, NY.
- Chiang, A.C. / Wainright, K. (2005): Fundamental Methods of Mathematical Economics. McGraw- Hill, New York, NY.
- Cody, R. P. / Smith, J. K. (2005): Applied Statistics and the SAS Programming Language. 5th Edition, Prentice Hall, Upper Saddle River, NJ.
- Heumann, C. /Schomaker, M. /Shalabh (2016): Introduction to Statistics and Data Analysis: With Exercises, Solutions and Applications in R. Springer, Cham.
- Kleinbaum, D. G / Klein, M. (2010): Logistic Regression. A Self-Learning Text (Statistics for Biology and Health). 3rd Edition, Springer, Heidelberg.
- Stock, J. H. et al. (2014): Introduction to Econometrics GlobalEdition. PearsonEducation, Boston, MA.

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

Business Ethics and Corporate Governance

Module Code: DLMBAEBECG

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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
Study Format: myStudies 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	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field of Economics	All Master Programs in the Business & Management fields

Business Ethics and Corporate Governance

Course Code: DLMBAEBECG01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

3. Business Ethics Problem Areas and Solutions
   - 3.1 Categorization of Ethical Problems in Business
   - 3.2 Components of a Corporate Ethics Program
   - 3.3 Ethics Implementation in Business Practice

4. Basic Perspectives of Corporate Governance
   - 4.1 Important Terms and Definitions of Corporate Governance
   - 4.2 Approaches to Corporate Governance
   - 4.3 The Concept of Control

5. Monitoring Concepts for Corporate Governance
   - 5.1 Governance Mechanisms
   - 5.2 Governance Systems
   - 5.3 Corporate Governance Codes

6. Combining Business Ethics and Corporate Governance
   - 6.1 Linking Business Ethics and Corporate Governance
   - 6.2 Developing an Ethically Oriented Corporate Governance
   - 6.3 Leadership in the Context of Ethical Corporate Governance

Literature

Compulsory Reading

Further Reading

- 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	

2. Semester

Leadership

Module Code: DLMBLSE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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

see curriculum

Module Contents

- 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	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field of Business Administration & Management.	All Master Programmes in the Business & Management field.

Leadership

Course Code: DLMBLSE01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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 recognizingothers. 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 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 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	

International Marketing

Module Code: DLMMARE

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

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

Module Coordinator

Prof. Dr. Josephine Zhou-Brock (International Marketing)

Contributing Courses to Module

- International Marketing (DLMMARE01)

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

- 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	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field of Marketing & Sales.	All Master Programmes in the Marketing & Communication field.

International Marketing

Course Code: DLMMARE01

Study Level	Language of Instruction	Contact Hours	CP	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, socio-cultural, 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

1. 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®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

DLMMARE01

Negotiation

Module Code: DLMNEGE-01

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

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

Module Coordinator

Prof. Dr. Georg Berkel (Negotiation)

Contributing Courses to Module

- Negotiation (DLMNEGE01-01)

Module Exam Type

Module Exam	Split Exam
Study Format: myStudies Oral Assignment Study Format: Distance Learning Oral Assignment	

Weight of Module

see curriculum

Module Contents

- The significance and nature of negotiation
- The distribution of value
- Distributive negotiation tactics
- The creation of value
- Value creation negotiation tactics
- The negotiator's dilemma
- Learning to negotiate

Learning Outcomes

Negotiation

On successful completion, students will be able to

- Describe the process of negotiation and the interconnected but opposing processes of value distribution and value creation.
- Recognize common myths and misconceptions regarding negotiation and negotiators and take measures to avoid common pitfalls.
- Apply empirical insights about the process of negotiation to negotiation scenarios.
- Negotiate with various other parties using value distribution and value creation tactics.
- Engage in a process of self-reflection and utilize a variety of tools to improve performance as a novice negotiator.

Links to other Modules within the Study Program	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the fields of Business Administration & Management	All Master Programmes in the Business & Management fields

Negotiation

Course Code: DLMNEGE01-01

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

Course Description

The course enables students to learn about both the negotiation process and actually how to negotiate. In order to understand the rules that govern the interpersonal decision-making process that is negotiation, it is essential to have an in-depth understanding of the two sides of negotiation: the distribution of value and the creation of value. This course begins by introducing students to the pervasive nature of negotiation and some of the common myths and misconceptions that limit the potential benefits that can be gained through effective negotiation. It then delves into the concept of distribution value and the specific tactics that can be employed in order to arrive at the most favorable outcome. Students will then explore value creation and how to implement tactics to move from a win-lose scenario to a win-win. The course will then offer insights drawn from game theory (including the prisoner's dilemma, the "stag hunt game," the "tit-for-tat" strategy) before concluding with a focused exploration of how to manage the process of implementing negotiation theory in practice, avoiding pitfalls and allowing for effective negotiation learning.

Course Outcomes

On successful completion, students will be able to

- Describe the process of negotiation and the interconnected but opposing processes of value distribution and value creation.
- Recognize common myths and misconceptions regarding negotiation and negotiators and take measures to avoid common pitfalls.
- Apply empirical insights about the process of negotiation to negotiation scenarios.
- Negotiate with various other parties using value distribution and value creation tactics.
- Engage in a process of self-reflection and utilize a variety of tools to improve performance as a novice negotiator.

Contents

1. The Significance and Nature of Negotiation
   - 1.1 The Nature and Types of Negotiation
   - 1.2 Misconceptions About Negotiation and Myths About Negotiators
2. The Distribution of Value
   - 2.1 The Pie: Zone of Possible Agreement
   - 2.2 Slicing the Pie: Maximizing Distributive Outcomes

3. Distributive Negotiation Tactics
   - 3.1 Distributive Negotiation To-Dos
   - 3.2 Learning Transfer

4. The Creation of Value
   - 4.1 Value Creation: From Win-Lose to Win-Win
   - 4.2 The Four Steps and the Three Types of Value Creation

5. Value Creation Negotiation Tactics
   - 5.1 Framing
   - 5.2 Value Creation Negotiation To-Dos

6. The Negotiator's Dilemma
   - 6.1 The Dilemma Between Creating and Distributing Value
   - 6.2 The Prisoner's Dilemma as a Metaphor for the Negotiator's Dilemma
   - 6.3 Coping Strategies: Tit-for-Tat Strategy and Changing Payoffs

7. Learning to Negotiate
   - 7.1 From Theory to Practice
   - 7.2 Three Challenges to Learning to Negotiate
   - 7.3 A Model for Negotiation Learning

Literature

Compulsory Reading

Further Reading

- Brett, J. M. (2014). Negotiating globally: How to negotiate deals, resolve disputes, and makedecisions across cultural boundaries (3rd ed.). Jossey-Bass.
- Fisher, R., Ury, W. L., & Patton, B. (2011). Getting to yes: Negotiating agreements without giving in(3rd ed.). Penguin Books.

Study Format myStudies

Study Format	Course Type
myStudies	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	

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	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®
- ☑ Course Book
- ☐ Vodcast
- ☑ Shortcast
- ☑ Audio
- ☐ Exam Template
- ☐ Review Book
- ☐ Creative Lab
- ☑ Guideline
- ☐ Live Tutorium/Course Feed

International Financial Management

Module Code: DLMINTIFM_E

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

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

Module Coordinator

Prof. Dr. Markus Prandini (International Financial Management)

Contributing Courses to Module

- International Financial Management (DLMINTIFM01_E)

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

- Introduction to International Financial Management
- International exchange rate management
- International finance
- International investment decisions
- International liquidity management
- International tax management

Learning Outcomes

International Financial Management

On successful completion, students will be able to

- identify the challenges of internationalization for financial management.
- explain the specifics, tasks and objectives of international financial management.
- understand the international monetary system and to implement adequate risk management and hedging measures.
- reflect the specifics of financing and capital budgeting measures in an international context in the decision-making process.
- apply the instruments of international liquidity management.
- provide an overview of international tax law, its effects and tax optimization strategies.

Links to other Modules within the Study Program	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the fields of Business Administration & Management	All Master Programs in the Business & Management fields

International Financial Management

Course Code: DLMINTIFM01_E

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

Course Description

With the increasing advancement of globalization of the economy, it is hardly imaginable that today's companies operate exclusively on a regional or national level. This is especially true for companies with a high export share. However, international activities are accompanied by very specific business management challenges and questions that the financial management of a company must also face.In this course, students deal with the specifics of international financial management in a practical context. To this end, challenges for financial management resulting from internationalization are first worked out in order to then understand the framework, tasks and goals of international financial management. The main responsibilities include the management of exchange rates, investment decisions, financing, liquidity and taxes in an international context - which accordingly form the focus of this course. In each case, the basics and the relevance of the subject area are explained in order to then present, apply and critically reflect on adequate (financial) management strategies and instruments.

Course Outcomes

On successful completion, students will be able to

- identify the challenges of internationalization for financial management.
- explain the specifics, tasks and objectives of international financial management.
- understand the international monetary system and to implement adequate risk management and hedging measures.
- reflect the specifics of financing and capital budgeting measures in an international context in the decision-making process.
- apply the instruments of international liquidity management.
- provide an overview of international tax law, its effects and tax optimization strategies.

Contents

1. Introduction to international Financial Management
   - 1.1 Basics of financial management
   - 1.2 International financial management environment
   - 1.3 Objectives & tasks of international financial management

2. International foreign exchange management
   - 2.1 Introduction to the international monetary system
   - 2.2 Balance of payments, foreign exchange market & exchange rates
   - 2.3 Risk management & hedging strategies

3. International finance
   - 3.1 Financing of multinational companies
   - 3.2 Cost of capital of multinational companies
   - 3.3 Intra-group financing

4. International investment decisions
   - 4.1 Objectives and types of foreign investments
   - 4.2 Issues in foreign investment analysis
   - 4.3 Cost of capital for international investments

5. International liquidity management
   - 5.1 Liquidity planning of multinational companies
   - 5.2 Cash Management, Cash Pooling & Netting
   - 5.3 International trade finance

6. International tax management
   - 6.1 Basics of international tax law
   - 6.2 Transfer pricing & taxation of holding companies
   - 6.3 Possibilities of income transformation & tax optimization

Literature

Compulsory Reading

Further Reading

- Copeland, L. S. (2014): Exchange rates and international finance. 6th edition, Pearson, Harlow.
- Eiteman, David K. / Stonehill Arthur I. / Moffett Michael H. (2020): Multinational business finance. 15th edition, Pearson, Harlow.
- Hull, J. C. (2018): Options, futures, and other derivatives. 10th edition, Pearson, New York, NY.
- Moffett, M. H./ Stonehill, A. I. / Eiteman, D. K. (2018): Fundamentals of multinational finance. 6th edition, Pearson, New York, NY.
- Shapiro, A. C. / Hanouna, P. (2020): Multinational financial management. 11th edition, Wiley, Hoboken, NJ.

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

International Financial Accounting

Module Code: DLMINRL_E

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

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

Module Coordinator

Prof. Dr. Michel Charifzadeh (International Financial Accounting)

Contributing Courses to Module

- International Financial Accounting (MINR01-02_E)

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

- Fundamentals of International Financial Reporting according to IFRS
- Property, plant, and equipment
- Intangible assets
- Financial instruments and hedge accounting
- Inventories
- Revenue recognition and construction contracts
- Provisions and deferred taxes
- Consolidated financial statements

Learning Outcomes

International Financial Accounting

On successful completion, students will be able to

- understand key international financial reporting standards (IFRS).
- analyze annual reports that have been prepared in accordance with IFRS.
- independently apply accounting standards in accordance with IFRS.

Links to other Modules within the Study Program	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the fields of Business Administration & Management	All Master Programs in the Business & Management fields

International Financial Accounting

Course Code: MINR01-02_E

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

Course Description

In recent years, economic activities and capital markets have become increasingly international, which has created the need to process and present financial information accordingly. This course provides important insights in accounting according to the International Financial Reporting Standards (IFRS). The course addresses problems relating to and the reasons for international accounting and discusses the need for international harmonization. In addition, the course covers practice-oriented areas of accounting, particularly property, plant and equipment, intangible assets, inventories, revenue recognition and provisions. A larger area deals with the treatment of financial instruments and in particular the area of hedge accounting. The course concludes with an outline of Group accounting under IFRS.

Course Outcomes

On successful completion, students will be able to

- understand key international financial reporting standards (IFRS).
- analyze annual reports that have been prepared in accordance with IFRS.
- independently apply accounting standards in accordance with IFRS.

Contents

1. Fundamentals of International Financial Reporting according to IFRS
   - 1.1 Management accounting and financial accounting
   - 1.2 Types of financial statements and reporting requirements
   - 1.3 Structure of the International Financial Reporting Standards
   - 1.4 Elements of financial statements
2. Property, plant, and equipment
   - 2.1 Scope, recognition and measurement
   - 2.2 Balance sheet features and disclosure
3. Intangible assets
   - 3.1 Recognition of expenditure on intangible resources, recognition and measurement
   - 3.2 Balance sheet features, disclosure and examples

4. Financial instruments and hedge accounting
   - 4.1 Principles of financial instruments and their valuation
   - 4.2 Classification and measurement of financial instruments
   - 4.3 Hybrid financial instruments, impairment, derecognition and disclosure
   - 4.4 Hedge accounting

5. Inventories
   - 5.1 Recognition, measurement and disclosure of inventories
   - 5.2 Subsequent measurement of inventories

6. Revenue recognition and construction contracts
   - 6.1 Revenue recognition
   - 6.2 Construction contracts

7. Provisions and deferred taxes
   - 7.1 Provisions
   - 7.2 Deferred taxes

8. Consolidated Financial Statements
   - 8.1 Groups and business combinations
   - 8.2 Consolidation

Literature

Compulsory Reading

Further Reading

- Alexander, B. / Jorissen, A. / Hoogendoorn, et al. (2020): International Financial Reporting and Analysis. 8th edition, Cengage, Boston.
- Kieso, D. / Weygandt, J. / Warfield, T. (2017): Intermediate Accounting. 3rd edition, John Wiley & Sons, New Jersey.
- Krimpmann, A. (2015): Principles of Group Accounting under IFRS. John Wiley & Sons, New Jersey.
- PKF International (2019): Wiley Interpretation and Application of International Financial Reporting Standards 2019. John Wiley & Sons, New Jersey.

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

Seminar: International Human Resource Management

Module Code: DLMSIHRM_E

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

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

Module Coordinator

Prof. Dr. Katharina-Maria Rehfeld (Seminar: International Human Resource Management)

Contributing Courses to Module

- Seminar: International Human Resource Management (DLMSIHRM01_E)

Module Exam Type

Module Exam	Split Exam
Study Format: myStudies Written Assessment: Research Essay Study Format: Distance Learning Written Assessment: Research Essay	

Weight of Module

see curriculum

Module Contents

The aim of this module is to discuss and work on current and practice-relevant issues of International Human Resource Management (IHRM). The module deepens the fundamentals of IHRM by taking into account the context, theories, methods, instruments and practice of international IHRM. Emphasis is placed on debates associated with cultural differences and ethical issues. In addition, it helps to prepare the students for the final master thesis, since a seminar paper is required as the final examination.

Learning Outcomes

Seminar: International Human Resource Management

On successful completion, students will be able to

- name the most important issues in international HR management.
- work independently on a current topic in international HR management using current and relevant literature (monographs, professional and academic journals) and develop innovative methods of solution.
- apply the fundamentals of scientific work to write a seminar paper and prepare methodically for writing the final master thesis.

Links to other Modules within the Study Program	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the fields of Business Administration & Management	All Master Programs in the Business & Management fields

Seminar: International Human Resource Management

Course Code: DLMSIHRM01_E

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

Course Description

HR Management differs from other business disciplines insofar that it is concerned with the management of a human resource, which brings with it special requirements and challenges. Not only the external framework conditions of HR management are changing, such as political, legal, economic, and socio-demographic conditions but also the internal framework conditions are subject to continuous change, such as the changing needs and expectations of employees, new forms of work and working time arrangements, contemporary forms of personnel management, etc. Against the background of globalization, HR management is increasingly confronted with international aspects and needs to position itself accordingly. In international corporations as well as in medium-sized companies that are in the process of internationalization, HR management needs to be in line with these changing conditions. The seminar deals with the application of the fundamentals of IHRM to current international topics, which have a high application and practical relevance.

Course Outcomes

On successful completion, students will be able to

- name the most important issues in international HR management.
- work independently on a current topic in international HR management using current and relevant literature (monographs, professional and academic journals) and develop innovative methods of solution.
- apply the fundamentals of scientific work to write a seminar paper and prepare methodically for writing the final master thesis.

Contents

- Current topics in international HR management. The following list of topics offers possible topics of the course:
  - International human resources development
  - International Recruiting
  - Opportunities and risks of foreign assignments of executives
  - Problems of reintegrating expatriats after their assignment abroad
  - Global Talent Management
  - International standardization of HR processes: between global standardization and local adaptation
  - Intercultural competence and personnel development
  - International remuneration policy

- Ethical aspects of international HR management

Literature

Compulsory Reading

Further Reading

- Books:
  - Armstrong, M./Taylor, S. (2014): Armstrong's Handbook of Human Resource Management Practice. 13th edition, Kogan Page, London.
  - Briscoe, D. R./Schuler, R. S./Claus, L. M. (2009): International Human Resource Management. Policies and Practices for Multinational Enterprises. 3. Auflage, Routledge, London.
  - Dessler, G. (2013): Human Resource Management. 13th edition, Prentice Hall, Boston.
  - DGFP (Ed.) (2012): Shaping International Human Resources Management. Perspectives, structures, success factors, practical examples. Bertelsmann, Bielefeld.
  - Festing, M. et al. (2011): International Human Resources Management. 3rd edition, Gabler, Wiesbaden.
  - Schmeisser, W./Krimphove, D. (2010): International Human Resources Management and International Labor Law. Oldenbourg, Munich.
  - Scullion, H./Collings, D. G. (Hrsg.) (2011): Global Talent Management. Routledge, New York.
  - Sparrow, P./Brewster, C./Harris, H. (2004): Globalizing Human Resource Management. Routledge, London et al.

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

3. Semester

Strategic Management

Module Code: DLMBSME

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

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

Module Coordinator

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

Contributing Courses to Module

- Strategic Management (DLMBSME01)

Module Exam Type

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

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	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field of Business Administration & Management.	All Master Programmes in the Business & Management field.

Strategic Management

Course Code: DLMBSME01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

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 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 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	

Seminar: Current Issues in International Management

Module Code: DLMINTSATIM_E

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

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

Module Coordinator

Prof. Dr. Markus Prandini (Seminar: Current Issues in International Management)

Contributing Courses to Module

- Seminar: Current Issues in International Management (DLMINTSATIM01_E)

Module Exam Type

Module Exam	Split Exam
Study Format: myStudies Written Assessment: Research Essay Study Format: Distance Learning Written Assessment: Research Essay	

Weight of Module

see curriculum

Module 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.

Learning Outcomes

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	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field of Business Administration & Management.	All Master Programs in the Business & Management fields.

Seminar: Current Issues in International Management

Course Code: DLMINTSATIM01_E

Study Level	Language of Instruction	Contact Hours	CP	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®	☐ 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	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®	☐ Review Book
☐ Course 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	CP	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	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field(s) of Marketing & Sales	All Master Programmes in the Marketing field(s)

Global Brand Management

Course Code: DLMBSPBE01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

2. Culture and Branding
   - 2.1 What is Culture?
   - 2.2 Culture and Consumer Behavior
   - 2.3 The Global-Local Dilemma of Branding

3. Creating Global Brands
   - 3.1 Brand Positioning
   - 3.2 Designing and Implementing Stages of Branding Strategies
   - 3.3 Choosing Brand Elements to Build Brand Equity
   - 3.4 Designing Marketing Programs to Build Brand Equity

4. Managing Global Brands
   - 4.1 Branding Strategy
   - 4.2 Brand Hierarchy
   - 4.3 Business-to-Business (B2B) Brand Management Strategies

5. Growing and Sustaining Brand Equity
   - 5.1 Extending the Brand
   - 5.2 Brand Alliances
   - 5.3 Green and Cause Marketing

6. Measuring Global Brand Equity and Performance
   - 6.1 Brand Equity Measurement Systems
   - 6.2 Measuring Sources of Brand Equity
   - 6.3 Measuring Outcomes of Brand Equity

7. Brand Analysis and Strategy Across Multiple Markets: A Managerial Approach
   - 7.1 Internal Analysis
   - 7.2 External Analysis
   - 7.3 Global Brand Management Scenarios

8. Managing a Brand Crisis
   - 8.1 Revitalizing a Brand
   - 8.2 Brand Falsification
   - 8.3 Brand Protection Strategies
   - 8.4 Brand Crises

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

Study Format Distance Learning

Study Format	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	

Sales and Pricing

Course Code: DLMBSPBE02

Study Level	Language of Instruction	Contact Hours	CP	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.

Contents

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

2. Channel Management
   - 2.1 Distribution System as a Function of the Products Sold
   - 2.2 Selection of Distribution Partners
   - 2.3 Professionalization and Mobilization of Distribution Partners
   - 2.4 Control of Distribution Partners

3. Sales Force Effectiveness
   - 3.1 Sales Strategy
   - 3.2 Sales Process
   - 3.3 Sales Organization
   - 3.4 Sales Information and Management Systems
   - 3.5 Sales Controlling

4. Sales Optimization Levers
   - 4.1 Key Account Management
   - 4.2 Proactive Sales
   - 4.3 Value-Based Selling
   - 4.4 Online Sales Tools

5. Fundamentals of International Pricing
   - 5.1 Pricing Strategies
   - 5.2 Pricing for Market Segments
   - 5.3 Transaction Pricing and Managing the Price Waterfall
   - 5.4 Price Differentiation and Standardization in an International Context

6. Special Topics in International Pricing
   - 6.1 Gray Markets
   - 6.2 Transfer Pricing
   - 6.3 Price Wars
   - 6.4 Innovative Pricing Methods
   - 6.5 Risks in International Business

Literature
Compulsory Reading
Further Reading ▪ Dibb, S., & Simkin, L. (2010). The market segmentation workbook: Target marketing for marketing managers. Boston, MA: Cengage Learning. ▪ Kotler, P., Keller, K., Brady, M., Goodman, M., & Hansen, T. (2016). Marketing management (3rd ed.) (pp. 331–420). Harlow: Pearson Education. (Database: 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	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☑ Vodcast	☐ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

DLMBSPBE02

Corporate Finance and Investment

Module Code: DLMBCFIE

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field of Finance & Tax Accounting	All Master Programmes in the Business & Management field

Advanced Corporate Finance

Course Code: DLMBCFIE01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

3. Debt Financing and Leasing
   - 3.1 Debt Valuation
   - 3.2 Rating Debt
   - 3.3 Different Kinds of Debt and Hybrid Securities
   - 3.4 Leasing as a Form of Corporate Finance

4. Options and Futures
   - 4.1 Derivative Financial Instruments, Options and Futures
   - 4.2 Valuing Options, the Binomial Model, the Black-Scholes Formula
   - 4.3 Real Options

5. Takeovers, Corporate Control, and Governance
   - 5.1 Mergers and Acquisitions
   - 5.2 LBOs, Management Buyouts, and Going Private
   - 5.3 Private Equity and the Venture Capitalist
   - 5.4 Empirical Testing of Takeover Success
   - 5.5 Corporate Governance and Corporate Control

6. Unsolved Issues and the Future of Finance
   - 6.1 What Do We Know and What Do We Not Know About Finance?
   - 6.2 The Future of Finance

Literature

Compulsory Reading

Further Reading

- Brealey, R., Myers, S. C., & Allen, F. (2016). Principles of corporate finance (12th ed.). New York, NY: McGraw-Hill Education.
- Vernimmen, P., Quiry, P., 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	CP	Admission Requirements
MA	English		5	none

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

2. Portfolio Selection and the Optimum Portfolio
   - 2.1 Mean Variance Portfolio Theory
   - 2.2 The Calculation of Risk and Return
   - 2.3 Efficient Portfolios and Techniques for Calculating the Efficient Frontier
   - 2.4 Single-Index Models and Multi-Index Models
   - 2.5 International Diversification

3. Equilibrium in Capital Markets and Asset Pricing Models
   - 3.1 Equilibrium in Capital Markets and the Standard Capital Asset Pricing Model
   - 3.2 Empirical Tests of Equilibrium Models
   - 3.3 Extensions to the Single-Factor Capital Asset Pricing Model
   - 3.4 Multifactor Asset Pricing Models: Arbitrage Pricing Theory and the Fama-French Model

4. Analysis of Securities
   - 4.1 Macro- and Microanalyses of Industries and Companies
   - 4.2 Stock Valuation, Intrinsic Value and Market Value Determinants, and Valuation Techniques
   - 4.3 The Analysis and Valuation of Bonds
   - 4.4 Technical Analysis and Behavioral Finance

5. Management of Securities
   - 5.1 The Efficient Market Hypothesis
   - 5.2 Stock and Bond Portfolio Management Strategies Using Active vs Passive Strategies
   - 5.3 Asset Allocation Strategies

6. Investment Vehicles
   - 6.1 Mutual Funds: Types, Industry, and Participants
   - 6.2 Hedge Funds
   - 6.3 Private Equity Funds

7. Evaluation of Investment Performance
   - 7.1 Globalization and International Investing
   - 7.2 Investment Process
   - 7.3 Evaluation of Portfolio Performance Using the Sharpe Ratio, Jensen Measure, Treynor Measure, and Other Measures
   - 7.4 Evaluation of Security Analysis

Literature
Compulsory Reading
Further Reading ▪ Bodie, Z., Kane, A., & Marcus, A. J. (2017). Essentials of investments (10th ed.). New York, NY:McGraw-Hill Education. ▪ Fabozzi, F. J., & Modigliani, F. (2009). Capital markets: Institutions and instruments (4th ed.). 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	

IT Project and Architecture Management

Module Code: DLMBITPAM

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

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

Module Coordinator

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

Contributing Courses to Module

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

Module Exam Type

Module Exam	Split Exam
	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	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field(s) of Computer Science & Software Development	All Master Programmes in the IT & Technology field(s)

IT Project Management

Course Code: DLMBITPAM01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

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

Literature

Compulsory Reading

Further Reading

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

Study Format Distance Learning

Study Format	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	CP	Admission Requirements
MA	English		5	none

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

4. Architecture Framework: TOGAF
   - 4.1 Purpose and Overview on TOGAF
   - 4.2 Architecture Development Method (ADM)
   - 4.3 Guidelines & Techniques
   - 4.4 Architecture Content Framework
   - 4.5 Architecture Capability Framework

5. Architecture Documentation
   - 5.1 Structures, Components, and Interfaces
   - 5.2 Processes and Applications
   - 5.3 Domain Architecture

6. Architecture Governance
   - 6.1 Roles and Committees
   - 6.2 Processes and Decisions
   - 6.3 Management of Architectural Policies

7. Enterprise Architecture Patterns
   - 7.1 Structures, Components, and Interfaces
   - 7.2 Processes and Applications
   - 7.3 Domain Architecture

Literature

Compulsory Reading

Further Reading

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

Study Format Distance Learning

Study Format	**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®	☐ 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	CP	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
	Internet of Things • Study Format "Distance Learning": Exam, 90 Minutes • Study Format "myStudies": Exam, 90 Minutes Manufacturing Methods Industry 4.0 • Study Format "myStudies": Exam, 90 Minutes • Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents

Internet of Things

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

Manufacturing Methods Industry 4.0

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

Learning Outcomes

Internet of Things

On successful completion, students will be able to

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

Manufacturing Methods Industry 4.0

On successful completion, students will be able to

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

Links to other Modules within the Study Program	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field(s) of Computer Science & Software Development	All Master Programmes in the IT & Technology field(s)

Internet of Things

Course Code: DLMBMMIIT01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

3. Architectures of Internet of Things and Industrial Internet of Things
   - 3.1 Elements of IoTs and IIoTs
   - 3.2 Sensors and Nodes
   - 3.3 Power Systems
   - 3.4 Fog Processors
   - 3.5 Platforms

4. Communication Standards and Technologies
   - 4.1 Network Topologies
   - 4.2 Network Protocols
   - 4.3 Communication Technologies

5. Data Storage and Processing
   - 5.1 NoSQL and MapReduce
   - 5.2 Linked Data and RDF(S)
   - 5.3 Semantic Reasoning
   - 5.4 Complex Event Processing
   - 5.5 Machine Learning
   - 5.6 Overview of Existing Data Storage and Processing Platforms

6. Fields of Application
   - 6.1 Smart Home/Living
   - 6.2 Smart Buildings
   - 6.3 Ambient Assisted Living
   - 6.4 Smart Energy/Grid
   - 6.5 Smart Factory
   - 6.6 Smart Logistics
   - 6.7 Smart Healthcare
   - 6.8 Smart Agriculture

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

Study Format Distance Learning

Study Format	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®	☐ Review Book
☑ Course 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	CP	Admission Requirements
MA	English		5	none

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

3. Additive Manufacturing and 3D printing
   - 3.1 Basics and Legal Aspects
   - 3.2 Material Extrusion
   - 3.3 Vat Polymerization
   - 3.4 Powder Bed Fusion
   - 3.5 Material Jetting
   - 3.6 Binder Jetting
   - 3.7 Direct Energy Deposition
   - 3.8 Sheet Lamination

4. Rapid Prototyping
   - 4.1 Definitions
   - 4.2 Strategical and Operative Aspects
   - 4.3 Application Scenarios

5. Rapid Tooling
   - 5.1 Definitions
   - 5.2 Direct and Indirect Methods
   - 5.3 Application Scenarios

6. Direct/Rapid Manufacturing
   - 6.1 Potentials and Requirements
   - 6.2 Implementation Examples

7. Cyber-Physical Production Systems
   - 7.1 Introduction
   - 7.2 Cyber-Physical Production Systems
   - 7.3 Impact on Design and Maintenance of Plants
   - 7.4 Dynamic Reconfiguration of Plants
   - 7.5 Application Examples

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

Study Format myStudies

Study Format	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®	☐ 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	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	

Artificial Intelligence

Module Code: DLMIMWKI

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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: AI 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 Seminar: AI and Society • Study Format "Distance Learning": Written Assessment: Research Essay

Weight of Module

see curriculum

Module Contents

Artificial Intelligence

- History of AI
- AI application areas
- Expert systems
- Neuroscience
- Modern AI 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	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field of Data Science & Artificial Intelligence.	All Master Programmes in the IT & Technology field.

Artificial Intelligence

Course Code: DLMAIAI01

Study Level	Language of Instruction	Contact Hours	CP	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 AI
   - 1.1 Historical Developments
   - 1.2 AI 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 AI Systems
   - 4.1 Recent Developments in Hard- and Software
   - 4.2 Narrow vs General AI
   - 4.3 NLP and Computer Vision

5. AI Application Areas
   - 5.1 Autonomous Vehicles & Mobility
   - 5.2 Personalized Medicine
   - 5.3 FinTech
   - 5.4 Retail & Industry

Literature

Compulsory Reading

Further 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 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®	☐ Review Book
☑ Course Book	☐ Creative Lab
☐ Vodcast	☐ Guideline
☑ Shortcast	☑ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

Seminar: AI and Society

Course Code: DLMAISAIS01

Study Level	Language of Instruction	Contact Hours	CP	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 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®	☐ Review Book
☐ Course 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	CP	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. Jöran Pieper (Analytical Software and Frameworks)

Contributing Courses to Module

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

Module Exam Type

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

Analytical Software and Frameworks

On successful completion, students will be able to

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

Links to other Modules within the Study Program	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field(s) of Data Science & Artificial Intelligence	All Master Programmes in the IT & Technology field(s)

Data Science

Course Code: DLMBDSA01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

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

Literature

Compulsory Reading

Further Reading

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

Study Format 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	

Analytical Software and Frameworks

Course Code: DLMBDSA02

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

3. Statistical Modeling Frameworks
   - 3.1 The R Project for Statistical Computing
   - 3.2 The Python Ecosystem

4. Machine Learning & Artificial Intelligence
   - 4.1 Overview of Modern Machine Learning Frameworks
   - 4.2 Introduction to TensorFlow & Keras

5. Cloud Computing Platforms & On-Premise Solutions
   - 5.1 Advantages and Disadvantages of Cloud, On-premise, and Edge Solutions
   - 5.2 Overview of Cloud Computing Solutions

6. Distributed Computing
   - 6.1 Overview of Distributed Computing Approaches
   - 6.2 Overview of Streaming Approaches
   - 6.3 Other Solutions

7. Database Technologies
   - 7.1 Overview of Database Approaches
     - 7.1.1 Row-based versus Column-based
     - 7.1.2 In Memory DB
     - 7.1.3 Relational DB versus noSQL
     - 7.1.4 Timeseries DB
   - 7.2 Overview of Database Implementations

Literature

Compulsory Reading

Further Reading

- Elmasri, R., & Navathe, S. (2010). Fundamentals of database systems. Boston, MA: Addison-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 Distance Learning

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®	☐ Review Book
☑ Course 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	CP	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 Supply Chain Risk Management and Controlling • Study Format "Fernstudium": Exam, 90 Minutes

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	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the fields of Transportation & Logistics	All Master Programs in the Transport & Logistics fields

Global Supply Chain Management

Course Code: MWCH01_E

Study Level	Language of Instruction	Contact Hours	CP	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®	☐ Review Book
☑ Course 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	CP	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	
☐ Learning Sprints®	☐ Review Book
☑ Course Book	☐ Creative Lab
☑ Vodcast	☐ Guideline
☐ Shortcast	☐ Live Tutorium/Course Feed
☑ Audio	
☑ Exam Template	

MWCH02_E

Consumer Behavior and Research

Module Code: DLMBCBR

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field(s) Marketing & Sales	All Master Programmes in the Marketing field(s)

International Consumer Behavior

Course Code: DLMBCBR01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

3. Internal Influences on Consumer Behavior
   - 3.1 Motives and Motivation
   - 3.2 Perception
   - 3.3 Attitude

4. External Influences on Consumer Behavior
   - 4.1 Culture
   - 4.2 Subculture
   - 4.3 Groups and Families

5. International Consumer Behavior
   - 5.1 Cultural Dimensions
   - 5.2 The Influence of Social Media on Consumer Decision-Making

6. International Marketing Strategy and Consumer Behavior
   - 6.1 International Market Segmentation and Product Positioning
   - 6.2 Consumer Behavior and Product Strategy
   - 6.3 Consumer Behavior and Communication Strategy
   - 6.4 Consumer Behavior and Pricing Strategy
   - 6.5 Consumer Behavior and Distribution Strategy

Literature

Compulsory Reading

Further Reading

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

Study Format 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	

Applied Marketing Research

Course Code: DLMBCBR02

Study Level	Language of Instruction	Contact Hours	CP	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.

Contents

1. The Role of Marketing Research in Managerial Decision-Making
   - 1.1 The Importance of Marketing Research in Decision-Making
   - 1.2 The Institutions Involved in Marketing Research
   - 1.3 Common Challenges in Conducting Marketing Research

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 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	CP	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	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field(s) of Finance & Tax Accounting	All Master Programmes in the Business & Management field(s)

Advanced Management Accounting & Control

Course Code: DLMBACCE01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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 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	

Current Issues in Accounting

Course Code: DLMBACCE02

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

1. Preparation of Financial Statements
    - 1.1 Accrual and Deferral Concepts for Recording Transactions
    - 1.2 End-of-Period Adjustments and the Use of Accounting Estimates
    - 1.3 Preparation of Financial Statements and the Classified Balance Sheet
    - 1.4 The Accrual Basis of Accounting and the Interpretation of Financial Statements
    - 1.5 Financial Analysis and the Company's Liquidity: Working Capital Ratio, Current Ratio, and Quick Ratio

2. Optimization of Receivables and Inventory
   - 2.1 Receivables and Uncollectibles
   - 2.2 Accounting for Receivables and Uncollectibles
   - 2.3 Inventories Classification
   - 2.4 Inventory Cost Flow Assumptions and Their Impact on Financial Statements
   - 2.5 Financial Analysis: Accounts Receivable and Inventory Turnover Ratios

3. Optimization of Liabilities and Equity
   - 3.1 Financing Using Current Liabilities, Notes Payable, and Contingencies
   - 3.2 Long-Term Sources of Finance
   - 3.3 Debt and Equity Financing and Earnings Per Share
   - 3.4 Financial Statement Analysis Using Price-Earnings Ratio

4. Current Issues in Financial Accounting
   - 4.1 International Financial Reporting Standards (IFRS)
   - 4.2 Principle- Versus Rule-Based Standards and IFRS Fair Value Measures
   - 4.3 Specific IFRS Standards
   - 4.4 Financial Statement Presentation under IFRS
   - 4.5 Integrated Revenue Recognition and the Implications of Adopting IFRS

5. Valuing Businesses
   - 5.1 Financial Statements and Valuation
   - 5.2 Accrual Accounting and Valuation: Pricing Book Value
   - 5.3 Accrual Accounting and Valuation: Pricing Earnings
   - 5.4 Business Valuation Methods in Practice
   - 5.5 Corporate Restructuring, Corporate Governance, and Auditor's Role in Firm Valuation

6. Capital Budgeting
   - 6.1 Capital Budgeting Decisions
   - 6.2 Non-Discounting Models: Payback and Accounting Rate of Return
   - 6.3 Discounting Models: The Net Present Value (NPV) Method and Internal Rate of Return (IRR)
   - 6.4 NPV Versus IRR for Selecting Mutually Exclusive Projects
   - 6.5 Basics of Modeling Capital Budgeting

7. Financial Modeling and Valuation
   - 7.1 Using Assumptions and Building a Financial Model
   - 7.2 Analysis, Valuation, and Planning

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

Study Format Distance Learning

Study Format	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 Service Management

Module Code: DLMBITGSM

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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
	IT Service Management • Study Format "Distance Learning": Exam, 90 Minutes IT Governance and Compliance • Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents

IT Service Management

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

IT Governance and Compliance

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

Learning Outcomes

IT Service Management

On successful completion, students will be able to

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

IT Governance and Compliance

On successful completion, students will be able to

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

Links to other Modules within the Study Program	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field of Computer Science & Software Development.	All Master Programmes in the IT & Technology field.

IT Service Management

Course Code: DLMBITGSM01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

3. ITIL – Service Strategy
   - 3.1 Business Relationship Management
   - 3.2 Service Portfolio Management
   - 3.3 Financial Management for Services
   - 3.4 Demand Management

4. ITIL – Operational Processes: Service Design
   - 4.1 Service Level Management
   - 4.2 Service Catalogue Management
   - 4.3 Availability Management
   - 4.4 Service Continuity Management

5. ITIL – Operational Processes: Service Transition
   - 5.1 Transition Planning and Support
   - 5.2 Change Management
   - 5.3 Service Asset and Configuration Management
   - 5.4 Release and Deployment Management

6. ITIL – Operational Processes: Service Operation
   - 6.1 Incident Management
   - 6.2 Problem Management
   - 6.3 Request Fulfilment
   - 6.4 Event Management

Literature

Compulsory Reading

Further Reading

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

Study Format Distance Learning

Study Format	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	CP	Admission Requirements
MA	English		5	none

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

2. Establishing IT Governance and Compliance
   - 2.1 Assessment
   - 2.2 IT Strategy
   - 2.3 Tactics
   - 2.4 Operations
   - 2.5 Compliance
   - 2.6 Performance

3. The COBIT Framework
   - 3.1 Overview of COBIT
   - 3.2 The COBIT Goals Cascade
   - 3.3 The COBIT Process Reference Model
   - 3.4 Deploying and Implementing COBIT

4. IT Governance Frameworks
   - 4.1 Quality Management as a Foundation
   - 4.2 ISO 9000 Family
   - 4.3 Maturity Models
   - 4.4 Relationship to Service and Architecture Frameworks (ITIL, TOGAF)
   - 4.5 Relationship to IT Security Frameworks (ISO 27000 family)

5. Data Protection and IT Security
   - 5.1 Data Protection
   - 5.2 IT Security Management
   - 5.3 IT Security Threats and Attack Scenarios
   - 5.4 Countermeasures
   - 5.5 Cryptography

Literature

Compulsory Reading

Further Reading

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

Study Format Distance Learning

Study Format	**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	

DLMBITGSM02

Product Development and Design Thinking

Module Code: DLMBPDDT

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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 • Study Format "Distance Learning": Exam, 90 Minutes • Study Format "myStudies": Exam, 90 Minutes Design Thinking • 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 within the Study Program	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field of Design	All Master Programs in the Design, Architecture & Construction fields

Product Development

Course Code: DLMBPDDT01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

3. Product Development Approaches
   - 3.1 Lean Product Development
   - 3.2 Design Thinking
   - 3.3 Human-Centered Design
   - 3.4 User Experience Strategy
   - 3.5 Open Innovation

4. Digital Tools
   - 4.1 Computer-Aided Design
   - 4.2 Computer-Aided Quality
   - 4.3 Product Data Management
   - 4.4 Product Lifecycle Management

5. Organizational Perspective
   - 5.1 Incremental, Platform, and Breakthrough Development
   - 5.2 Building Teams
   - 5.3 Political Issues in Organizations
   - 5.4 Distributed New Product Development

Literature

Compulsory Reading

Further Reading

- Kahn, K. B., Kay, S. E., Slotegraaf, R. J., & Uban, S. (Eds.). (2012). The PDMA handbook of new 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 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®	☐ 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	CP	Admission Requirements
MA	English		5	none

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

Literature
Compulsory Reading
Further Reading ▪ IDEO.org. (2015). The Field Guide to Human-Centered Design. A step-by-step guide that will get you solving 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 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	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	

DLMBPDDT02

Big Data

Module Code: DLMBBD

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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
	Data Utilization • 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.
- apply different approaches for acquiring and using a knowledge management system.

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	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field(s) of Data Science & Artificial Intelligence	All Master Programmes in the IT & Technology field(s)

Data Utilization

Course Code: DLMBBD01

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

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

4. Image Recognition
   - 4.1 Basics of Image Representation
   - 4.2 Integral Transforms and Compression
   - 4.3 Exploiting the Visual: Image Recognition for Augmented Reality

5. Detection and Sensing
   - 5.1 Sensor Construction and Techniques
   - 5.2 Intelligent Agents and Surveillance
   - 5.3 Managing the Complex: Sensor Networks in Intelligent Transportation Systems

6. Problem-solving
   - 6.1 Knowledge Sharing and the Cloud
   - 6.2 Rule-based Systems
   - 6.3 Learning from Nature: Expert Systems in Business

7. Decision Support
   - 7.1 Invariants, Determinants, and Alternatives in Decision-making
   - 7.2 Correlation and Causality in Strategic Decision-making
   - 7.3 Approaching the Crossroads: Dashboards and Visualization

8. Data Security and Data Protection
   - 8.1 Securing Data Storage and Processing Infrastructure Against Unauthorized Access
   - 8.2 Compliance and Regulations, GPDR

Literature

Compulsory Reading

Further Reading

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

Study Format Distance Learning

Study Format	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	

Application Scenarios and Case Studies

Course Code: DLMBBD02-01

Study Level	Language of Instruction	Contact Hours	CP	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

Literature

Compulsory Reading

Further Reading

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

Study Format Distance Learning

Study Format	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	

Advanced Robotics 4.0

Module Code: DLMAIEAR

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	DLMAIEAR01	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. Leonardo Riccardi (Industrial and Mobile Robots) / Prof. Dr. Leonardo Riccardi (Project: Collaborative Robotics)

Contributing Courses to Module

- Industrial and Mobile Robots (DLMAIEAR01)
- Project: Collaborative Robotics (DLMAIEAR02)

Module Exam Type

Module Exam	Split Exam
	Industrial and Mobile Robots • Study Format "Distance Learning": Exam, 90 Minutes Project: Collaborative Robotics • Study Format "Distance Learning": Written Assessment: Project Report

Weight of Module

see curriculum

Module Contents

Industrial and Mobile Robots

- Architectural components of mobile and industrial robots
- Mathematical description
- Design of interactions and control

Project: Collaborative Robotics

- Human-robot interaction
- Safety operation
- Human-friendly robot design

A current list of topics is located in the Learning Management System.

Learning Outcomes

Industrial and Mobile Robots

On successful completion, students will be able to

- identify the main challenges of robotics in the era of Industry 4.0.
- understand the working principles of industrial and mobile robots.
- model a robotic system and design a motion control algorithm.
- use software platforms to command the execution of tasks and retrieve the execution status.

Project: Collaborative Robotics

On successful completion, students will be able to

- classify interactions between robots and humans.
- identify safety and risk scenarios.
- understand the principles of human-friendly robot design.
- apply algorithms for safe interaction.

Links to other Modules within the Study Program	Links to other Study Programs of IU International University of Applied Sciences

Industrial and Mobile Robots

Course Code: DLMAIEAR01

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

Course Description

The focus of this course is the theoretical foundation of mobile and industrial robotics. First, the basic concepts, architectural components (e.g., actuators and sensors), and challenges related to mobile and industrial robotics in the era of Industry 4.0 are presented. Next, the mathematical aspects concerning robot kinematics and trajectory planning are considered. These are necessary in order to define the operative task that a robot (mobile or industrial) must execute. The dynamics of a robotic system provides a mathematical model of the robot which can be exploited for simulation, design, and to control the task execution. There are various control architectures and approaches for robotic systems. This course focuses on the centralized and de-centralized architectures, as well as simple control design (e.g., proportional-integral-derivative control approaches).Finally, this course introduces the main software platforms and architectures used to control and exchange data with robots in a multi-agent environment, for instance, a manufacturing facility where many robots execute different tasks or must cooperate. The main patterns of such architectures and their uses are discussed. The adoption of model-based sensing/perception and control approaches yields intelligent systems which interact with the environment. This course concludes with an overview of behavior-based robotics, where robots are able to dynamically react to and learn from the real world.

Course Outcomes

On successful completion, students will be able to

- identify the main challenges of robotics in the era of Industry 4.0.
- understand the working principles of industrial and mobile robots.
- model a robotic system and design a motion control algorithm.
- use software platforms to command the execution of tasks and retrieve the execution status.

Contents

1. Introduction
   - 1.1 Robots and manufacturing
   - 1.2 Industrial robots
   - 1.3 Mobile robots
   - 1.4 Actuators for robotics
   - 1.5 Trends in robotics

2. Kinematics
   - 2.1 Position and orientation of a rigid body
   - 2.2 Joint kinematics
   - 2.3 Forward kinematics
   - 2.4 Inverse kinematics
   - 2.5 Differential kinematics
   - 2.6 Kinematics of mobile robots

3. Trajectory Planning
   - 3.1 Basic concepts
   - 3.2 Trajectories in the joints space
   - 3.3 Trajectories in the workspace
   - 3.4 Trajectory planning for mobile robots

4. Sensing and Perception
   - 4.1 Position
   - 4.2 Velocity
   - 4.3 Force
   - 4.4 Distance
   - 4.5 Visual

5. Fundamentals of Robot Dynamics
   - 5.1 Rigid body dynamics
   - 5.2 Lagrange formulation
   - 5.3 Newton formulation
   - 5.4 Direct and inverse dynamics
   - 5.5 Dynamics of mobile robots

6. Control of Robots
   - 6.1 Basic concepts
   - 6.2 Decentralized motion control
   - 6.3 Centralized motion control
   - 6.4 Force control

7. Architecture of Robotic Systems
   - 7.1 Architectural components
   - 7.2 Open Robot Control Software (OROCOS)
   - 7.3 Yet Another Robotic System Platform (YARP)
   - 7.4 Robot Operating System (ROS)
   - 7.5 Behavior-based robotics

Literature

Compulsory Reading

Further Reading

- Ben-Ari, M., & Mondada, F. (2017). Elements of robotics. Springer International Publishing.
- Siciliano, B., Sciavicco, L., Villani, L., & Oriolo, G. (2009). Robotics. Springer.
- Siciliano, B., & Khatib, O. (Eds.). (2016). Springer handbook of robotics (2nd ed.). Springer.

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	

Project: Collaborative Robotics

Course Code: DLMAIEAR02

Study Level	Language of Instruction	Contact Hours	CP	Admission Requirements
MA	English		5	DLMAIEAR01

Course Description

A collaborative robot is a robot which is used in collaborative operation, where humans and robots share the same workspace. This course focuses on the basic concepts of collaborative robotics, such as classification of human-robot interaction, definition of safe interaction, soft robotics and human-friendly robot design, and algorithms to guarantee such a safe interaction. The students will receive a hands-on introduction to the topic, with the goal of being able to autonomously design, simulate and test collaborative robotic systems.

Course Outcomes

On successful completion, students will be able to

- classify interactions between robots and humans.
- identify safety and risk scenarios.
- understand the principles of human-friendly robot design.
- apply algorithms for safe interaction.

Contents

- Each participant must create a project report on a topic related to collaborative robotics, focusing on design and/or implementation aspects.

Literature

Compulsory Reading

Further Reading

- Ben-Ari, M., & Mondada, F. (2018). Elements of robotics. Cham: Springer.
- Corke, P. (2017). Robotics, vision and control (2nd ed.). Berlin, Heidelberg: Springer.
- Mihelj, M., Bajd, T., Ude, A., Lenarčič, J., Stanovnik, A., Munih, M., ... Šlajpah, S. (2019). Robotics (2nd ed.). Cham: Springer.
- Siciliano, B., & Khatib, O. (Eds.). (2016). Springer handbook of robotics (2nd ed.). Berlin, Heidelberg: Springer.
- Teixeira, J. V. S., Reis, A. M., Mendes, F. B., & Vergara, L. G. L. (2019). Collaborative Robots. In P. Arezes (Ed.), Occupational and environmental safety and health. Studies in systems, decision and control (pp. 791-796). Cham: Springer.

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	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

Salesforce Consultant Specialization

Module Code: DLMSFCS

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

Semester / Term	Duration	Regularly offered in	Language of Instruction
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	**Links to other Study Programs of IU International University of Applied Sciences**
This module is similar to other modules in the field of Marketing & Sales	All Master Programs in the Marketing & Communication field

Salesforce Administrator and Service Cloud Consultant

Course Code: DLMSFCS01

Study Level	Language of Instruction	Contact Hours	CP	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 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	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 Cloud Consultant

Course Code: DLMSFCS02

Study Level	Language of Instruction	Contact Hours	CP	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 Distance Learning

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

Salesforce Developer Specialization

Module Code: DLMSFDS

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

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

Module Coordinator

N.N. (Salesforce Platform App Builder) / N.N. (Salesforce Platform Developer)

Contributing Courses to Module

- Salesforce Platform App Builder (DLMSFDS01)
- Salesforce Platform Developer (DLMSFDS02)

Module Exam Type

Module Exam	Split Exam
	Salesforce Platform App Builder • Study Format "Distance Learning": Written Assessment: Project Report Salesforce Platform Developer • Study Format "Distance Learning": Oral Project Report

Weight of Module

see curriculum

Module Contents

Salesforce Platform App Builder

Using the learning platform Trailhead students will learn the fundamentals of Salesforce. At the end of the course, the students will be able to design, build and deploy custom applications. This course prepares for the Salesforce Platform App Builder Certification.

Salesforce Platform Developer

Using the learning platform Trailhead students will learn how to develop own applications, built from various parts of the Salesforce platform. At the end of the course the students will be able to use Apex, JavaScript, Visualforce and basic Lightning components. This course prepares for the Salesforce Platform Developer I and JavaScript Developer I Certification.

Learning Outcomes

Salesforce Platform App Builder

On successful completion, students will be able to

- define what Salesforce and customer relationship management is.
- design the data model, user interface and business logic for custom applications.
- customize applications for mobile use.
- design reports and dashboards.
- manage application security and deploy custom applications.

Salesforce Platform Developer

On successful completion, students will be able to

- develop own applications using Apex and basic Lightning components.
- write SOSL, SOQL and DML statements.
- use Visualforce to build custom user interfaces for mobile and web apps.
- build reusable, performant components that follow modern web standards.
- use JavaScript to handle user interactions.
- use the built-in testing framework to test Apex and Visualforce.

Links to other Modules within the Study Program	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field of Marketing & Sales	All Master Programs in the Marketing & Communication field

Salesforce Platform App Builder

Course Code: DLMSFDS01

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

Course Description

Salesforce is the most used software solution for customer relationship management worldwide. This solution can be customized and personalized for the needs of customers, partners and employees. Using the learning platform Trailhead, students will learn independently the fundamentals of Salesforce and the development of customized application. This course prepares students for the Salesforce Platform App Builder Certification.

Course Outcomes

On successful completion, students will be able to

- define what Salesforce and customer relationship management is.
- design the data model, user interface and business logic for custom applications.
- customize applications for mobile use.
- design reports and dashboards.
- manage application security and deploy custom applications.

Contents

- The content on the learning platform focuses on the features and functionality to design, build and deploy custom applications. The content also provides knowledge to define business logic and process automation declaratively. Furthermore, the design and management of the correct data models and the customization of applications for individual needs is included in this course. Thus, the content of this course enables to automate repetitive tasks and to optimize processes in customer organizations.

Literature

Compulsory Reading

Further Reading

- Benioff, M./Langley, M. (2019): Trailblazer. The Power of Business as the Greatest Platform for Change. 1st ed.
- Shaalan, S. (2020): Salesforce for Beginners. A step-by-step guide to creating, managing, and automating sales and marketing processes. Packt Publishing, Birmingham.
- Weinmeister, P. (2019): Practical Salesforce Development Without Code. Building Declarative Solutions on the Salesforce Platform. 2nd ed., Apress, Berkeley.

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	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 Platform Developer

Course Code: DLMSFDS02

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

Course Description

The Salesforce platform not only forms the foundation of core Salesforce products like Sales Cloud and Service Cloud, but it is also possible to build own functionality and own applications. Using the learning platform Trailhead, students will learn how to use the programmatic pillars of the Salesforce platform: Lightning components, Apex and Visualforce. This course prepares students for the Salesforce Platform Developer I and JavaScript Developer I Certification.

Course Outcomes

On successful completion, students will be able to

- develop own applications using Apex and basic Lightning components.
- write SOSL, SOQL and DML statements.
- use Visualforce to build custom user interfaces for mobile and web apps.
- build reusable, performant components that follow modern web standards.
- use JavaScript to handle user interactions.
- use the built-in testing framework to test Apex and Visualforce.

Contents

- The content on the learning platform focuses on the development of own functionality and own applications, built from various parts of the Salesforce platform. The content enables to use the programmatic elements Lightning components, Apex and Visualforce. Furthermore, knowledge is provided for data modeling, process automation, user interface design, testing and deployment. Thus, the content of this course enables to extend Salesforce by individual applications to cover the needs in customer organizations.

Literature

Compulsory Reading

Further Reading

- Gupta, R. (2019): Salesforce Platform App Builder Certification. A Practical Study Guide. 1st ed., Apress.
- Salesforce (2020): Developer Documentation. (URL: https://developer.salesforce.com/docs/ [accessed: 12.12.2020]).

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	Oral 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	
☐ Exam Template	

Internship

Module Code: OPTINTER1

Module Type	Admission Requirements	Study Level	CP	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 program	All on campus offered programs

Internship

Course Code: OPTINTER110

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

Course Description

This module consists of three parts:preparation tutorials. During these tutorials, students will learn about the intention of the internship and about the intellectual as well as social requirements of the working environment.the internship itself, andWorkshops 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).

4. Semester

Master Thesis

Module Code: MMTHE

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	30	900 h

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

Module Coordinator

Degree Program Advisor (SGL) (Master Thesis) / Degree Program Advisor (SGL) (Colloquium)

Contributing Courses to Module

- Master Thesis (MMTHE01)
- Colloquium (MMTHE02)

Module Exam Type

Module Exam	Split Exam
	Master Thesis • Study Format "Distance Learning": Written Assessment: Master Thesis (90) • Study Format "myStudies": Written Assessment: Master Thesis (90) Colloquium • Study Format "Distance Learning": Presentation: Colloquium (10) • Study Format "myStudies": Presentation: Colloquium (10)

Weight of Module

see curriculum

Module Contents

Master Thesis

- Master's thesis

Colloquium

- Colloquium on the Master's thesis

Learning Outcomes

Master Thesis

On successful completion, students will be able to

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

Colloquium

On successful completion, students will be able to

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

Links to other Modules within the Study Program	Links to other Study Programs of IU International University of Applied Sciences
This module is similar to other modules in the field(s) of Methods.	All Master Programmes in the Business & Management field(s).

Master Thesis

Course Code: MMTHE01

Study Level	Language of Instruction	Contact Hours	CP	Admission Requirements
MA	English		27	none

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

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

Study Format Distance Learning

Study Format	Course Type
Distance Learning	Thesis

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

Student Workload					
Self Study	**Presence**	**Tutorial**	**Self Test**	**Practical Experience**	**Hours Total**
810 h	0 h	0 h	0 h	0 h	810 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	Thesis

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

Student Workload					
Self Study	**Presence**	**Tutorial**	**Self Test**	**Practical Experience**	**Hours Total**
810 h	0 h	0 h	0 h	0 h	810 h

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

Colloquium

Course Code: MMTHE02

Study Level	Language of Instruction	Contact Hours	CP	Admission Requirements
MA	English		3	none

Course Description

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

Course Outcomes

On successful completion, students will be able to

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

Contents

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

Literature

Compulsory Reading

Further Reading

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

Study Format Distance Learning

Study Format	Course Type
Distance Learning	Thesis Defense

Information about the examination	
Examination Admission Requirements	**BOLK:** no **Course Evaluation:** no
Type of Exam	Presentation: Colloquium

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

Instructional Methods

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

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	Presentation: Colloquium

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

Instructional Methods

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