HfWU

MODULHANDBUCH

Master of Science (M.Sc.)

Digital Business Management

Wintersemester 2024/25

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Digital Business

Module Description		Digital Business Innovation
Contribution of the module to the study objectives	Qualification goals	• Being able to analyse and control disruptive events and developments, deriving business ideas from disruptive events • Recognising and exploiting the opportunities and risks of digitalisation for industries and companies • Understanding value and growth drivers for digital business models • Gain an overview of different digital business models • Developing a digitalisation strategy and learning about implementation and realisation options • Developing and evaluating digital business models • Develop and evaluate innovations
	Contents	See course
	Teaching / learning methods	Lecture, discussions, exercises, case studies and simulation game
Prerequisites for participation	Knowledge, skills, competences	No formal requirements for participation
	Preparation for the module	see references under course
References...	... to other modules	Digital Business Planning & Valuation
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Student research project 100 %
Organisation	Module coordinator/ Lecturer	• Dr. Martin Handschuh • Melanie Stütz
	Language	English
	ECTS points	6 ECTS
	Workload	150 hours
	Allocation	Attendance : preparation/follow-up + self-study : assignments/group work = 22 % (28 units) : 39 % : 39 %

Course	Digital Business Innovation

<table>
<tr><th colspan="2">Course</th><th colspan="4">Digital Business Innovation</th></tr>
<tr><td rowspan="7">Excellent organi-sation</td><td rowspan="5">Qualificatio ntargets</td><td colspan="4">The students should be enabled to
• Be able to analyse and control disruptive events and developments, derive business ideas from disruptive events
• Recognising and exploiting the opportunities and risks of digitalisation for industries and companies
• Understand value and growth drivers for digital business models
• Gain an overview of different digital business models
• Be able to evaluate digital business models using the Business Model Canvas, among other things
• Develop and evaluate digital business models
• Develop and evaluate innovations</td></tr>
<tr><td>Knowledge</td><td>Knowledge</td><td>Skills</td><td>Expertise</td></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Social</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Contents</td><td colspan="4"><u>Management of disruptive events and developments:</u>
• Being able to analyse and control disruptive events and developments
• Deriving business ideas from disruptive events
• Recognising and exploiting the opportunities and risks of digitalisation for industries and companies
<u>Business Model Innovation</u>
• Understanding value and growth drivers for digital business models
• Gain an overview of different digital business models
• Developing and evaluating digital business models
• Develop and evaluate innovations
• Application of the AI-based simulation game Idea Scanner</td></tr>
<tr><td>Teaching / learning methods</td><td colspan="4">Lecture, discussions, exercises, case studies and simulation game</td></tr>
<tr><td>Literature / teaching material</td><td colspan="4">Script
Recommended reading, always in the latest edition:
• Osterwalder, A./ Pigneur, Y. (2010): Business Model Generation, Hoboken.
• Ries, E. (2017): The Lean Startup – How Constant Innovation Creates Radically Successful Businesses, London.
• Wirtz, Bernd W. (2021): Business Model Management, 5. Aufl., Wiesbaden.</td></tr>
<tr><td>Special features</td><td colspan="4">-</td></tr>
<tr><td rowspan="2">Organi-sation</td><td>ECTS points</td><td colspan="4">6 ECTS</td></tr>
<tr><td>Allocation</td><td colspan="4">150 hours</td></tr>
</table>

	Workload	Attendance : Preparation/follow-up + self-study :Assignments/group work = 14 % (21 units) : 43 % : 43 %

Module Description		**Digitale Business Planning & Valuation**
Contribution of the module to the study objectives	**Qualification targets**	The students should be enabled to • To be able to analyse the value and growth drivers of digital business models • To be able to carry out driver-based business planning for digital business models • Be able to implement performance management for digital business models using unit economics • Be able to evaluate digital business models according to common evaluation methods
	Contents	See course
	Teaching / learning methods	Lecture, discussions, exercises and case studies
Prerequisites for participation	**Knowledge, skills, competences**	No formal requirements for participation
	Preparation for the module	see references under course
References ...	**... to other modules**	Digital Business Innovation
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Student research project 100%
Organisation	**Module coordinator/ Lecturer**	• Marc Flammer • Oliver Würtenberger
	Language	English
	ECTS points	6 ECTS
	Workload	150 hours
	Allocation	Attendance : preparation/follow-up + self-study : assignments/group work = 22 % (28 units) : 39 % : 39 %

Course	Digital Business Planning, Steering & Valuation / Digital Business Planning, Steering & Valuation

<table>
<tr><td colspan="2">Course</td><td colspan="4">Digital Business Planning & Valuation</td></tr>
<tr><td rowspan="6">Excellent organi-sation</td><td rowspan="5">Qualification goals</td><td colspan="4">The students should be enabled to
• To be able to analyse the value and growth drivers of digital business models
• Be able to carry out driver-based business planning for digital business models
• Be able to implement performance management for digital business models using unit economics
• Be able to evaluate digital business models according to common evaluation methods</td></tr>
<tr><td>Knowledge</td><td>Knowledge</td><td>Skills</td><td>Expertise</td></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td></td></tr>
<tr><td>Social</td><td>x</td><td>x</td><td></td></tr>
<tr><td>Contents</td><td colspan="4"><u>Business planning and steering of digital business models:</u>
• Value and growth drivers for digital business models
• Driver-based planning and control models
• KPIs and unit economics for digital business models
• Implementation of planning and control models
• Performance management for digital business models

<u>Venture Valuation:</u>
• Evaluation of digital business models according to common evaluation methods
• Venture Valuation with Comparable Transaction- and Comparable Company-based Multiple Approach
• DCF valuation approaches for digital business models
• Creation of your own valuation model</td></tr>
<tr><td>Teaching / learning methods</td><td colspan="4">Lecture and discussion, case studies, presentation</td></tr>
<tr><td>Literature / teaching material</td><td colspan="4">Script
Recommended reading, always in the latest edition:
• ALEMANY, L./ ANDREOLI, J. (2018): Entrepreneurial Finance - The Art and Science of Growing Ventures, Cambridge.
• BAUMÖL, U./ BOCKSHECKER, A. (2018): Steuerung im Zeitalter der Digitalisierung mit dem Digital Business Management-Modell, in: Controlling, Jahrgang 30, Heft 5, S. 4 – 11.
• KOLLER, T. et al. (2020): Valuation : Measuring and Managing the Value of Companies, New York.
• SMITH, J./ SMITH, R. (2019): Entrepreneurial Finance - Venture Capital, Deal Structure & Valuation, Stanford.
• WIRTZ, Bernd W. (2021): Business Model Management, 5. Aufl., Wiesbaden.</td></tr>
<tr><td>Special features</td><td colspan="4">-</td></tr>
<tr><td rowspan="2">Organi-sation</td><td>ECTS points</td><td colspan="4">6 ECTS</td></tr>
<tr><td>Allocation</td><td colspan="4">150 hours</td></tr>
</table>

	Workload	Attendance : preparation/follow-up + self-study : assignments/group work = 18 % (28 units) : 41 % : 41 %

AI & Analytics

Module Description		**AI based Customer Experience Management**
Contri-bution of the module to the study aim	**Qualification targets**	• Get to know applications of artificial intelligence in marketing and sales - especially with regard to analytics and automation • Be able to analyse and design digital customer touchpoints with AI/chatbots, among other things • Understand the influence of robotic process automation in marketing and sales and be able to develop concepts for it • Understand and design digital marketing and sales organisations • Familiarising yourself with new roles and skills requirements • Get to know control concepts for sales and marketing
	Contents	See course
	Teaching / learning methods	Lecture, discussions, exercises and case studies
Prerequi-sites for partici-pation	**Knowledge, skills, competences**	No formal requirements for participation
	Preparation for the module	see literature references under course
References ...	**... to other modules**	Machine Learning & Big Data Analytics
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Student research project 100 %
Organi-sation	**Module responsible/ Lecturer**	• Benjamin Ferreau • Julia Lehmann
	Language	English
	ECTS points	6 ECTS
	Workload	150 hours

	Allocation	Attendance : preparation/follow-up + self-study : assignments/group work = 22% (28 units) : 39% : 3 9%

<table>
<tr><td colspan="2">Course</td><td colspan="4">AI based Customer Experience Management</td></tr>
<tr><td rowspan="3">Design</td><td>Qualification goals</td><td colspan="4">The students should be enabled to
● Get to know applications of artificial intelligence in marketing and sales - especially with regard to analytics and automation
● Understand digital customer touchpoints, including with AI/chatbots, and be able to develop concepts in this area
● Understand robotic process automation in marketing and sales and be able to develop concepts in this area
● Understand and design digital marketing and sales organisations
● Familiarising yourself with new roles and skills requirements
● Get to know control concepts for sales and marketing</td></tr>
<tr><td></td><td colspan="4"><table>
<tr><th>Knowledge</th><th>Knowledge</th><th>Skills</th><th>Expertise</th></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td></td></tr>
<tr><td>Social</td><td>x</td><td>x</td><td></td></tr>
</table></td></tr>
<tr><td>Contents</td><td colspan="4"><u>Digital customer touchpoints with AI/chatbots:</u>
● The basics of customer experience: definitions, differentiations and concepts
● Data strategy as the basis for a good customer experience: demystifying artificial intelligence
● Big data examples at a glance - industries, strategic approaches, areas of application: Problem, solution and added value
● Chatbot design principles
● Development of a customer experience concept
● Derivation of a requirements concept for a chatbot
● Configuration of a chatbot

<u>Robotic Process Automation/ digital marketing & sales organisation:</u>
● Understand the influence of robotic process automation in marketing and sales and be able to develop concepts for it
● Understand and design digital marketing and sales organisations
● Familiarising yourself with new roles and skills requirements
● Get to know control concepts for sales and marketing</td></tr>
<tr><td>Teaching / learning methods</td><td colspan="4">Lecture and discussion, case studies, group work with presentation</td></tr>
</table>

	Literature / teaching material	Script Recommended reading, always in the latest edition: ● DETSCHER, S. et al. (2018): Fin Sales Tech: Artifizielle Intelligenz im Marketing und im Vertrieb von Kapitalmarktprodukten, in Marketing Review St. Gallen, 4/2018, S. 36-43. ● DETSCHER, S./ HANDSCHUH, M. (2021): Künstliche Intelligenz im Marketing und im Vertrieb – Evolutionsstufen und Anwendungsbereiche, in: Detscher, S. (Hrsg.): Digitales Management & Marketing, Springer Verlag, S. 293-304. ● DETSCHER, S./ MÜLLER, J, (2022): Potenziale für den Einsatz von Voice-Commerce entlang der Customer Journey – Eine Untersuchung am Beispiel der Kosmetik- und Körperpflegebranche. In transfer Zeitschrift für Kommunikation und Markenmanagement, Nr. 02 Juni/2022, 68. Jahrgang, S. 52-61. ● GENTSCH, P. (2018): Künstliche Intelligenz für Sales. Marketing und Service, Mit AI und Bots zu einem Algorithmic Business – Konzepte, Technologien und Best Practices, Springe Gabler, Wiesbaden. ● HANDSCHUH, M. et al. (2018): Mit AAA-Vertrieb innovative Energielösungen verkaufen, in: Sales Excellence, 11/2018, S. 16-19. ● LEHMANN, J.: Der Chatbot-Guide, in: Detscher, S. (Hrsg.): Digitales Management & Marketing, Springer Verlag, S. 305-328. ● RAPP, H./ HANDSCHUH, M./ BELZ, C. (2018): Reorganisation in Marketing und Verkauf, in: Marketing Review St. Gallen, 3/2018, S. 12-20. ● ROBRA-BISSANTZ, S./ LATTEMANN, C. (2018, Hrsg.): Digital Customer Experience: Mit digitalen Diensten Kunden gewinnen und halten, Springer Fachmedien, Wiesbaden.
	Special features	-
Organi-sation	**ECTS points**	6 ECTS
	Allocation	150 hours
	Workload	Attendance : preparation/follow-up + self-study : assignments/group work = 18 % (28 units) : 41 % : 41 %

Module Description		Machine Learning & Big Data Analytics
Contribution of the module to the aim	Qualification targets	• Understanding big data analysis & predictive analytics • Learn how to use an advanced analytics tool • Applying data mining and CRM • Be able to perform predictive analytics-based analyses
	Contents	See course
	Teaching / learning methods	Lecture, discussions, exercises and case studies
Prerequisites for participation	Knowledge, skills, competences	No formal requirements for participation
	Preparation for the module	cf. literature references for course
References ...	... to other modules	AI based customer experience management
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Student research project 100%
Organisation	Module coordinator/ lecturer/	• Prof Dr Sebastian Moll • Dr Stefanie Seifert
	Language	German
	ECTS points	6 ECTS
	Workload	150 hours
	Allocation	Attendance : preparation/follow-up + self-study : assignments/group work = 22 % (28 units) : 39 % : 39 %
Course		Machine Learning & Big Data Analytics / Machine Learning & Big Data Analytics

<table>
<tr><td colspan="2">Course</td><td colspan="4">Machine Learning & Big Data Analytics</td></tr>
<tr><td rowspan="7">Design</td><td rowspan="5">Qualificatio ntargets</td><td colspan="4">The students should be enabled to
• Understanding Big Data Analysis & Predictive Analytics
• Applying data mining and CRM
• Perform predictive analytics-based market analyses</td></tr>
<tr><td>Knowledge</td><td>Knowledge</td><td>Skills</td><td>Expertise</td></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td></td></tr>
<tr><td>Social</td><td>x</td><td></td><td></td></tr>
<tr><td>Contents</td><td colspan="4">• Tool training Advanced Analytics Platform KNIME
• Big Data & Innovation: Introduction, technology and methods
• Introduction to machine learning & predictive analytics
• Machine Learning - Methods
• CRM analytics: use cases, introduction to personalisation, practical examples
• Natural Language Processing: Use Cases</td></tr>
<tr><td>Teaching / learning methods</td><td colspan="4">Lecture and discussion, case studies, group work with presentation</td></tr>
<tr><td>Literature / teaching material</td><td colspan="4">Script
Recommended reading, always in the latest edition:

• Ng, A., Soo, K.: Data Science – Was ist das eigentlich ?!, Algorithmen des maschinellen Lernens verständlich erklärt, Springer, 2017.
• Finlay, S.: Predictive Analytics, Data Mining and Big Data – Myths, Misconceptions and Methods, Palgrave MacMillan, 2014.
• Provost, F./ Fawcett, T.: Data Science für Unternehmen. Data Mining und datenanalytisches Denken praktisch anwenden, mitp Verlag, Frechen 2017.
• Engel, M. (2021): Nutzung von KI für Predictive Analytics, in: Detscher, S. (Hrsg.): Digitales Management & Marketing, S. 481-504.</td></tr>
<tr><td>Special features</td><td colspan="4"></td></tr>
<tr><td rowspan="3">Organi-sation</td><td>ECTS-Points</td><td colspan="4">6 ECTS</td></tr>
<tr><td>Allocation</td><td colspan="4">150 hours</td></tr>
<tr><td>Workload</td><td colspan="4">Attendance : preparation/follow-up + self-study : assignments/group work = 22 % (28 units) : 39 % : 39 %</td></tr>
</table>

Web3 & Immersive Web

Module Description		Blockchain Technology & Web3 based Business Models
Beitrag des Moduls zu den Studien-zielen	Qualifika-tionsziele	• Folgende technologischen Themenbereiche im Überblick verstehen: digitale Vernetzung/ Machine Learning, Blockchain (technische Grundlagen und Use Cases), IoT, AR/ VR, autonomes Fahren •
	Inhalte	Siehe Lehrveranstaltung
	Lehr- / Lernformen	Vorlesung, Diskussionen, Übungen und Fallbeispiele
Voraus-setzungen für die Teilnahme	Kenntnisse, Fertigkeiten, Kompetenzen	keine formalen Voraussetzungen für die Teilnahme
	Vorbereitung für das Modul	vgl. Literaturangaben unter Lehrveranstaltung
Bezüge ...	.. zu anderen Modulen	Immersive Web & 3D Technologies
	.. zum HfWU Profil	Stark auf Bedarf der berufsbegleitend Studierenden fokussiertes, praxisorientiertes Curriculum. Aktuelle und neuartige Themen im Bereich Digitalisierung werden von sehr gut qualifizierten Akademikern und Praktikern unterrichtet. Die Lehrinhalte werden von hochwertiger praxisorientierter Forschung mit entsprechenden Veröffentlichungen unterstützt. Gesellschaftlich gesehen wird der Zertifikatskurs einen Beitrag leisten, dass sich Arbeitnehmer und Selbständige im für die berufliche Entwicklung heutzutage und künftig sehr wichtigen Bereich der Digitalisierung weiterzubilden und so ihre Beschäftigungsfähigkeit/ Wettbewerbsfähigkeit langfristig und nachhaltig sicherzustellen.
Prüfungsleistungen		Studienarbeit 100 %
Organisa-tion	Modulverant-wortlicher / Dozenten	Philipp Riedlinger
	Sprache	Englisch
	ECTS-Punkte	6 ECTS
	Workload	150 Stunden
	Aufteilung	Präsenz : Vor-/Nachbereitung + Selbststudium : Aufgaben/Gruppenarbeit = 22 % (28 UE) : 39 % : 39 %
Lehrveranstaltung		Blockchain Technology & Web3 based Business Models

<table>
<tr><td colspan="2">Course</td><td colspan="4">Blockchain Technology &
Web3 based Business Models</td></tr>
<tr><td rowspan="3">Ausge-
staltung</td><td>Qualifi-
kationsziele</td><td colspan="4">Digital Technology:
Die Studierenden sollten die Grundkenntnisse der Informationstechnik beherrschen.
• Grundbegriffe der IT, Softwareentwicklung,
• Hardware und Kommunikation, IT- und Internetarchitektur

In der Veranstaltung wird auf die IT-Sicherheit und die Treiber der Digitalisierung eingegangen:
• IT-Sicherheit
• Digitalisierung (Agile Methoden, Industrie 4.0, Cloud Computing, Künstliche Intelligenz, Autonomes Fahren, Business Intelligence und Data Mining und AR/VR)

Blockchain Technology:
•
Web3 based Business::
• x</td></tr>
<tr><td></td><td colspan="4"><table><tr><th>Wissen</th><th>Kenntnisse</th><th>Fertigkeiten</th><th>Kompetenzen</th></tr><tr><td>Fach</td><td>x</td><td>x</td><td>x</td></tr><tr><td>System</td><td>x</td><td>x</td><td>x</td></tr><tr><td>Selbst</td><td>x</td><td>x</td><td></td></tr><tr><td>Sozial</td><td>x</td><td>x</td><td></td></tr></table></td></tr>
<tr><td>Inhalte</td><td colspan="4">Digital Technology:
In diesem Teilmodul wird aufbauend auf Kapitel 1 und 2 des beigefügten Skripts die Digitalisierung und die IT-Sicherheit reflektiert. Dabei liegt das besondere Augenmerk auf den Treibern der Digitalisierung und was diese im Kern bedeuten.
• IT-Sicherheit
• Digitalisierung (Industrie 4.0, Cloud Computing, Blockchain Technology, Künstliche Intelligenz, Autonomes Fahren, Business Intelligence, Data Mining und AR/VR)

Blockchain Technology:
• x

Web3 based Business:
• x</td></tr>
<tr><td></td><td>Lehr- / Lern-
methoden</td><td colspan="4">Vorlesung und Diskussion, Fallstudien, Präsentation</td></tr>
</table>

	Literatur / Lehrmaterial	Skript Literaturempfehlungen, jeweils in der neuesten Auflage: Digital Technology: ● Erickson; Hacking; dpunkt-Verlag; ISBN 9783898645362 ● Jason's Machine Learning 101: https://bit.ly/2AODPGd ● Laudon, Laudon, Schoder; Wirtschaftsinformatik; Pearson-Studium-Verlag, ISBN 3827373484 ● Lehner, Hildebrand, Maier; Wirtschaftsinformatik; Hanser-Verlag, ISBN 3446180028 ● Rashid, Neuronale Netze selbst programmieren, O'Reilly, 2017 ● Suthaharan, Machine Learning Models and Algorithms for Big Data Classification, Springer ● Wartala, Praxiseinstieg Deep Learning, O`Reilly, 2017 Blockchain Technology: ● Maus, S. et al. (2023): Tokenise Europe 2023, München. ● Token Economy ● Money, Tokens, and Games ● Crypto, tokens and DeFi: navigating the regulatory landscape Web3 based Business: ● How is Blockchain used in marketing: A review and research agenda ● Blockchain meets marketing: Opportunities, threats, and avenues for future research ● Transforming the Know Your Customer (KYC) Process using Blockchain ● The Future of Financial Systems in the Digital Age ● Blockchain Applications in Tourism and Tourism Marketing: A Short Review ● Web3 Challenges and Opportunities for the Market ●
	Besonderes	-
Organisa-tion	**ECTS-Punkte**	6 ECTS
	Aufteilung	150 Stunden
	Workload	Präsenz : Vor-/Nachbereitung + Selbststudium : Aufgaben/Gruppenarbeit = 18 % (28 UE) : 41 % : 41 %

Module Description		Immersive Web & 3D Technologies
Contri-bution of the module to the aim	Qualification targets	• Gain a basic understanding of 3D modelling (light, rasterisation, vectors, transformations, textures, etc.) • Acquire a basic understanding of real-time 3D (on the web) (performance, limitations, etc.) • Build a basic understanding of the development of interactive experiences on the web • Understanding the importance of immersive web experiences and interactivity / immersiveness for the user experience • Be able to design interactive 3D web applications, in particular with the Google Modelviewer, Spline and WebGL (using Webflow if necessary) • Be able to create your own 3D modelling (e.g. with Spline) • Be able to evaluate immersive 3D web environments (performance, etc.)
	Contents	See course
	Teaching / learning methods	Lecture, discussions, exercises and case studies
Prerequi-sites for partici-pation	Knowledge, skills, competences	No formal requirements for participation
	Preparation for the module	see literature references under course
References ...	... to other modules	Blockchain Technology & Web3 based Business Models
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Student research project 100 %
Organi-sation	Module responsible/ Lecturer	Philipp Roth
	Language	English
	ECTS points	6 ECTS
	Workload	150 hours
	Allocation	Attendance : preparation/follow-up + self-study : assignments/group work = 22% (28 units) : 39% : 39%

Course	Immersive Web & 3D Technologies

<table>
<tr><td rowspan="6">Design</td><td>Qualification goals</td><td>The students should be enabled to
Gain a basic understanding of 3D modelling (light, rasterisation, vectors, transformations, textures, etc.)
Acquire a basic understanding of real-time 3D (on the web) (performance, limitations, etc.)
Build a basic understanding of the development of interactive experiences on the web
Understand the importance of immersive web experiences
Understand the importance of interactivity / immersiveness for the user experience
Design interactive 3D web applications, in particular with the Google Modelviewer, Spline and WebGL (using Webflow if necessary)
Be able to create your own 3D modelling (e.g. with Spline)
To be able to evaluate immersive 3D web environments (performance, etc.)
<table>
<tr><th>Knowledge</th><th>Knowledge</th><th>Skills</th><th>Expertise</th></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td></td></tr>
<tr><td>Social</td><td>x</td><td>x</td><td></td></tr>
</table></td></tr>
<tr><td>Contents</td><td>3D modelling (light, rasterisation, vectors, transformations, textures, etc.)
Real-time 3D (on the web) (performance, restrictions, etc.)
Development of interactive experiences on the web
Understanding the importance of immersive web experiences
Importance of interactivity / immersiveness for the user experience
Be able to design interactive 3D web applications, in particular with the Google Modelviewer, Spline and WebGL (using Webflow if necessary)
Be able to create your own 3D modelling (e.g. with Spline)
Be able to evaluate immersive 3D web environments (performance, etc.)
Excursus: Virtual reality, especially web-based VR (e.g. with the Meta Quest 3 / 4)</td></tr>
<tr><td>Teaching / learning methods</td><td>Lecture and discussion, case studies, group work with presentation</td></tr>
<tr><td>Literature / teaching material</td><td>Script
Recommended reading, always in the latest edition:
(2022). Introduction to Computer Graphics and Ray-Tracing Using the WebGPU API. https://doi.org/10.1145/3550495.3558218
Akenine-Möller, T., Haines, E., & Hoffman, N. (2018). Real-Time Rendering, Fourth Edition. A K Peters/CRC Press.
Cantor, D., & Jones, B. (2014). WebGL Beginner's Guide. Packt Publishing.
Matsuda, K., & Lea, R. (2013). WebGL Programming Guide: Interactive 3D Graphics Programming with WebGL. Addison-Wesley Professional.
Hughes, J. F., van Dam, A., McGuire, M., Sklar, D. F., Foley, J. D., Feiner, S. K., & Akeley, K. (2014). Computer Graphics: Principles and Practice. Addison-Wesley.
Krug, S. (2014). Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability. New Riders.
Weinschenk, S. (2011). 100 Things Every Designer Needs to Know About People. New Riders.</td></tr>
</table>

		• Baker, C. M. (2022). *Immersive Technologies: Benefits, Challenges and Predicted Trends*. • Arnaldi, B., Guitton, P., & Moreau, G. (2018). *Virtual Reality and Augmented Reality: Myths and Realities*. Wiley. • Sherman, W. R., & Craig, A. B. (2018). *Understanding Virtual Reality: Interface, Application, and Design*. Morgan Kaufmann. • Jerald, J. (2015). *The VR Book: Human-Centered Design for Virtual Reality*. ACM Books. • Bailenson, J. (2018). *Experience on Demand: What Virtual Reality Is, How It Works, and What It Can Do*. W. W. Norton & Company. • Neelakantam, S., & Pant, T. (2017). *WebVR: Virtual Reality on the Web*. • ZHANG, D. et. al (2022): The Metaverse: Opportunities and Challenges for Marketing in Web3, SSRN.
	Special features	-
Organi-sation	**ECTS points**	6 ECTS
	Allocation	150 hours
	Workload	Attendance : preparation/follow-up + self-study : assignments/group work = 18 % (28 units) : 41 % : 41 %

Digital Leadership & Transformation

Module Description		Digital Leadership Development
Contri-bution of the module to the study objectives	Qualification targets	• Develop an understanding of the challenges in companies that make agile management and leadership necessary • Develop an understanding of why ambidexterity plays a central role in digital leadership • Gain an overview of key agile management and leadership tools • Gain the ability to evaluate and apply relevant agile management and leadership tools • Implementing agile project management • Realise New Work culture and use appropriate tools
	Contents	See course
	Teaching / learning methods	Lecture, discussions, exercises and case studies
Prerequi-sites for partici-pation	Knowledge, skills, competences	No formal requirements for participation
	Preparation for the module	see literature references under course
References ...	... to other modules	Digital Strategy & Transformation
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Student research project 100 %
Organi-sation	Module coordinator/ Lecturer	Manuel Pflumm
	Language	English
	ECTS points	6 ECTS
	Workload	150 hours
	Allocation	Attendance : preparation/follow-up + self-study : assignments/group work = 22 % (28 units) : 39 % : 39 %
Course		Digital Leadership Development

<table>
<tr><td colspan="2">Course</td><td>Digital Leadership Development</td></tr>
<tr><td rowspan="6">Excellent organi-sation</td><td>Qualification goals</td><td>The students should be enabled to
Develop an understanding of the challenges in companies that make agile management and leadership necessary
Develop an understanding of why ambidexterity plays a central role in digital leadership
Gain an overview of key agile management and leadership tools
Gain the ability to evaluate and apply relevant agile management and leadership tools
Implementing agile project management
Realise New Work culture and use appropriate tools
<table>
<tr><th>Knowledge</th><th>Knowledge</th><th>Skills</th><th>Expertise</th></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Social</td><td>x</td><td>x</td><td>x</td></tr>
</table></td></tr>
<tr><td>Contents</td><td>Framework conditions and challenges in companies that make agile management and leadership tools necessary
Agile target management in companies
Agile leadership through a multipliers approach
Agile management basics and agile project management
New Work approaches and New Work culture and tools
Application of agile management and leadership methods in the simulation game "Leaderfy"</td></tr>
<tr><td>Teaching / learning methods</td><td>Lecture and discussion, case studies, presentation</td></tr>
<tr><td>Literature / teaching material</td><td>Script
Recommended reading, always in the latest edition:
Detscher, S./ Schmid, A. (2021): Digitaler Darwinismus - Agile Steuerung, Führung und Personalentwicklung in der VUKA-Welt, in Detscher, S. (Hrsg.): Digitales Management & Marketing, S. 147-176.
Doerr, J. (2018): "OKR: Objectives & Key Results: Wie Sie Ziele, auf die es wirklich ankommt, entwickeln, messen und umsetzen, München.
WISEMEN, L. (2010): Multipliers - How the Best Leaders Make Everyone Smarter, New York.
Petry, T. et al. (2019): Digital Leadership: Erfolgreiches Führen in Zeiten der Digital Economy, Freiburg.
Häusling, A. et al. (2019): Praxisbuch Agilität – Tools für Personal- und Organisationsentwicklung, 2. Aufl., Freiburg.
Hofert, S. (2021): Agiler führen : Einfache Maßnahmen für bessere Teamarbeit, mehr Leistung und höhere Kreativität, 3. Aufl., Wiesbaden.
Morgan, J. (2017): The Employee Experience Advantage, New Jersey.
Stanforth, N. (2020): Win with OKR. Mindset. Methodik. Miteinander., Göttingen</td></tr>
<tr><td>Special features</td><td>-</td></tr>
<tr><td rowspan="2">Organi-sation</td><td>ECTS points</td><td>6 ECTS</td></tr>
<tr><td>Allocation</td><td>150 hours</td></tr>
</table>

	Workload	Attendance : preparation/follow-up + self-study : assignments/group work = 18 % (28 units) : 41 % : 41 %

Module Description		**Digitale Strategy & Transformation**
Contri-bution of the module to the aim	**Qualification goals**	• Understanding digital transformation, especially (disruptive) business models • Learning to analyse influencing factors as triggers of a business model transformation/technologies of platform business models • Recognising the reasons for and special features of business model transformation • Stages of digital transformation, in particular business model transformation incl. case study (multi-level business model) • Understanding corporate culture, team climate and participative design options • Understanding possible roles and tasks of the manager and employees (employee participation) in the development of the team and the team climate • Get to know the forms and dimensions of intrapreneurship and the corresponding cultural elements
	Contents	See course
	Teaching / learning methods	Lecture, discussions, exercises and case studies
Prerequi-sites for partici-pation	**Knowledge, skills, competences**	No formal requirements for participation
	Preparation for the module	see literature references under course
References ...	**... to other modules**	Digital Business Innovation; Digital Leadership Development
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Paper/ presentation 100 %
Organi-sation	**Module responsible/ Lecturer**	• Prof Dr Michael Hepp • Prof Dr Stefan Remhof
	Language	English
	ECTS points	6 ECTS

	Workload	150 hours
	Allocation	Attendance : preparation/follow-up + self-study : assignments/group work = 22 % (28 units) : 39 % : 39 %
Course		**Digitale Transformation & nachhaltiges Veränderungsmanagement / Digital Transformation & Sustainable Change Management**

Course		**Digitale Strategy & Transformation**
Design	**Qualification goals**	The students should be enabled to ● Understanding digital transformation, especially (disruptive) business models ● Learning to analyse influencing factors as triggers of a business model transformation/technologies of platform business models ● Recognising the reasons for and special features of business model transformation ● Stages of digital transformation, in particular business model transformation incl. case study (multi-level business model) ● Understanding corporate culture, team climate and participative design options ● Understanding possible roles and tasks of the manager and employees (employee participation) in the development of the team and the team climate ● Get to know the forms and dimensions of intrapreneurship and the corresponding cultural elements
		Knowledge / **Knowledge** / **Skills** / **Expertise** Subject: x / x / x System: x / x / x Even: x / x / Social: x / x /
	Contents	<u>Digital Business Model Transformation:</u> ● Multi-level digital business model transformation ● Digital transformation, in particular (disruptive) business models ● Stages of digital transformation, in particular business model transformation incl. case study (multi-level business model) ● Development of a customer-centric digitalisation strategy (incl. product-market fit analysis) ● Influencing factors as triggers for business model transformation/ Platform Business Model technologies ● Reasons for and special features of business model transformation <u>Participative transformation & change management:</u> ● Corporate culture, team atmosphere and participative design options ● Concepts that enable the team climate to be used for the further development of the corporate culture ● Possible roles and tasks of the manager and employees (employee participation) in the development of the team and the team climate ● Implementation example of a team transformation and its effects ● Forms & dimensions of intrapreneurship and the corresponding cultural elements ● Development of a participative transformation & change management concept

	Teaching / learning methods	Lecture and discussion, case studies, group work with presentation
	Literature / teaching material	Script Recommended reading, always in the latest edition: ● DETSCHER, S. (2021, Hrsg.): Digitales Management & Marketing, Teil II Digitale Innovation, Transformation und agile Entwicklung von Organisationen, S. 111-230. ● HEPP, M./ DETSCHER, S. (2021): Multi-Level Digital Business Model Transformation. In: Detscher, S. (Hrsg.), Digitales Management & Marketing, Springer Gabler, S. 39-49. ● PARKER G., Alstyne M, CHOUDARY, S. (2017): Platform Revolution: How Networked Markets Are Tranforming and How to Make Them Work for You. ● SCHALLMO,, D. (2018): Digitale Transformation von Geschäftsmodellen erfolgreich gestalten, Springer. https://link.springer.com/book/10.1007/978-3-658-20215-6 ● SWOBODA, M. (2022): Innovational Leadership, Springer Gabler.
	Special features	-
Organi-sation	**ECTS points**	6 ECTS
	Allocation	150 hours
	Workload	Attendance : preparation/follow-up + self-study : assignments/group work = 18 % (28 units) : 41 % : 41 %

Digital Marketing & Sales

Module Description		Digital Marketing
Contri-bution of the module to the aim	Qualification goals	• Understanding the influence of digitalisation on marketing • Analysing the behaviour of digital customers • Get to know new trends in digital marketing • Develop a digital marketing strategy • Understanding digital global brand management and being able to develop corresponding concepts • Be able to define and implement a global digital marketing plan including a campaign mix with relevant tools and channels • International rollout
	Contents	See course
	Teaching / learning methods	Lecture, discussions, exercises and case studies
Advance requirements for participation	Knowledge, skills, competences	No formal requirements for participation
	Preparation for the module	see literature references under course
References ...	... to other modules	Digital Sales & E-Commerce
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Student research project and presentation 100 %
Organi-sation	Module coordinator/ Lecturer	• Prof Dr Stefan Detscher • Sonja Mechling
	Language	English
	ECTS points	6 ECTS
	Workload	150 hours
	Allocation	Attendance : preparation/follow-up + self-study : assignments/group work = 22 % (28 units) : 39 % : 39 %
Course		Digital Marketing

<table>
<tr><th colspan="2">Course</th><th colspan="4">Digital Marketing</th></tr>
<tr><td rowspan="6">Design</td><td>Qualification goals</td><td colspan="4">The students should be enabled to
● Be able to develop and implement digital marketing strategies, digital brand concepts and online channel mixes
● Understanding the influence of digitalisation on marketing
● Analysing the behaviour of digital customers
● Develop a digital marketing strategy
● Understanding digital global brand management and being able to develop corresponding concepts
● Be able to define and implement a global (digital) campaign mix</td></tr>
<tr><td rowspan="5"></td><td>Knowledge</td><td>Knowledge</td><td>Skills</td><td>Expertise</td></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td></td></tr>
<tr><td>Social</td><td>x</td><td>x</td><td></td></tr>
<tr><td>Contents</td><td colspan="4"><u>Digital Marketing Strategy & Growth Hacking:</u>
● The influence of digitalisation on marketing
● Digital behaviour of customers/ buying personas and customer segmentation
● Digital marketing strategy analysis (incl. analysis tools)
● Digital marketing strategy development incl. KPI target definition
● Digital marketing concept/ growth hacking
● Development of a digital marketing strategy and growth hacking funnel concept

<u>Digital Global Branding & Campaign Management:</u>
● Digital B2C and B2B brand marketing
● Global digital brand strategy & management with case studies
● On-offline brand presence, online/offline channel mix and brand value enhancement through digital footprint, with practical examples and exercises
● Online campaign planning with case studies
● Presentation of digital brand concept and presentation of practical implementation of digital brand footprint by student
● International campaign rollout with case studies
● Development of global brand rollout concept and global campaign planning</td></tr>
<tr><td>Teaching / learning methods</td><td colspan="4">Lecture and discussion, case studies, group work with presentation</td></tr>
</table>

	Literature / teaching material	Script + literature recommendations, each in the latest edition: ● CHAFFEY, Chadwick/ ELLIS-CHADWICK, Fiona (2019): Digital Marketing – Strategy, Implementation & Practice, 7th Edition, Harlow. ● DETSCHER, S. (2021, Hrsg.): Digitales Management & Marketing, Teil III Digitale Disruption des Marketings und der Customer Journey, S.231-480. ● Ellis, J./ Brown M. (2017) Hacking Growth: How Today's Fastest-Growing Companies Drive Breakout Success, New York. ● KREUTZER, R. (2021): Praxisorientiertes Online-Marketing, 4. Auflage, Wiesbaden. ● KREUTZER, R./ Land, K.-H. (2017): Digitale Markenführung – Digital Branding im Zeitalter des digitalen Darwinismus, Wiesbaden. ● LAMMENETT, E. (2021): Praxiswissen Online-Marketing: Affiliate- und E-Mail-Marketing, Suchmaschinenmarketing, Online-Werbung, Social Media, Facebook-Werbung, 8. Auflage, Wiesbaden. ● MERTENS, Artur (2019): Markenorientierte digitale Transformation – Wie Sie Ihr Unternehmen erfolgreich in das digitale Zeitalter führen, Wiesbaden. ● TUNA, C./ Ejder, C. (2019): Native Advertising – Digitale Werbung mit neuen Formaten, Wiesbaden
	Special features	-
Organi-sation	**ECTS points**	6 ECTS
	Allocation	150 hours
	Workload	Attendance : preparation/follow-up + self-study : assignments/group work = 18 % (28 units) : 41 % : 41 %

Module Description		Digital Sales & E-Commerce
Contribution of the module to the study objectives	Qualification targets	• Understanding and analysing multi-channel retailing • Evaluate and (further) develop e-commerce business models • Analyse / develop digital marketplace concepts
	Contents	See course
	Teaching / learning methods	(Online) lecture, discussions, exercises and case studies
Prerequisites for participation	Knowledge, skills, competences	No formal requirements for participation
	Preparation for the module	cf. literature references in the courses
References ...	... to other modules	Digital Marketing
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Paper/ presentation 100 %
Organisation	Module coordinator/ Lecturer	• Prof Dr Dirk Funck • Markus Fost, MBA • Dr Hannes Schubert
	Language	English
	ECTS points	6 ECTS
	Workload	150 hours
	Allocation	Attendance : preparation/follow-up + self-study : assignments/group work = 22 % (28 units) : 39 % : 39 %
Course		**Digital Sales & E-Commerce**

<table>
<tr><th colspan="2">Course</th><th colspan="4">Digital Sales & E-Commerce</th></tr>
<tr><td rowspan="3">Excellent organi-sation</td><td rowspan="5">Qualification goals</td><td colspan="4">The students should be enabled to
● Understand and analyse multi-channel retail approaches
● Evaluate and (further) develop e-commerce business models
● Being able to analyse and develop digital marketplace concepts</td></tr>
<tr><td>Knowledge</td><td>Knowledge</td><td>Skills</td><td>Expertise</td></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td></td></tr>
<tr><td>Social</td><td>x</td><td>x</td><td></td></tr>
<tr><td rowspan="2">Contents</td><td colspan="4"><u>Multi-channel management:</u>
● Multi-channel sales: many paths lead to the customer
● Customer journey in the multi-channel sales funnel
● Evaluation of multi-channel sales approaches and concepts
● Development of multi-channel sales systems in B2C retail

<u>E-Commerce:</u>
● Market forms & players in e-commerce
● Strategy & business model positioning in e-commerce
● Structure and functionality of online shops
● Customer acquisition, traffic and conversion for online shops
● Case study to evaluate the analysis of online shop concepts
● Order processing: OM, payment, logistics & service
● E-commerce team: typical roles & tasks
● Opportunities and risks in e-commerce
● Case study on omnichannel strategies
● Case study on setting up a Shopify shop

<u>Digital Market Places:</u>
● Basics of the platform economy and business model types of online marketplaces
● Overview and evaluation of the most relevant online marketplaces
● Utilisation of existing marketplaces from the perspective of a brand manufacturer/retailer
● Development of Amazon marketing strategies
● Case study on the development of an Amazon Marketplace marketing concept
● Development and success factors of an own marketplace by/ of brand manufacturer(s)/ retailer(s)
● Case study on own marketplace development</td></tr>
<tr><td>Teaching / learning methods</td><td colspan="4">(Online) lecture, discussion, case studies, presentation</td></tr>
</table>

	Literature / teaching material	Script / recommended reading, latest edition: • Böckenholt, I., Mehn, A., Westermann, A.: (Hrsg., 2018): Konzepte und Strategien für Omnichannel-Exzellenz - Innovatives Retail-Marketing mit mehrdimensionalen Vertriebs- und Kommunikationskanälen, Wiesbaden (Herausgeberwerk mit kompakten Grundlagen und diversen Fallbeispielen). • Deges, F. (2020): Grundlagen des E-Commerce, Strategien, Modelle, Instrumente, Wiesbaden (Lehrbuch, Überblick und Zusammenhänge) • Fost, M. (2021): Die Amazonisierung des Handels, in Detscher, S. (Hrsg.): Digital Management & Marketing, Springer-Verlag, S. 349 - 400. • Funck, D. (2021): Multi-Channel vs. Omni-Channel: Vertriebskanäle bestimmen und kombinieren, in Detscher, S. (Hrsg.): Digital Management & Marketing, Springer-Verlag,, S. 329 - 347. • Gallino, S., Moreno, A. (Hrsg., 2019): Operations in an Omnichannel World, Cham (Herausgeberwerk mit Bezügen zu operative Handlungsfeldern und einigen Fallbeispielen). • Heinemann, G. (2020): B2B eCommerce, Grundlagen, Geschäftsmodelle und Best Practices im Business-to-Business Online-Handel, Wiesbaden (Lehrbuch, B2B) • Heinemann, G. (2019): Der neue Online-Handel Geschäftsmodelle, Geschäftssysteme und Benchmarks im E-Commerce, 10. Aufl., Wiesbaden, 2019 (Lehrbuch, Grundlagen, Geschäftsmodelle, Erfolgsfaktoren)
	Special features	-
Organi-sation	**ECTS-Points**	6 ECTS
	Allocation	150 hours
	Workload	Attendance : preparation/follow-up + self-study : assignments/group work = 18 % (28 units) : 41 % : 41 %

Digital Research Seminar & Master Thesis

Module Description		Digital Research Seminar
Contribution of the module to the study objectives	Qualification targets	The students should: ● learn to successfully plan a research paper (e.g. empirical Master's thesis) as a project ● find the relevant (also international) literature, especially in their field of specialisation, read it critically and evaluate it analytically and profitably ● select the appropriate empirical methodology for their research questions and object of research ● Use IT tools such as literature databases or the literature management programme Citavi effectively and efficiently
	Contents	See course
	Teaching / learning methods	Lecture with discussion and exercises
Prerequisites for participation	Knowledge, skills, competences	No formal requirements for participation
	Preparation for the module	cf. literature references for the course
References ...	... to other modules	Theories and scientific methods from other modules can be introduced and used as examples
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability and competitiveness.
Examination services		Student research project 100%
Organisation	Module coordinator/ Lecturer	Prof Dr Carsten Herbes
	ECTS points	18 ECTS
	Workload	450 hours
	Allocation	Attendance : own work = 5 % (28 units) : 95 %
Course		Digital Research Seminar

<table>
<tr><td colspan="2">Course</td><td colspan="4">Digital Research Seminar</td></tr>
<tr><td rowspan="7">Excellent organi-sation</td><td rowspan="6">Qualification goals</td><td colspan="4">The students should be enabled to
● successfully plan a research paper (e.g. empirical Master's thesis) as a project
● find, critically read and analytically evaluate the relevant (also international) literature, especially in their field of specialisation
● select the appropriate empirical methodology for their research questions and subject matter
● Use IT tools such as literature databases or the literature management programme Citavi
● prepare the Master's thesis in a targeted manner</td></tr>
<tr><td>Knowledge</td><td>Knowledge</td><td>Skills</td><td>Expertise</td></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Social</td><td></td><td></td><td></td></tr>
<tr><td>Contents</td><td colspan="4">● Efficient literature search with EBSCO, EconLit, Google Scholar etc.
● Efficient reading of academic essays and critical approach to literature
● Use of theories in general; theories in the field of digital management and marketing
● Overview of empirical research methods and selection criteria; presentation of alternative: hermeneutics
● Overview of qualitative research methods
● Content analysis
● Options for the publication of research results
● Further content as required</td></tr>
<tr><td>Teaching / learning methods</td><td colspan="4">Lecture and discussion, exercises</td></tr>
<tr><td>Literature / teaching material</td><td colspan="4">Script

Recommended reading, always in the latest edition:
● DÖRING/BORTZ (2016): Forschungsmethoden und Evaluation in den Sozial- und Humanwissenschaften, 5th edition, Heidelberg: Springer
=> available free of charge as an e-book via the HfWU library</td></tr>
<tr><td>Special features</td><td colspan="4">Individual tips for creating an exposé for the Master's thesis</td></tr>
<tr><td rowspan="3">Organi-sation</td><td>ECTS points</td><td colspan="4">6 ECTS</td></tr>
<tr><td>Allocation</td><td colspan="4">150 hours</td></tr>
<tr><td>Workload</td><td colspan="4">Attendance : own work = 19 % (28 units) : 81 %</td></tr>
</table>

Module Description		Master-Thesis
Contri-bution of the module to the study objectives	Qualification targets	The students should: ● Successfully complete a research paper (e.g. empirical Master's thesis) as an independent project ● Analyse the relevant (also international) literature, especially in their field of specialisation, in an analytically profitable way in their research work ● Apply the appropriate empirical methodology for their research questions and subject matter ● Write linguistically appropriate ● Use IT tools such as literature databases or the literature management programme Citavi effectively and efficiently
	Contents	See course
	Teaching / learning methods	Master's thesis, lecture with discussion and exercises
Prerequi-sites for partici-pation	Knowledge, skills, competences	No formal requirements for participation
	Preparation for the module	cf. literature references for the course
References ...	... to other modules	Theories and scientific methods from other modules can be introduced and used as examples
	... to the HfWU profile	Practice-orientated curriculum strongly focused on the needs of part-time students. Current and innovative topics in the field of digitalisation are taught by highly qualified academics and practitioners. The teaching content is supported by high-quality, practice-orientated research with corresponding publications. From a social point of view, the certificate course will help employees and the self-employed to further their education in the area of digitalisation, which is very important for professional development today and in the future, and thus ensure their long-term and sustainable employability/competitiveness.
Examination services		Master's thesis (6 months) 100%
Organi-sation	Module coordinator/ Lecturer	● Prof Dr Carsten Herbes ● Prof Dr Stefan Remhof
	ECTS points	24 ECTS
	Workload	600 hours
	Allocation	Attendance : own work = 5 % (28 units) : 95 %
Course		Master thesis

<table>
<tr><th colspan="2">Course</th><th colspan="4">Master-Thesis</th></tr>
<tr><td rowspan="7">Excellent organi-sation</td><td rowspan="5">Qualificatio ntargets</td><td colspan="4">The students should be enabled to
● Successfully complete a research paper (e.g. empirical Master's thesis) as an independent project
● Analyse the relevant (also international) literature, especially in their field of specialisation, in an analytically profitable way in their research work
● Apply the appropriate empirical methodology for their research questions and subject matter
● Write linguistically appropriate
● Use IT tools such as literature databases or the literature management programme Citavi effectively and efficiently</td></tr>
<tr><td>Knowledge</td><td>Knowledg e</td><td>Skills</td><td>Expertise</td></tr>
<tr><td>Subject</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>System</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Even</td><td>x</td><td>x</td><td>x</td></tr>
<tr><td>Social</td><td></td><td></td><td></td></tr>
<tr><td>Contents</td><td colspan="4">● Raise theoretical foundations
● Evaluating the state of research
● Conduct your own empirical research
● Make an interpretation
● Provide recommendations for action
● Identify the need for further research</td></tr>
<tr><td>Teaching / learning methods</td><td colspan="4">Lecture and discussion, exercises</td></tr>
<tr><td>Literature / teaching material</td><td colspan="4">Script

Recommended reading, always in the latest edition:
● DÖRING/BORTZ (2016): Forschungsmethoden und Evaluation in den Sozial- und Humanwissenschaften, 5th edition, Heidelberg: Springer
=> available free of charge as an e-book via the HfWU library</td></tr>
<tr><td>Special features</td><td colspan="4">Individual tips for creating an exposé for the Master's thesis</td></tr>
<tr><td rowspan="2">Organi-sation</td><td>ECTS-Points</td><td colspan="4">18 ECTS</td></tr>
<tr><td>Allocation</td><td colspan="4">450 hours</td></tr>
</table>

	Workload	Attendance : own work = 5 % (28 units) : 95 %