

MODULHANDBUCH

für den Studiengang der Fakultät Wirtschaft und Technik

International Industrial Management (MBA) - SPO 3.1

Fassung Version 3.1 Stand 04. Juli 2023

SPO Version 3.1 vom 16. Januar 2007 in der Fassung vom 04. Juli 2023

Gültig ab September 2023 (Wintersemester 2023/2024)



Änderungsverzeichnis

Datum	Version	Beschreibung der Änderung	Bearbeiter
28. Oktober 2019	1.0	Erstellung	Flad/Luong
19. März 2021	2.0	Update Modulbeschreibungen SoSe 2021	Flad/Luong
01. Oktober 2021	3.0	Update Modulbeschreibungen WiSe 2021/22	Flad/Luong
05. Oktober 2022	3.0	Update Modulbeschreibungen WiSe 2022/23	Flad/Luong
04. Juli 2023	3.1	Überführen der SPO Version 3.0 in die SPO für die Masterstudiengänge aus den Bereichen Betriebswirtschaft, Ingenieurwissenschaften und Naturwissenschaften	
26. Juli 2023	3.1	Update Modulbeschreibungen WiSe 2023/24	Flad/Luong

Hinweis zur Gültigkeit

Dieses Modulhandbuch gilt für Studierende, die das Studium im Studiengang

- International Industrial Management SPO Version 3.1

der Studien- und Prüfungsordnung der Hochschule Esslingen ab dem Wintersemester 2023/2024 aufgenommen haben.

Sonstige Anmerkungen

Der Workload pro Creditpoint beträgt in diesem Studiengang (§8 (1) MRVO):

Credits	Workload in Stunden
1	30

Freigabe

Dieses Dokument ist zur Verwendung freigegeben, Esslingen, den 1. September 2023

gez. Prof. Dr. M. Flad



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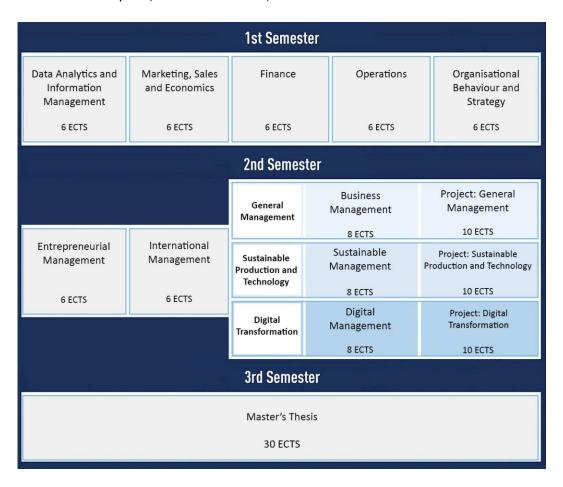
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Erstellung Modulhandbücher: Flad/Luong

Studienverlaufsplan / Modulübersicht / Struktur





1	2	3	4	5			6	7	8	
Modulnummer Modul	nmer		Teilgebiet			/S je	Studienleistung	Prüfungsleistung	Creditpunkte	
Vorber	eitungskurs									
		0	German Language and Culture	X			TE		0	
5211	Data Analytics and Information Management	2 2 2	Quantitative Methods Data Science Information Management	2 2			TE	KL90	6	
5212	2 Industrial Marketing 2 Marketing 2		2			-	KL90 (2) KL60 (1)	6		
5213	Finance	2 2 2	Financial Reporting and Analysis Corporate Finance Investments	2 2				KL150	6	
5214	Operations	2 2 2	Project Management Quality Management Operations and Supply Chain Management	2 2 2				KL120	6	
5215	Organisational Behaviour and Strategy	2 2 2	Organisational Development Intercultural Leadership and Negotiations Corporate Strategy	2 2 2			TE	PA	6	
		_	Summe 1. Semester	30					30	
5216	Entrepreneurial Management	2 2 2	Corporate Governance and Business Ethics Business Law Entrepreneurship		2 4		TE	PA (2) PA (1)	6	
5225	5225 International Management 2		International Finance and Risk Management International Marketing Management Accounting		2 2 2			KL150	6	
			Summe 2. Semester						12	
5226	Master's Thesis	2 10 14 4	Scientific Methodology and Academic Writing Corporate Report Thesis Colloquium			x x		PA (2) BE (10) BE (14) RE (4)	30	
			Summe 3. Semester			x+2			30	
			Summe gesamtes Studium	55					90	
1	2	3	4	5			6	7	8	
Modulnummer	Modulname	Teil- Creditpunkte	Teilgebiet	fang	Lehrum- fang SWS je Semester		um- gt sws		Prüfungsleistung	Creditpunkte
Schwer	punkt: General Management			=	-				18	
5227	Business Management	2 2 2 2	Lean Management Business Growth and Valuation Innovation and Technology Management Business Simulation		2 2 1		TE	KL120 PA	-8	
5220	Project General Management	2	Best-Practice-Solutions		1		TE	PA	10	
Schwer	punkt: Sustainable Production and Tec	8 hnolog	Project Work y		2		I	l	18	
5221	Sustainable Management	2 2 2	Sustainable Technology Management Sustainability Assessment Sustainable Supply Chain Management		2 2			KL120 PA	-8	
5222	Project Sustainable Production and Technology	2 2 8	Business Simulation Best-Practice-Solutions Project Work		1 2		TE TE	PA PA	10	
Schwer	punkt: Digital Transformation	2	Digital Enterprise and Information Systems	_	2			1	18	
5223	Digital Management	2 2 2	Smart Manufacturing Digital Change and Process Management Business Simulation		2		TE	KL120 PA	8	
5224	Project Digital Transformation	2	Business Simulation Best-Practice-Solutions Project Work		1 2		TE	PA PA	10	



Inhalt

Course German Language and Culture	(
Module 5211 Data Analytics and Information Management	
Module 5212 Marketing, Sales and Economics	10
Module 5213 Finance	12
Module 5214 Operations	14
Module 5215 Organizational Behaviour and Strategy	16
Module 5216 Entrepreneurial Management	18
Module 5220,5222,5224 Project	20
Module 5221 Sustainable Management	22
Module 5223 Digital Management	24
Module 5225 International Management	20
Module 5226 Master's Thesis	28
Module 5227 Business Management	30



Course German Language and Culture

:	Course Number	Study Programme IM (MBA)	Semester 1	Offered in	Duration 1 semester	Course Type Not Mandatory	Workload (h) 293	ECTS Points 0
	Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	German Language and Culture		Lecture, exercises, excursions		10	293	45	German

3 Learning Outcomes and Competences

Once the course has been successfully completed, the students

Knowledge and Understanding

- have at least beginners A2 level (common European framework of reference for languages)
- can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment).
- The students learn about German culture, history and local geography

Use, Application and Generation of Knowledge

Use and Transfer

- can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters
- can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need

Methods

Lectures, exercises & excursions

Contents

German Lecture

- Possessivartikel
- Perfekt und Präteritum
- Wortbildung Nomen
- Wechselpräpasitionen mit Dativ und Akkusativ
- Adjektivdeklinationen
- Temporale Präposistionen und Temporale Adverbien
- Konjunktiv I und II
- Konjunktionen
- Reflexive Verben
- Passiv Präsens
- Indirekte Fragen und locale Präposition
- Fragen und Präpositionaladverbien
- Präteritum Modalverben
- Demonstrativpronomen

Excursions

- Lake Constance
- Stuttgart city and TV tower
- Heidelberg
- Ulm
- Ludwigsburg
- Mercedez Benz museum
- Tübingen und Hohenzollern



Culture lectures Culture lecture 1: "German customs and traditions" Culture lecture 2: "The way into dictatorship and WWII" Culture lecture 3: "From Confrontation to Cooperation" the idea of the European Union 5 **Participation Requirements** recommended: A1 level Examination Forms and Prerequisites for Awarding ECTS Points Certificate of attendance non-graded (Class attendance of more than 80 %) To get a certificate (A2, etc. level): Written exam passed **Further Use of Course** Application for the master's thesis placement **Course Manager and Full-Time Lecturer** Various lecturers Literature Menschen A2, Hueber Material provided by the lecturers 10 **Last Updated**

30.10.2019



Module 5211 Data Analytics and Information Management

1	Module Number 5211	Study Programme IM (MBA)	Semester 1	Offered in	Duration 1 semesters	Module Type Compulsory	Workload (h) 180	ECTS Points
2	2 Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Quantitative Methods		Lecture, exercises		2	30	30	English
	b) Data Science		Lecture, cases, exercises		2	30	30	English
	c) Information Management		Lecture, cases, exercises		2	30	30	English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- understand the methods which support decision making in various departments of a company (Quantitative Methods)
- understand some methods in order to analyze actual phenomena with data (Data Science)
- have an understanding of information technology and systems on management level (Information Management)

Use, Application and Generation of Knowledge

Use and Transfer

- choose an appropriate forecasting model and make predictions based the model
- · choose and apply methods for data driven decision making
- understand the basics of information security

Scientific Innovation

- create new regression models
- use methods and tools to gain new insights in the various departments of a company based on data
- use methods and tools to gain insight into new concepts of information management

Communication and Cooperation

- interpret the results of regression analysis
- translate business problems into analytical solutions
- enabling evaluation and decision capabilities in information technology issues

Scientific Self-Conception/ Professionalism

- will recognize situations in which the methods can be applied
- independently develop adequate approaches for implementing and/or updating technologies in business and production

Methods

• lecture, exercises using IT equipment and other sources, presentations, discussion

4 Contents

The module covers the following three courses:

- Quantitative Methods: Methods which support decision making in various departments of a company
- Data Science: methods in order to analyze actual phenomena with data
- Information Management: Implementation, evaluation, design, operation, security, and maintenance of information systems in business and production environments

Participation Requirements

recommended: Participants should be able to work with MS-Excel.

Examination Forms and Prerequisites for Awarding ECTS Points

- Written exam graded (90min.)
- Information Management: Certificate of attendance non-graded (Class attendance of more than 80 %)



7	Further Use of Module This module lays the groundwork for the modules "Entrepreneurial Management" and "Enterprise Management" in the 2 nd semester.
8	Module Manager Prof. Dr. Karin Melzer
9	Literature Please see the specific course descriptions
10	Last Updated 26.10.2019



Module 5212 Marketing, Sales and Economics

1	Module Number 5212	Study Programme IM (MBA)	Semester 1	Offered in ⊠ WS□ SS	Duration 1 semester	Module Type Compulsory	Workload (h) 180	ECTS Points 6
2	2 Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Industrial Marketing		Lecture, exercises		2	30	30	English
	b) Market and Competitve Intelligence		Lecture, lab exercises		2	30	30	English
	c) Economics		Lecture, exerc	ises	2	30	30	English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- know the principles of industrial marketing (Industrial Marketing)
- know how to enable business reengineering (Market and Competitive Intelligence)
- know the economic environment (Economics)

Use, Application and Generation of Knowledge

Use and Transfer

• recognize and classify connections to ways of doing business – also w.r.t. ethical and sustainable aspects

Scientific Innovation

• develop and to implement strategies within an industrial company

Communication and Cooperation

• solve problems of case studies

Scientific Self-Conception/ Professionalism

• deploy, evaluate and reflect methods and tools chosen

Methods

• Lectures, discussion, participant presentations, case studies

4 Contents

The module covers the following three courses:

- · Industrial Marketing: Develop and implement marketing strategies and apply the tools and methods
- Market and Competitive Intelligence : Evaluation of markets and competitors
- Economics: Understand the principle of micro- and macroeconomics

Different topics in this module lead to an understanding of marketing and the economic environment

5 Participation Requirements

recommended: Participants should be able to prepare presentations using MS-PowerPoint

6 Examination Forms and Prerequisites for Awarding ECTS Points

- Industrial Marketing/Market and Competitive Intelligence: Written exam graded (90min.)
- Economics: Written exam graded (60min.)

Because of the variety of topics in this module, the exams must be passed in order to receive the ECTS for the whole module



7	Further Use of Module This module lays the groundwork for the modules "Entrepreneurial Management" and "Enterprise Management" in the 2 nd semester, where marketing and strategic issues are essential
8	Module Manager Prof. Dr. Helmut Kohlert
9	Literature Please see the specific course descriptions
10	Last Updated 26.10.2019



Module 5213 Finance

1	Module Number 5213	Study Programme IM (MBA)	Semester 1	Offered in	Duration 1 semester	Module Type Compulsory	Workload (h) 180	ECTS Points
2	2 Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Financial Reporting and Analysis		Lecture, exercises		2	30	30	English
	b) Corporate Finance		Lecture, cases, exercises		2	30	30	English
	c) Investments		Lecture, cases, exercises		2	30	30	English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- know the impact of different costing methods, depreciation, and reporting standards (Financial Reporting and Analysis)
- know the relevant financial aspects for decision-making, such as financial budgeting, choosing financial sources and working capital management (Corporate Finance and Investments)

Use, Application and Generation of Knowledge

Use and Transfer

• analyse and interpret financial statements and the financial situation of companies

Scientific Innovation

• use methods and tools to gain new insights in the analysis of financial management decisions

Communication and Cooperation

• discuss current topics in finance

Scientific Self-Conception/ Professionalism

· deploy financial tools and methods in the decision-making

Methods

• Lectures, corporate strategic planning simulations, participant presentations, interactive learning through discussions, exchange of experience, case studies and workshops

4 Contents

The module covers the following three courses:

- Financial Reporting and Analysis: Impact of different costing methods, depreciation and reporting standards
- Corporate Finance: Deployment of financial tools and methods in the decision-making of managerial finance; How
 companies finance their operations; Cost of capital, and working capital management
- Investments: Investment decision problems in corporations; Present value calculus, capital budgeting, portfolio theory,
 Capital Asset Pricing Model (CAPM) and market efficiency

Although the self-study part seems low, there are many exercises during the contact hours, especially in Corporate Finance and Investments

Participation Requirements

recommended: Participants should be able to work with MS-Excel

6 Examination Forms and Prerequisites for Awarding ECTS Points

Written exam graded (150min.)

7 Further Use of Module

This module lays the groundwork for the modules "Entrepreneurial Management" and "Enterprise Management" in the 2nd semester, where financial planning and budgeting as well as risk management are essential, next to other disciplines



8	Module Manager Prof. Dr. Michael Flad
9	Literature Please see the specific course descriptions
10	Last Updated 26.10.2019



Module 5214 Operations

1	Module Number 5214	Study Programme IM (MBA)	Semester 1	Offered in	Duration 1 semester	Module Type Compulsory	Workload (h) 180	ECTS Points 6
2	2 Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Project Management		Lecture, exercises		2	30	30	English
	b) Quality Management		Lecture, exercises		2	30	30	English
	c) Operations and Supply Chain Management		Lecture, exercises		2	30	30	English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- understand the role of professional project management (Project Management)
- understand the role of professional quality management in industrial businesses (Quality Management)
- · know how the modern supply chain and methods and tools (Operations and Supply Chain Management)

Use, Application and Generation of Knowledge

Use and Transfer

· apply methods and tools for managing operations worldwide within an industrial company

Scientific Innovation

- set up an operating system
- analyse problems and develop solutions

Communication and Cooperation

• work in small groups to gather commonly used information and align strategy parts

Scientific Self-Conception/ Professionalism

• justify the proposed solutions of case-studies theoretically and methodically

Methods

• Lectures, discussion, exercises, participant presentations, case studies, exchange of experience, independent research work done by students

4 Contents

The module covers the following three courses:

- Project Management: Apply principles and methods of professionally managing projects
- Quality Management: Impact of quality management on business performance, quality management tools including SPC, quality audits and certifications
- Operations and Supply Chain Management: Fundamentals of all operations functions within industrial companies

5 Participation Requirements

recommended: Participants have knowledge of the foundations of the courses "Economics", "Quantitative Methods" and "Data Science"

6 Examination Forms and Prerequisites for Awarding ECTS Points

Written exam (incl. case studies) graded (120min.)

7 Further Use of Module

This module is the basis for the modules "Production and Technology" and "Sustainable Management"



8	Module Manager Prof. Dr. Siegfried Zürn
9	Literature Please see the specific course descriptions
10	Last Updated 25.10.2019



Module 5215 Organisational Behaviour and Strategy

1	Module Number 5215	Study Programme IM (MBA)	Semester 1	Offered in	Duration 1 semester	Module Type Compulsory	Workload (h) 180	ECTS Points
2	2 Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Organizational	Development	Lecture, cases		2	30	30	English
	b) Intercultural Le	eadership and	Lecture, role p	olays	2	30	30	English
	Negotiations		Lecture, cases		2	30	30	English
	c) Corporate Stra	tegy						

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- understand an effective and efficient management of organizations (Organizational Development)
- know methods for efficient team work and selling as well as importance of soft skill factors for collaboration (Leadership and Negotiations)
- know the principles of a company's strategy (Corporate Strategy)

Use, Application and Generation of Knowledge

Use and Transfer

 are capable to use the knowledge including international aspects by using tools and methods to face the human side of enterprise

Scientific Innovation

- develop and implement strategies within an industrial company
- minimize conflict and build team environment

Communication and Cooperation

establish and maintain perfect working conditions & motivation

Scientific Self-Conception/ Professionalism

• diagnose complex team dynamics and how to deal with critical situations

Methods

• Participant presentations, assigned readings, case studies, group discussions, presentations of group projects, homework, interactive participation, role play, simulations

4 Contents

The module covers the following three courses:

- Organizational Development: Insights to the critical issues facing organizations in simultaneously managing their human resources at home and abroad. It focuses on international business strategies and discusses discussing digital implications of the core organizational development topics
- Leadership & Negotiations: Learn and practice the basics of intercultural competence, leadership styles and delegation
 tools as well as how to profit from diversity: identifying, promoting and using different life experiences, talents and
 know-how to produce high performance
- Corporate Strategy: Evaluate alternative strategic roadmaps

5 Participation Requirements

recommended: Participants should be able to prepare presentations using MS-PowerPoint

Examination Forms and Prerequisites for Awarding ECTS Points

- Overall: Project work graded
- Leadership and Negotiations: Certificate of attendance non-graded (Class attendance of more than 80 %)



7	Further Use of Module This module lays the groundwork for the modules "Entrepreneurial Management" and "Enterprise Management" in the 2nd semester, where foci lay on the human side and strategy of corporations
8	Module Manager Prof. Dr. Michael Flad
9	Literature Please see the specific course descriptions
10	Last Updated 26.10.2019



Module 5216 Entrepreneurial Management

1	Module Number 5216	Study Programme IM (MBA)	Semester 2	Offered in ☐ WS区 SS	Duration 1 semester	Module Type Compulsory	Workload (h) 180	ECTS Points
2	2 Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Corporate Governance and Business Ethics		Lecture, tutorial		2	30	30	English
	b) Business Law		Lecture		2	30	30	English
	c) Entrepreneurship		Lecture, start-up visits		4	60		English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- understand the importance of values and corporate governance for personal and corporate success (Corporate Governance and Business Ethics)
- have a basic understanding of commercial legal relations, in particular with respect to trans-border transactions in Common Law and Civil Law Systems (Business Law)
- are able to set up a framework for successfully establishing a new business (Entrepreneurship and Innovation Strategies)

Use, Application and Generation of Knowledge

Use and Transfer

- become familiar with core principles of making tough ethical decisions
- are able to develop risk management solutions from different viewpoints (e.g. seller/purchaser, licensor/licensee)

Scientific Innovation

- create their own framework for analysing ethical dilemmas
- evaluate, develop and implement business ideas

Communication and Cooperation

- present methodical contents and discuss them, e.g. ethical dilemmas (e.g. stemming from digital business solutions)
- present benefits of international cooperation, uniform laws and harmonization of laws

Scientific Self-Conception/ Professionalism

- evaluate moral values and their role in guiding conduct
- derive recommendations for decisions from an ethical and legal perspective on the basis of the existing laws

Methods

• lectures, interactive learning by discussion, exchange of experience, participant presentations, case studies and workshop, company visits, flipped-class

4 Contents

The module covers the following three courses:

- Corporate Governance and Business Ethics: Delegation tools, fair leadership process, challenging leadership situations current engagement studies into business world and ethical dilemmas
- Business Law: Formation of contracts, breach of contract etc., corporate structures, mergers & acquisitions (M&A), joint ventures
- Entrepreneurship and Innovation Strategies: The spirit of Entrepreneurship, entrepreneurs master Innovations, selected key topics for entrepreneurs

Although the self-study part seems low there are exercises and presentations of the students during the contact hours

5 Participation Requirements

recommended: Participants have knowledge of the foundations of the modules "Marketing, Sales and Economics", "Finance" and "Organizational Behaviour and Strategy"



Examination Forms and Prerequisites for Awarding ECTS Points Corporate Governance and Business Ethics: Certificate of attendance non-graded (Class attendance of more than 80 %) Business Law: Project work graded Entrepreneurship and Innovation Strategies: Project work graded Because of the variety of topics in this module all exams must be passed in order to receive the ECTS for the whole module Further Use of Module This module lays the foundation for module "General Management" and "Master's Thesis" Module Manager Prof. Dr. Michael Flad Literature Please see the specific course descriptions

10 Last Updated 26.10.2019



Module 5220,5222,5224 Project

1	Module Number 5220, 5222, 5224	Study Programme IM (MBA)	Semester 2	Offered in ☐ WS区 SS	Duration 1 semester	Module Type Compulsory	Workload (h) 300	ECTS Points 10
2	Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Best Practice Solutions				1	15	45	English
	b) Project Work		Project, coach	ing	2	30	210	English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- understand what makes the competitive advantage in different companies and different industries with a focus on the chosen specialization (Best Practice Solutions)
- can compare the knowhow obtained in the several modules with real company transformation processes (Project Work)

Use, Application and Generation of Knowledge

Use and Transfer

Assess and evaluate project performance

Scientific Innovation

resolve scientific and technical issues, taking into account economic, environmental, safety and ethical aspects

Communication and Cooperation

• give short pitches on the topic of the project

Scientific Self-Conception/ Professionalism

• independently learn new managerial technologies and methods

Methods

• project (classical or agile), team work, coaching, student presentations

4 Contents

The module covers the following two courses:

- Best Practice Solutions: Visits to industrial companies in the chosen specialization
- Project Work: Development of a project within the field of their specialization

This module supplies the student with different tools and methods which are important for the module "Master's Thesis"

5 Participation Requirements

recommended: Participants have knowledge of the foundations of the modules of the 1st semester and based on their specialization "General Management" or "Sustainable Production and Technology" or "Digital Transformation"

6 Examination Forms and Prerequisites for Awarding ECTS Points

- Best Practice Solutions: Certificate of attendance non-graded (Class attendance of more than 80 %)
- Project Work: Project work graded

7 Further Use of Module

This module is part of the specializations "General Management" or "Sustainable Production and Technology" or "Digital Transformation" and lays the foundation for the module "Master's Thesis"

8 Module Manager

Prof. Dr. Michael Flad



9	Literature Please see the specific course descriptions
10	Last Updated 28.10.2019



Module 5221 Sustainable Management

1	Module Number 5221	Study Programme IM (MBA)	Semester 2	Offered in ☐ WS⊠ SS	Duration 1 semester	Module Type Compulsory	Workload (h) 240	ECTS Points 8
2	Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Sustainable Technology Management		Lecture, cases		2	30	30	English
	b) Sustainability A	Assessment	Lecture, lab		2	30	30	English
	c) Sustainable Supply Chain Management		Lecture, cases		2	30	30	English
	d) Business Simulation Sustainable Production and Technology		Gamification, simulation		1	15	45	English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- understand and know sustainable management concepts driven by technology (Sustainable Technology Management)
- understand the principles and importance of LCA, TCO and GGE for assessing activities concerning the sustainability (Sustainability Assessment)
- · know methods and tools for establishing a sustainable supply chain (Sustainable Supply Chain Management)
- know how to make decisions based on analyzing the business environment (Business Simulation)

Use, Application and Generation of Knowledge

Use and Transfer

• apply methods and tools for managing operations worldwide in a sustainable way

Scientific Innovation

• analyse environmental impacts and problems and develop solutions

Communication and Cooperation

• present contents and discuss them within the peer group

Scientific Self-Conception/ Professionalism

• take different perspectives and points of view on a given situation, weigh them up against each other and make an assessment how and in which steps an implementation could lead to an increase in the sustainability of a company

Methods

 Presentation of the lecturers, discussions, real life case studies, group work, presentations of participants, exchange of experience, PC supported simulation

4 Contents

The module covers the following four courses:

- Sustainable Technology Management
- Sustainability Assessment
- Sustainable Supply Chain Management: Concept of sustainability and how this is influencing supply chain management
- Business Simulation: Derivation and development of business solutions in changing economic environment, especially with respect to sustainability

This module supplies the student with different tools and methods which are important for the specialization "Sustainable Technology and Production"

5 Participation Requirements

recommended: Participants should have successfully passed the modules "Operations" as well as "Production and Technology", and should be able to prepare professional presentations



6 Examination Forms and Prerequisites for Awarding ECTS Points • Sustainable Technology Management, Sustainability Assessment: Written exam graded (120min.) • Sustainable Supply Chain Management: Project work graded • Business Simulation: Certificate of attendance non-graded (Class attendance of more than 80 %) 7 Further Use of Module This module is part of the specialization "Sustainable Production and Technology" and lays the foundation for the module "Master's Thesis" 8 Module Manager Prof. Dr. Ralf Wörner 9 Literature Please see the specific course descriptions 10 Last Updated

25.10.2019



Module 5223 Digital Management

1	Mo	odule Number 5223	Study Programme IM (MBA)	Semester 2	Offered in ☐ WS区 SS	Duration 1 semester	Module Type Compulsory	Workload (h) 240	ECTS Points
2	Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language	
					(SWS)	(h)	(h)		
	e) Digital Enterprise and Information Systems		Lecture		2	30	30	English	
	f)	Smart Manufa	cturing	Lecture, exerc	ises	2	30	30	English
	g) Digital Change and Process Management		Lecture, cases		2	30	30	English	
	h) Business Simulation Digital Transformation		Gamification, simulation		1	15	45	English	

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- understand and know digitalization concepts driven by technology (Digital Transformation Management)
- · know the principles and importance of technology integration and changed management needs associated
- know methods and tools for establishing a digitalisation strategy in correlation with the company goals.

Use, Application and Generation of Knowledge

Use and Transfer

• apply methods and tools for managing operations worldwide in a sustainable way

Scientific Innovation

• analyse environmental impacts and problems and develop solutions

Communication and Cooperation

• present contents and discuss them within the peer group

Scientific Self-Conception/ Professionalism

• take different perspectives and points of view on a given situation, weigh them up against each other and make an assessment how and in which steps a implementation could lead to an increase in the sustainability of a company

Methods

 Presentation of the lecturers, discussions, real life case studies, group work, presentations of participants, exchange of experience

4 Contents

The module covers the following 4 courses:

- Digital Enterprise and Information Systems: Business processes supported by the software
- Smart Manufacturing: Knowledge of the goals, tasks, framework conditions, processes and methods of the process and factory planning with digital focus
- Digital Change and Process Management: Chances and risks of digital transformation ("Industry 4.0") in a production company
- Business Simulation: Derivation and development of business solutions in changing economic environment, especially with respect to digitalization

This module supplies the student with different tools and methods which are important for the specialization "Digital Transformation"

5 Participation Requirements

recommended: Participants should have successfully passed the modules "Digital Analytics and Information Management" as well as "Organizational Behaviour and Strategy", and should be able to prepare professional presentations



6	 Examination Forms and Prerequisites for Awarding ECTS Points Digital Enterprise and Information Systems, Smart Manufacturing: Written exam graded (120min.) Digital Change and Process Management: Project work graded Business Simulation: Certificate of attendance non-graded (Class attendance of more than 80 %)
7	Further Use of Module This module is part of the specialization "Digital Transformation" and lays the foundation for the module "Master's Thesis"
8	Module Manager and Full-Time Lecturer Prof. Dr. Siegfried Zürn
9	Literature Please see the specific course descriptions
10	Last Updated 25.10.2019



Module 5225 International Management

1	Module Number 5225	Study Programme IM (MBA)	Semester 2	Offered in ☐ WS区 SS	Duration 1 semester	Module Type Compulsory	Workload (h) 180	ECTS Points 6
2	2 Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	d) Management A	Accounting	Lecture, exerc	cises	2	30	30	English
	e) International Finance and Risk Management		Lecture, exercises		2	30	30	English
	f) International Marketing		Lecture, exercises		2	30	30	English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- know the basic skills of managerial accounting (Management Accounting)
- · are aware of different risks that multinational companies face (International Finance and Risk Management)
- understand how to become more effective marketing managers by understanding the strategy issues most relevant for the multinational corporation (International Marketing)

Use, Application and Generation of Knowledge

Use and Transfer

- apply management accounting tools, procedures and methods
- analyze the impact of intercultural issues to solution

Scientific Innovation

- develop concepts for dealing with exchange rate risks in a company's context
- set up hypothesis and verify their potential outcomes with anticipated figures

Communication and Cooperation

- present management accounting contents and discuss them
- communicate and cooperate within the group in order to find adequate solutions for the task at hand

Scientific Self-Conception/ Professionalism

- derive recommendations for company's management planning based on new technical developments reflect and assess their own presentation abilities w.r.t. to finance theory in a group comparison
- reflect and analyse historical decisions and its results (back-testing)

Methods

 Lectures, interactive learning by discussion, exchange of experience, participant presentations, case studies and workshop

4 Contents

The module covers the following four courses:

- · Management Accounting: Basic procedure of management accounting and understand the connections within field
- International Finance and Risk Management: Specific aspects of international finance, financial risk management tools and methods
- International Marketing: Concepts in international marketing research the international marketplace, operational global marketing decisions

This module supplies the student with different tools and methods which are important for the specialization "General Management"

5 Participation Requirements

recommended: Participants have knowledge of the foundations of the modules "Marketing, Sales and Economics, "Finance" and "Organizational Behaviour and Strategy"



6	 Examination Forms and Prerequisites for Awarding ECTS Points Management Accounting, International Finance and Risk Management: Written exam graded (120min.) International Marketing: Project work graded Business Simulation: Certificate of attendance non-graded (Class attendance of more than 80 %)
7	Further Use of Module This module is part of the specialization "General Management" and lays the foundation for the module "Master's Thesis"
8	Module Manager Prof. Dr. Michael Flad
9	Literature Please see the specific course descriptions
10	Last Updated 29.07.2021



Module 5226 Master's Thesis

1	Module Number 5226	Study Programme IM (MBA)	Semester 3	Offered in	Duration 1 semester	Module Type Compulsory	Workload (h) 900	ECTS Points 30
2	Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Scientific Methodology and		Lecture, web-l	ecture	2	30	30	English
	Academic Writ	ing	Project/acade	mic work				
	b) Corporate Rep	ort	Academic wor	k	10		300	English
	c) Thesis		Presentation		14		420	English
	d) Colloquium				4	30	90	English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- can structure and write an academic study in a scientific manner (Scientific Methodology)
- prepare professional report for the upper management of a company to decide on further projects regarding the topic (Corporate Report)
- are able to analyze complex problems in business situations and develop feasible solutions (Thesis)
- present the full understanding of the topic's problem and the achievement of the target (Colloquium)

Use, Application and Generation of Knowledge

Use and Transfer

- create reports (thesis)
- analyse solutions to research questions
- analyse business problems to generate research questions
- take different perspectives and points of view on a research question, weigh them up against each other and make an assessment

Scientific Innovation

 transform and apply the learned contents and modern methods and tools to challenges in business and performing academic analyses

Communication and Cooperation

present a scientific study in a professional way

Scientific Self-Conception/ Professionalism

answer questions and discussing on management level

Methods

- lecture, web-lecture, lab exercise, questions & answers, individual practise of writing an academic paper, group study assignment on literature review through analysis and research
- analysis and problem solving, independent academic research, exchange of experience, writing an academic report, preparing a paper for making decision for further research

4 Contents

The module covers the following four courses:

- Scientific Methodology: Understand the basics of research methods and structure and write an academic study in a scientific manner
- Corporate Report: Apply academic methodologies to real life problems in a company
- Thesis: Demonstrate the ability of using appropriate scientific methods and tools
- Colloquium: Challenges, problems and objective of the Corporate Report and Thesis, methods and tools used and strength and weaknesses and evaluation of the solutions found

This module is linked to all the modules regarding the topic of the problem and industry to be analysed



5 **Participation Requirements**compulsory: Participants should have successfully passed all other modules and have 60 ECTS recommended: Citavi workshop

6 Examination Forms and Prerequisites for Awarding ECTS Points

- Scientific Methodology: Project work graded
- Corporate Report: Report graded
- Thesis: Master's Thesis graded
- Colloquium: Presentation graded; Certificate of attendance non-graded (Class attendance of more than 80 % to do the presentation)

All exams must be passed in order to receive the ECTS for the whole module

7 Further Use of Module

8 Module Manager

Prof. Dr. Michael Flad and 1st and 2nd supervisors according to the study and examination regulations

9 Literature

Please see the specific course descriptions

10 Last Updated

26.10.2019



Module 5227 Business Management

1	Module Number 5227	Study Programme IM (MBA)	Semester 2	Offered in ☐ WS⊠ SS	Duration 1 semester	Module Type Compulsory	Workload (h) 240	ECTS Points 8
2	Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	g) Lean Management		Lecture, exercises		2	30	30	English
	h) Business Growth and Valuation		Lecture, exercises		2	30	30	English
	i) Innovation and Technology Management		Lecture, exercises		2	30	30	English
	j) Business Simul	ation	Gamification,	simulation	1	15	45	English

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

Knowledge and Understanding

- understand the principles and importance of Lean Management approaches (Lean Management)
- be familiar with the essentials in planning, financing and valuing entrepreneurial ventures (Business Growth and Valuation)
- acquire information about new global trends in innovation and technological advancements and the management thereof, e.g. digitalization in business (Innovation and Technology Management)
- know how to make decisions based on analyzing the business environment (Business Simulation)

Use, Application and Generation of Knowledge

Use and Transfer

- implement lean management methods for success factors in different real-life case studies
- analyse business growth strategies of their own start-up-idea and/or engineering companies
- compare technological approaches under international competitive aspects
- prepare and assess information for later IP protection and patent applications

Scientific Innovation

- identify and evaluate critical assumptions for the success of entrepreneurial ventures
- evaluate new technological possibilities and innovations in a global context
- integrate new technologies in existing production environments to create new business models

Communication and Cooperation

- · use their knowledge to discuss entrepreneurial opportunities and decision making under uncertainty
- explain complex technological aspects to a management audience

Scientific Self-Conception/ Professionalism

- $\bullet \hspace{0.5cm}$ are able to manage entrepreneurial ventures in an uncertain environment
- derive recommendations for decisions from a social and ethical perspective on the basis of the analyses and evaluations made
- execute individual scientific research on case studies and self-elected technological topics

Methods

- Lectures, interactive learning by discussion, exchange of experience, participant presentations, case studies and workshop
- A hands-on training on a small-scale Toyota Production Cell, etc.



4 Contents

The module covers the following four courses:

- Lean Management: Thorough understanding of the main Lean Management tools and methods
- Business Growth and Valuation: Development and design of growth hacking strategies for own start-up-idea and/or
 existing engineering companies
- Innovation and Technology Management: New global trends in innovation and technological advancements and the management thereof, e.g. digitalization in business
- Business Simulation: Derivation and development of business solutions in changing economic environment, optimization
 of internal processes, workflows and calculations in order to improve results

This module supplies the student with different tools and methods which are important for the specialization "General Management"

5 Participation Requirements

recommended: Participants have knowledge of the foundations of the modules "Marketing, Sales and Economics, "Finance" and "Organizational Behaviour and Strategy"

6 Examination Forms and Prerequisites for Awarding ECTS Points

- Lean Management and Business Growth and Valuation: Written exam graded (120min.)
- Innovation and Technology Management: Project work graded
- Business Simulation: Certificate of attendance non-graded (Class attendance of more than 80 %)

7 Further Use of Module

This module is part of the specialization "General Management" and lays the foundation for the module "Master's Thesis"

Module Manager

Prof. Dr. Michael Flad

9 Literature

Please see the specific course descriptions

10 Last Updated

01.10.2021