



Module catalog for the degree program  
**Digital Business and Information Systems (B.Sc.)**  
(Internationale Wirtschaftsinformatik)

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## 1. CONTENT

Number	Module name	Coordinator
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### 1. Semester

B01	<a href="#">Principles of Business Management</a>	Anne König
B02	<a href="#">Grundlagen des Wirtschaftsrechts</a>	Uwe Dathe
B03	<a href="#">Microeconomics</a>	Heiner Brockmann
B04	<a href="#">Principles of Mathematics and Statistics</a>	Marlene Müller
B05	<a href="#">Programming 1</a>	Agathe Merceron
B06	<a href="#">Principles of Computer Science</a>	N.N. (FB VI)

### 2. Semester

B07	<a href="#">Financial Management and Accounting</a>	Michael Philippi / Andreas Krimpmann
B08	<a href="#">Marketing</a>	Susann Ericsson
B09	<a href="#">International Business Law</a>	Uwe Dathe
B10	<a href="#">Agile Project Management</a>	Dieter Pumpe
B11	<a href="#">Programming 2</a>	Agathe Merceron
B12	<a href="#">Software Engineering 1</a>	Sven Graupner

### 3. Semester

B13	<a href="#">Management and Business Modelling</a>	Matthias Schmidt
B14	<a href="#">Supply Chain Management</a>	Christian Butz
B15	<a href="#">Management Accounting</a>	Nicole Jekel
B16	<a href="#">Database Systems</a>	Agathe Merceron
B17	<a href="#">Software Engineering 2</a>	Sven Graupner
B18	<a href="#">Modelling of Business Processes and Services</a>	Jörn Kreutel

## 1. CONTENT (cont.)

Number	Module name (credits)	Coordinator
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## 4. Semester

B19	<a href="#">Online-Marketing</a>	Susann Ericsson / Annett Haas
B20	<a href="#">Business Intelligence</a>	Jörn Kreutel
B21	<a href="#">Cloud Computing</a>	Sven Graupner
B22	<a href="#">Required Elective Module 1:</a> <ul style="list-style-type: none"> <li>• <a href="#">Principles of Digital Media</a> or</li> <li>• <a href="#">Integrated Production Systems</a></li> </ul>	Ilona Buchem Christian Butz
B23	<a href="#">Business Project</a> <sup>1</sup>	N.N. (FB I)

## 5. Semester

B24	<a href="#">Management Information Systems in Enterprises</a> <sup>1</sup>	Klaus-Peter Schoeneberg
B25	<a href="#">Required Elective Module 2:</a> <ul style="list-style-type: none"> <li>• <a href="#">Project seminar digital media</a> or</li> <li>• <a href="#">Brand management</a></li> </ul>	Ilona Buchem Susann Erichsson
B26	<a href="#">Required Elective Module 3:</a> <ul style="list-style-type: none"> <li>• <a href="#">Economic Policies for Digital Business</a></li> <li>or</li> <li>• <a href="#">Digitalization and Society</a></li> </ul>	Heiner Brockmann Matthias Schmidt
B27	<a href="#">IT-Project</a> <sup>1</sup>	Sven Graupner

## 6. Semester

B28	<a href="#">Corporate Communication and Change Management</a>	Antje Ducki
B29	<a href="#">Human Resource Management</a>	Antje Ducki
B30	<a href="#">Statistical Computing</a>	Marlene Müller
B31	<a href="#">Empirical Research Methods</a>	Karoline Barthel
B32	<a href="#">Required Elective Module 4:</a> <ul style="list-style-type: none"> <li>• <a href="#">Mobile Applications</a> or</li> <li>• <a href="#">Media Design</a></li> </ul>	Jörn Kreutel Pamela Schaudin
B33	<a href="#">Studium Generale I</a>	Dekan/in FB I
B34	<a href="#">Studium Generale II</a>	Dekan/in FB I

## 7. Semester

B35	<a href="#">Praktikum</a> <sup>2</sup>	Studiengangsleiter/in FB I
B36	<a href="#">Abschlussprüfung</a> <sup>3</sup> :	Studiengangsleiter/in FB I

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<sup>1</sup> 10 ECTS

<sup>2</sup> 15 ECTS

<sup>3</sup> 15 ECTS

	1. Bachelor-Arbeit 2. Mündliche Prüfung	
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## 2. SUPPLEMENT: DESCRIPTION OF REQUIRED ELECTIVE MODULES

## 2. MODULE DESCRIPTIONS

### 1. Semester

Module number	B01
English title / German title	<a href="#">Principles of Business Management</a> / Grundlagen der Betriebswirtschaftslehre
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	Students acquire an overview of the main subject areas of business administration and can classify them into scientific disciplines. Through the mastering of fundamental business concepts, in later advanced courses students will be capable of grasping further aspects of their studies in a larger context.  They will become capable of assessing their abilities to learn on their own and finding ways to enhance their self-study skills.
Requirements	None
Level	First semester of the degree program
Type of module	Seminar, self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 70 % Written Examination (30 min)</li> <li>• 30 % Oral Examination (15 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<u>The Fundamentals</u> <ul style="list-style-type: none"> <li>• The subject matter of business management</li> <li>• The history and objectives of businesses organizations</li> <li>• The objectives of enterprises</li> <li>• The classification of business management as a scientific discipline</li> <li>• The St. Gallen Management Model</li> </ul>

	<p><u>Decision Theory</u></p> <ul style="list-style-type: none"> <li>• Decision-making models and processes</li> <li>• The significance of key performance indicators</li> <li>• Methodology: the evaluation matrix and the decision matrix</li> </ul> <p><u>Elementary Operational Decisions</u></p> <ul style="list-style-type: none"> <li>• Overview</li> <li>• Particular focus: objectives, limitations, and forms of cooperation and partnerships</li> <li>• Special forms of cooperation in the digital economy, e.g. re-selling, value-added partnerships, virtual companies, project exchanges, crowdsourcing, and the shared economy</li> </ul> <p><u>Aspects of Corporations</u></p> <ul style="list-style-type: none"> <li>• Types of company based on their legal forms</li> <li>• Special feature: Risk-capital providers in the digital economy</li> </ul> <p><u>Organization</u></p> <ul style="list-style-type: none"> <li>• Structures and processes in organizations</li> <li>• Design of organizational changes</li> </ul> <p><u>Human Resources Management</u></p> <ul style="list-style-type: none"> <li>• Selected forms of recruiting</li> <li>• Basic models of personnel management and management styles</li> <li>• Personnel development as a management task</li> </ul> <p><u>Management Accounting</u></p> <ul style="list-style-type: none"> <li>• Concept, tasks, objectives, forms</li> <li>• Organization of management accounting in companies</li> <li>• Methods of planning and control (an overview, to be further expanded in the module “Management Accounting”)</li> </ul> <p><u>Accounting and Finance</u></p> <ul style="list-style-type: none"> <li>• The significance of external accounting for taxation and internal accounting for pricing</li> <li>• Types of corporate finance</li> </ul> <p><u>Provision of Services</u></p> <ul style="list-style-type: none"> <li>• Tasks and basic concepts of innovation management</li> <li>• Tasks and basic concepts of procurement and logistics</li> <li>• Special features of service provision in manufacturing enterprises</li> <li>• Special features of service provision in service companies</li> </ul>
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in English.
Required Room type	SU-Sem (Regel-Seminarraum für SU)

Module number	B02
English title / German title	Grundlagen des Wirtschaftsrechts / <a href="#">Introduction to Business Law</a>
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	Die Studierenden kennen die Grundlagen des Bürgerlichen Rechts, des Handels- und des Gesellschaftsrechts. Sie haben die Schnittstellen zwischen der praktischen betriebswirtschaftlichen Tätigkeit und den genannten Rechtsgebieten erkannt. Sie haben einen Sinn dafür bekommen, wann es zweckmäßig ist, juristische Fachleute in den betriebswirtschaftlichen Entscheidungsprozess einzubeziehen.
Requirements	None
Level	First semester of the degree program
Type of module	Seminar
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• Written examination (90 min.)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	Recht des Kaufmanns, GmbH, Aktiengesellschaft, BGB-Gesellschaft, Offenen Handelsgesellschaft und Kommanditgesellschaft. Grundlagen des Schuldrechts, Sachenrechts, Handels- und Gesellschaftsrechts.  Vertiefungen zu: <ul style="list-style-type: none"> <li>• Zustandekommen von Verträgen,</li> <li>• Besonderheiten bei Vertrieb von Waren und Lizenzen im Netz,</li> <li>• Abtretung von Forderungen,</li> <li>• einzelne Vertragstypen (Kauf-, Werk-, Darlehens- und Sicherungsverträge etc.),</li> <li>• Erwerb des Eigentums an beweglichen und unbewegli-</li> </ul>

	<p>chen Sachen,</p> <ul style="list-style-type: none"> <li>• Grundschild und Hypothek.</li> </ul> <p>Arbeitsvertragsrecht</p> <ul style="list-style-type: none"> <li>• Zustandekommen des Arbeitsvertrages</li> <li>• Inhalt des Arbeitsvertrages einschl. Antidiskriminierungsrichtlinie</li> </ul>
Reading list	<p>Führich, E.: Wirtschaftsprivatrecht. Vahlen.</p> <p>Brox, H.; Walker, W.-D.: Allgemeiner Teil des BGB. Vahlen.</p> <p>Klunzinger, E.: Grundzüge des Gesellschaftsrechts. Vahlen.</p> <p>Nörr, K.; Scheyhing, R.; Pöggeler, W. [Hrsg.]: Sukzessionen. Forderungszession, Vertragsübernahme, Schuldübernahme. Mohr-Siebeck.</p>
Further information	Dieses Modul wird in deutscher Sprache angeboten.
Required Room type	SU-Sem (Regel-Seminarraum für SU)

Module number	B03
English title / German title	<a href="#">Microeconomics</a> / Mikroökonomik
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	Students are familiar with basic economic terms and concepts and are capable of identifying and describing specific aspects of digital goods and markets. Students are able to apply economic concepts and theories to current issues regarding the digital economy. They understand digitalization as a process of economic transformation and are able to critically reflect on the implications of structural change.
Requirements	Recommendation: Principles of Business Management, Principles of Mathematics and Statistics
Level	First semester of the degree program
Type of module	Seminar, self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• Written examination (90-120 min.)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<u>Basics</u> <ul style="list-style-type: none"> <li>• Scarcity</li> <li>• Production factors and goods / data as a production factor</li> <li>• innovation (goods and processes) / digital goods and smart factory</li> <li>• division of labour</li> </ul> <u>Principles of Microeconomics: Markets and prices</u> <ul style="list-style-type: none"> <li>• Demand and Supply</li> <li>• Equilibrium and adaption to external shocks</li> <li>• Forms of competition</li> </ul> <u>Specific aspects of markets for digital goods</u>



	<ul style="list-style-type: none"><li>• production at zero marginal costs</li><li>• network effects</li><li>• double-sided markets</li></ul>
Reading list	Mankiw, N. G.: Economics. South-Western. Varian, H.R. et. al.: The Economics of Information Technology. Cambridge.
Further information	This module is offered in English.
Required Room type	SU-Sem (Regel-Seminarraum für SU)

Module number	B04
English title / German title	<a href="#">Principles of Mathematics and Statistics</a> / Mathematische und statistische Grundlagen
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Principles of Mathematics and Natural Sciences
Learning objectives / outcomes	The students master basic calculation techniques and methods that support analyzing mathematical problems in the digital economy. They are able to perform elementary mathematical tasks of economic relevance.  The students know basic concepts and methods for statistical data analysis. They can perform simple statistical analyses themselves and are able to interpret the results.
Requirements	None
Level	First semester of the degree program
Type of module	Seminar, laboratory training, self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• Written examination (90-120 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<u>Mathematical Principles</u> <ul style="list-style-type: none"> <li>• Mathematical symbols and calculation rules, logical operations and set theory</li> <li>• Elements of Analysis/Calculus (functions and graphs, power functions, logarithms and exponential functions, sequences, sums, series, percentages, interest calculation, compound interest, basics of financial mathematics)</li> </ul> <u>Statistics</u> <ul style="list-style-type: none"> <li>• Descriptive Methods (data sets and types of variables, description of single variables: absolute and relative frequencies, graphical display, measures of location, measures of dispersion, bivariate and multivariate relationships: contingency tables, correlation, linear regression, graphical display,</li> <li>• Elementary introduction to probability calculus, random vari-</li> </ul>

	<p>ables as theoretical models for empirical data, statistical hypothesis testing in specific situations</p> <p>The course is supported using suitable software tools in laboratory exercises (for example spreadsheet software as Microsoft Excel or OpenOffice Calc).</p>
Reading list	<p>Don, E.: Schaum's Outline of Basic Business Mathematics</p> <p>Kazmier, L.: Schaum's Outline of Business Statistics</p> <p>Kronthaler, F.: Statistik angewandt: Datenanalyse ist (k)eine Kunst Excel Edition, Springer</p>
Further information	This module is offered in German or in English.
Required Room type	<p>SU-Sem (Regel-Seminarraum für SU)</p> <p>Ü-IT (Übung in einem IT-Labor; rechnergestützter Unterricht)</p>

Module number	B05
English title / German title	<a href="#">Programming 1</a> / Programmierung I
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	Students know the principles of object-oriented programming. They understand what it means for a class to be well structured and how objects interact. They came across fundamental classes of the java standard library and are able to read and understand the documentation of classes. They are able to develop their own solutions to solve small programming problems using a combination of classes they write themselves and classes from the standard Java library. They can judge whether their own code is well-structured and readable.
Requirements	None
Level	First semester of the degree program
Type of module	Seminar, training course, self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 50% written examination</li> <li>• 50% written exercises</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<ul style="list-style-type: none"> <li>• Structure of classes (attributes, constructors, methods)</li> <li>• Variables and data types (primitive types, reference types)</li> <li>• Statements (assignments, conditional assignments, loops)</li> <li>• Code conventions and programming style</li> <li>• Interactions with objects (method call – external, internal)</li> <li>• Collections (arrays, lists, sets, iterators)</li> <li>• Encapsulation (interface, controlling access)</li> <li>• Use of the standard libraries</li> </ul>

	<ul style="list-style-type: none"><li>• Documentation of classes</li><li>• Class variables and class methods</li><li>• Inheritance and polymorphy</li></ul>
Reading list	K. Sierra, B. Bates: <i>Head first Java</i> , O'Reilley (More to be announced in class at the outset of the module.)
Further information	This module is offered in English.
Required Room type	SU-Sem Ü-IT (Übung in einem IT-Labor; rechnergestützter Unterricht)

Module number	B06
English title / German title	<a href="#">Principles of Computer Science</a> / Grundlagen der Informatik
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	Students know the basic architecture of computers and the function of the most important components involved. They know the mechanisms how information is processed within a computer system. They understand the structure of programming languages and software systems. They are aware of important aspects of using software systems for business applications.
Requirements	None
Level	First semester of the degree program
Type of module	Seminar, training course, self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• Written examination</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<ul style="list-style-type: none"> <li>• Basic concepts of informatics</li> <li>• Numeral systems, codes and Boolean algebra</li> <li>• Von Neumann model</li> <li>• Computer, interfaces, peripheral devices</li> <li>• Models and data structure</li> <li>• Software (algorithms, operating systems, programming languages, translation, interpretation, database systems, application software)</li> <li>• Communication networks</li> <li>• Business application software</li> <li>• Data privacy and data security</li> <li>• Informatics and business</li> <li>• Reliability of complex systems</li> </ul>

	<ul style="list-style-type: none"><li>• Informatics and society</li></ul>
Reading list	Stair, R.; Reynolds, G.: <i>Fundamentals of Information Systems</i> , Cengage Learning
Further information	This module is offered in English.
Required Room type	SU-Sem

Module number	B07
English title / German title Titel	<a href="#">Financial Management and Accounting /</a> Angewandtes Rechnungswesen
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	Students are able to map a micro business in accounting terms and to provide the necessary information for the tax office or the tax advisor (in the form of a balance sheet). They are familiar with the value of special accounting software.  They can read and understand accounting evaluations. They know which tax types are relevant to entrepreneurs. The responsibilities of auditors are known to them.
Requirements	Recommendations: Principles of Business Management, Principles of Mathematics and Statistics
Level	Second semester of the degree program
Type of module	Seminar, self-study
Status	Required module
Semester when offered	Summer Semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 100% Written examination (90 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<u>System of company accounting</u> <ul style="list-style-type: none"> <li>• Basic principles and principles of accounting</li> <li>• Financial and Management accounting</li> <li>• Organization of company accounting</li> </ul> <u>Financial Accounting</u> <ul style="list-style-type: none"> <li>• Inventory, basic accounting</li> <li>• VAT, VAT returns</li> <li>• Income tax, income tax returns, net income method, balance sheet and income statement</li> <li>• Depreciation</li> <li>• Charts of accounts</li> </ul>



	• Accounting Software
Reading list	Weetman, P. : <i>Financial Accounting</i> , Prentice Hall.
Further information	This module is offered in English.
Required room type	SU-Sem (Regel-Seminarraum für SU)

Module number	B08
English title / German title	<a href="#">Marketing</a> / Marketing
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	The students know the principles of marketing and the special features of the marketing of services as an independent market performance. They understand the marketing mix and the possible strategies for successful market processing. Students know the concepts and tools for designing a marketing plan.
Requirements	Recommendation: Principles of Business Management
Level	Second semester of the degree program
Type of module	Seminar
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 50% Multiple choice (60 min.)</li> <li>• 50% Written examination (60 min.)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<ul style="list-style-type: none"> <li>• Defining principles of marketing</li> <li>• Concept of service and service marketing</li> <li>• Production of goods and services</li> <li>• Purchasing behavior and market research</li> <li>• Strategic marketing</li> <li>• Quality management</li> <li>• Operational marketing</li> <li>• Selected tools of service design (e.g., Business Blueprinting, Persona)</li> </ul>
Reading list	Mager, B.; Gais, M.: Service Design. UTB.  Pruitt, J.; Adlin, T.: The Persona Lifecycle: Keeping People in Mind throughout Product Design. Elsevier.

	Stickdorn, M.; Schneider, J.: This is Service Design Thinking. BIS Publishers.
Further information	This module is offered in English.
Required room type	SU-Sem (Regel-Seminarraum für SU)

Module number	B09
English title / German title	<a href="#">International Business Law</a> / Internationales Wirtschaftsrecht
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	The students gained basic knowledge of International Business Law and are skilled at performing the following tasks: <ul style="list-style-type: none"> <li>• applying fundamental legal rules on simple situations</li> <li>• solving practical legal problems</li> <li>• assessing the effect of clauses in international contracts</li> </ul>
Requirements	None
Level	Second semester of the degree program
Type of module	Seminar, self-study
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• Written examination (90 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<ol style="list-style-type: none"> <li>1. Defining international business law</li> <li>2. International private law, particularly application of a foreign law and principles of conflict-of-laws rules for contracts</li> <li>3. Convention on Contracts for the International Sale of Goods (CISG), particularly <ul style="list-style-type: none"> <li>• Applicability of CISG</li> <li>• Conclusion of contract</li> <li>• Rights and obligations of the parties</li> <li>• Breach of contract</li> <li>• International Commercial Terms</li> </ul> </li> <li>4. World Trade Organization and the General Agreement on Tariffs and Trade</li> <li>5. International protection of intellectual property</li> </ol>

	<p>6. The law of the European Union, particularly</p> <ul style="list-style-type: none"> <li>• Treaty on EU and Treaty on the Functioning of the EU, inter alia European fundamental freedoms</li> <li>• Protection against discrimination</li> <li>• Consumer protection, especially in online trading</li> </ul> <p>7. International labor law, inter alia cross-border deployment and posting of staff</p>
Reading list	Schaffer/Augusti/Dhooge, International Business Law and its Environment.
Further information	This module is offered in English.
Required room type	SU-Sem (Regel-Seminarraum für SU)

Module number	B10
English title / German title	<a href="#">Agile Project Management</a> / Agiles Projektmanagement
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	<p>Students are familiar with theoretical and methodological principles of Agile Project Management. They understand Agile Project Management as one particular concept of Project Management and are capable of comparing it to other concepts.</p> <p>Students have acquired an overview over principle frameworks, methods, instruments and areas of application of Agile Project Management in business in general and in the digital economy in particular.</p> <p>Students are capable of applying methods and instruments of Agile Project Management to practical problems taking into account agile values and principles. They are able to plan, execute projects and to evaluate and present results.</p>
Requirements	None
Level	Second semester of the degree program
Type of Module	Seminar, group project
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 50% project report (10 pages)</li> <li>• 50% presentation (15 minutes)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<p><u>Project Management in transition</u></p> <ul style="list-style-type: none"> <li>• Objectives, tasks, methods</li> <li>• Characteristics and types of projects in the digital economy</li> <li>• Project Management in the digital age</li> </ul>

	<p><u>Agile Project Management</u></p> <ul style="list-style-type: none"> <li>• Origins and background</li> <li>• Agile values, mindset and principles</li> <li>• Project organisation and project phases in comparison (traditional vs. agile)</li> <li>• Frameworks (Scrum, Kanban)</li> <li>• Requirements Engineering</li> <li>• Open space</li> <li>• Execution and performance measurement of agile projects</li> <li>• Factors of success and risk management of agile projects</li> </ul> <p><u>Cross functional teams</u></p> <ul style="list-style-type: none"> <li>• New forms of teamwork in the digital economy</li> <li>• Specific characteristics of cooperation in cross functional teams</li> <li>• Cultural, technical and organisational challenges of cross functional teams</li> </ul>
Reading list	<p>Wysocki, R. K.: Effective Project Management: Traditional, Agile, Extreme. Wiley.</p> <p>Pichler, R.: Agile Product Management with Scrum: Creating Products That Customers Love. Addison Wesley.</p> <p>Cohn, M.: Agile Estimating and Planning. Pearson.</p>
Further information	The module is offered in English. Please take note of the current information posted by your faculty.
Required room type	SU-Sem; Ü-Sem

Module number	B11
English title / German title	<a href="#">Programming 2</a> / Programmierung II
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	Students learn how to systematically discover extensive libraries of an object-oriented programming language and use them. They can develop simple java applications which include a graphical user interface.
Requirements	Recommendation: Programming 1
Level	Second semester of the degree program
Type of module	Seminar, training course, self-study
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 75% written examination</li> <li>• 25% written exercises</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<ul style="list-style-type: none"> <li>• Abstract classes</li> <li>• Interfaces</li> <li>• Exception handling</li> <li>• Test (with JUnit) / debugging</li> <li>• Advanced collections (Map, sorted collections)</li> <li>• Graphical User Interface</li> <li>• Event handling</li> <li>• Serialization</li> <li>• Input / Output Files</li> <li>• Optional: other advanced topics or APIs.</li> </ul>
Reading list	C. S. Horstmann, G. Cornell: Core Java: Fundamentals. Addison-Wesley



Further information	The module will be offered in English.
Required Room type	SU-Sem, Ü-IT

Module number	B12
English title / German title	<a href="#">Software engineering 1</a> / Software-Engineering I
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	<p>Students expand basic knowledge from programming languages and understand complexities of larger, multi-party software development.</p> <p>Students recognize different stakeholder perspectives and use systematic Requirements Engineering (RE) methods to formulate specific domain requirements. Students learn to differentiate domain requirements from solution and system requirements and to formulate industry-standard specifications.</p> <p>Students understand the distinction between functional (FR) and non-functional (NFR) requirements including the various types of quality requirements. Students practically apply concepts of software modeling and are proficient in UML.</p>
Requirements	Recommendation: Programming 1
Level	Second semester of the degree program
Type of module	Seminar, training course, self-study
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 60% written examination</li> <li>• 40% written exercises</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Modules with similar content
Content	<p>Software development organization:</p> <ul style="list-style-type: none"> <li>• core process of software development with planning, analysis, design, implementation, quality assurance. Technical roles: requirements engineer, solutions architect, software architect, product manager/owner, developer, QA-roles.</li> <li>• Linear, iterative and agile approaches, Scrum.</li> </ul>

	<ul style="list-style-type: none"> <li>• Management and support processes with roles of program and project manager, scrum master.</li> </ul> <p>Requirements Engineering (RE):</p> <ul style="list-style-type: none"> <li>• domain analysis with requirements solicitation, stakeholder analysis, problem definition and goal setting</li> <li>• requirements specification as use cases and user stories,</li> <li>• system analysis and specification of functional and non-functional requirements (FR, NFR), including quality requirements.</li> </ul> <p>Object-oriented Analysis (OOA): translation of system requirements into a software solution model with business logic (business objects, business processes) using UML diagrams:</p> <ul style="list-style-type: none"> <li>• UML Use Case Diagram,</li> <li>• UML Domain Class Diagram,</li> <li>• UML Activity Diagram,</li> <li>• UML State Diagram,</li> <li>• UML Interaction diagrams.</li> </ul>
Reading list	<p>Hull, Jackson, Dick: <i>Requirements Engineering</i>, Springer Science &amp; Business Media, ISBN 978-1849964043, 2010.</p> <p>Miles, Hamilton: <i>Learning UML 2.0: A Pragmatic Introduction to UML</i>, ISBN ISBN-13: 978-0596009823, O'Reilly 2003. and online resources for UML 2.5.</p> <p>Online resources.</p>
Further information	This module is offered in English.
Required Room type	SU-Sem, Ü-IT

Module number	B13
English title / German title	<a href="#">Management and Business Modeling /</a> Unternehmensführung und Geschäftsmodellentwicklung
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	<p>Students understand basic terminology, essential challenges and aims of business management. They can assess the profession of being a manager and the special responsibility that comes with the job critically. The students understand the basic cross-functional, case relevant and personalized operational processes within the company. They are able to develop a model of relevant strategic management and organisation concepts and discuss practical case studies.</p> <p>Students know the essential elements of business models and can describe companies of different industries and different sizes in accordance to their business models. They can analyse specific business models in depth and are able to derive basic rules for success beyond a concrete example.</p>
Requirements	Recommendation: Principles of Business Management, Microeconomics
Level	Third semester of the degree program
Type of Module	Seminar, self-study
Status	Required module
Semester when offered	Wintersemester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 75% project report (30 pages)</li> <li>• 25% term paper (5 pages)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<ul style="list-style-type: none"> <li>• Integrative management as a cross-divisional function</li> <li>• Current and historic development of business management</li> <li>• Management as a profession and management responsibility</li> </ul>

	<ul style="list-style-type: none"> <li>• Strategic management and basic models of organisational structure</li> <li>• Basic forms and patterns of business models</li> <li>• Structured presentation and exemplary development of new business models – creative techniques</li> <li>• Success factors for developing and implementing innovative business models</li> </ul>
Reading list	To be announced in class at the outset of the module.
Further information	The module is offered in English. Please take note of the current information posted by your faculty.
Required room type	SU-Sem (Regel-Seminarraum für SU)

Module number	B14
English title / German title	<a href="#">Supply chain management</a> / Supply Chain Management
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	<p>The students have understood the basic idea and goals of logistics and Supply Chain Management. They have developed an understanding for the term Supply Chain Management and are able to identify and evaluate connections to other fields of Business Economics.</p> <p>The students have an overview over the key aspects of logistic processes and systems. Furthermore, they are able to understand, analyze, evaluate and possibly improve real systems and processes of the Supply Chain in the areas procurement, production and distribution. The students have developed an understanding for holistic Supply Chains. They are familiar with concepts and methods to strategically form a Supply Chain and can implement them.</p>
Requirements	None
Level	Third semester of the degree program
Type of module	Seminar, group project, calculation training, self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 50 % written exercises</li> <li>• 50 % written examination (60 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<ul style="list-style-type: none"> <li>• Basics of Logistics</li> <li>• Basics of Supply Chain Management</li> <li>• Supply Chain und Network Design</li> <li>• Procurement and distribution logistics</li> <li>• Methods and Processes for disposal</li> <li>• Storage and consignment</li> </ul>

	<ul style="list-style-type: none"><li>• Optimizing transport and route planning</li><li>• Basics and trends of trade logistics</li><li>• Methods and Processes to assess value of inventory</li></ul>
Reading list	Chopra, S.: Supply Chain Management. Prentice Hall.
Further information	The module is offered in English. Please take note of the current information posted by your faculty.
Required Room type	SU-Sem, Ü-Sem

Module Number	B15
English title / German title	<a href="#">Management Accounting /</a> Controlling
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	Students are familiar with the objectives of selected management accounting topics and gain knowledge about result-oriented leadership. Based on this knowledge, students learn about modern management accounting instruments. They can critically discuss selected management accounting topics and in key topics reflect and evaluate further aspects of management. In addition they employ for instance Microsoft Excel Management Accounting Software in order to reduce complexity.
Requirements	Recommendation: Principles of Business Management, Principles of Mathematics and Statistics, Financial Management and Accounting.
Level	Third semester of the degree program
Type of Module	Seminar, training course and self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 50% Case study with consultation</li> <li>• 50% Written examination</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<ul style="list-style-type: none"> <li>• Objective and functions of Management Accounting</li> <li>• Selected Strategic Management Accounting Instruments, e.g. Portfolio-Analysis, KPI-Analytics, SWOT-Analysis, Balanced Scorecard (e.g. Excel)</li> <li>• Selected Operative Management Accounting Instruments, e.g. Target Costing, specific Analytics</li> <li>• Integrated Reporting e.g. with Excel</li> <li>• Marketing- and Sales Management Accounting</li> </ul>



Reading list	Johnson, Gerry, Scholes, Kevan and Whittington, Richard: Exploring Corporate Strategy, Text and Cases.
Further information	This module is offered in English
Required room type	SU-Sem, Ü-Sem

Module number	B16
English title / German title	<a href="#">Database Systems</a> / Datenbanksysteme
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	Become acquainted, know and understand the principles of databases; become able to make a database-analysis and a database-implementation; is able to evaluate data-models and database-systems.
Requirements	Recommendation: Principles of Mathematics and Statistics, Programming 1 + 2,
Level	Third semester of the degree program
Type of module	Seminar, laboratory training
Status	Required Module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 75% Written examination</li> <li>• 25% Written exercises</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Courses with comparable content
Content	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Principles and responsibilities of database-administration systems</li> <li>• Database design</li> <li>• Data models</li> <li>• Principles of relational databases</li> <li>• Structured Query Language (SQL)</li> <li>• Views, administration rights, integrity</li> <li>• Applications with databases</li> </ul>
Reading list	To be announced in class at the onset of the module.

Further information	This module is offered in English.
Required Room type	SU-Sem (Regel-Seminarraum für SU) Ü-IT (Übung in einem IT-Labor; rechnergestützter Unterricht)

Module number	B17
English title / German title	<a href="#">Software Engineering 2</a> / Software-Engineering II
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	<p>Students obtain basic understanding of software and system architecture. Students learn to systematically engineer a software solution starting with the analysis of system requirements. Students design functioning business logic in UML and are familiar with design patterns and object persistence. Students know advanced object-oriented concepts such as principles of coupling and cohesion.</p> <p>Students understand the various dimensions of software quality. They understand code and dependency complexities and their resolution. Students also understand the need for designing specific, measurable quality metrics and systematic quality assurance tests.</p> <p>Students understand Unit tests and the need for a systematic unit test plan. Other test types have been introduced: regression, integration, system, performance, acceptance, user experience tests.</p> <p>Implementation skills are developed by mapping designs into code using a relevant framework to create a functioning software solution. Implementation of quality assurance measures has been practiced for unit tests according to a test plan. The purpose of the software build process, software configuration, versioning and tools are understood and practiced.</p>
Requirements	Recommendation: Software engineering 1
Level	Third semester of the degree program
Type of module	Seminar, training course, self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 60% written test</li> <li>• 40% written exercises</li> </ul>

Grade assessment	See study and examination regulations
Equivalent modules	Modules with similar content
Content	<p><i>Software and system architecture</i>: includes architectural principles (layers, abstractions), system architecture (components, interaction patterns, client-server, n-tier architecture), software architecture.</p> <p><i>Object-Oriented Design</i> includes business logic design (classes, relations, multiplicities, processes); design patterns; design of a persistent data model (object persistence, Object-Relational Mapping ORM); advanced object-oriented concepts coupling and cohesion.</p> <p>Design includes designing for quality covering code analysis and review with dependency analysis and code complexity metrics. Code quality metrics are discussed by Sonar. Students conduct code reviews. Code coverage is introduced as frequently used metric. Frameworks are discussed for validation. Other test types are presented for regression, integration, system, performance, acceptance, user experience tests.</p> <p><i>Implementation</i> includes the use of a suitable framework and tools (SpringBoot, hibernate ORM, maven as build tool). Unit tests and systematic test planning are demonstrated using JUnit.</p> <p><i>Versioning and Configuration Management</i> is introduced with git. Students will develop and build a functioning system during exercises.</p>
Reading list	Gamma, Helm, Johnson, Vlissides: <i>Design Patterns: Elements of Reusable Object-Oriented Software</i> , Addison-Wesley, Nov 1994.
Further information	This module is offered in English.
Required Room type	SU-Sem, Ü-IT

Module number	B18
English title / German title	<a href="#">Modelling of Business Processes and Services /</a> Modellierung von Geschäftsprozessen und Diensten
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	<p>Students are familiar with the notion of business process and are capable of identifying them.</p> <p>Students acquire knowledge regarding employment of business rules in software solutions and know how rules can be modelled and technically executed.</p> <p>They are capable of modelling processes and interactions between actors in business contexts using appropriate notations, e.g. BPMN. Processes can be analysed in terms of their potential for being optimised.</p> <p>The notion of “service” in the context of software systems is familiar to students, and services required for the execution of business processes can be identified. Data to be employed when interacting with services can be modelled.</p> <p>Students know of software solutions for operating services and are capable of identifying appropriate software components for given requirements. Services can be invoked from a runtime environment for business process execution.</p>
Requirements	Recommendation: Software Engineering 1 + 2
Level	Third semester of the degree program
Type of module	Seminar, laboratory training, self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 50 % Exercises with consultation</li> <li>• 50 % Written examination (60 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content

Content	<p><u>Business processes and workflows</u></p> <ul style="list-style-type: none"> <li>• Business process analysis</li> <li>• Business process modelling with BPMN or alternative expressive means</li> <li>• Business process management and optimisation</li> </ul> <p><u>Business processes and services</u></p> <ul style="list-style-type: none"> <li>• Services as a concept of software architecture</li> <li>• Modelling of services and data to be employed by services</li> <li>• "Human Tasks" as manual activities in processes</li> </ul> <p><u>Execution of business processes</u></p> <ul style="list-style-type: none"> <li>• Software solutions for business process execution</li> <li>• Accessing services from business processes</li> <li>• Modelling and execution of business rules</li> </ul>
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in English.
Required room type	SU-Sem, Ü-IT

Module number	B19
English title / German title	<a href="#">Online Marketing</a> / Online-Marketing
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	<p>The students have an overview of the digital communication tools of marketing. They can classify these into the pre-purchasing, purchasing and post purchasing process and assess their respective strengths, weaknesses, opportunities and risks. The special feature of the measurable customer interaction in online marketing is understood.</p> <p>For exemplary companies, an online marketing communication mix can be created, explained and presented in combination with a proposal of improvements.</p> <p>Students know the various forms of IT-technical support systems for online-sales, E-logistics and, depending on the company, can decide to what extent which platform is compatible in terms of networking. The different internal / external interfaces, such as online marketing, warehouse management, E-procurement and accounting are comprehended. Students know the current opportunities, chances and limitations of payment systems in the area of E-payment.</p>
Requirements	Recommendation: Principles of Mathematics and Statistics, Marketing
Level	Fourth semester of the degree program
Type of module	Seminar
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• Written examination (90-120 min.)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	Overview of marketing tools and the role of online marketing,



	<p>including the respective tools</p> <p>Definition, development and forms of online marketing</p> <p>Instruments:</p> <ul style="list-style-type: none"> <li>• Corporate website / shop</li> <li>• Display formats</li> <li>• Search-engine marketing (SEO and SEA)</li> <li>• E-mail marketing</li> <li>• Affiliate marketing</li> <li>• Social media marketing</li> <li>• Content marketing</li> <li>• Mobile marketing</li> </ul> <p>Strategies and implementations:</p> <ul style="list-style-type: none"> <li>• Target group planning: Classic, behavior-based, targeting / retargeting</li> <li>• Online brand management: branding / image, recognition, commitment, brand monitoring</li> <li>• Editorial and journalistic writing including corporate communication and social-media guidelines</li> <li>• Customer recovery: Sales Funnels and Customer Journey Monitoring, Conversion Optimization, Lead Generation</li> <li>• Multichannel: interlinking online and offline, tracking</li> <li>• Customer loyalty: Customer Lifetime Value, One2One Marketing, Up- and Cross-Selling</li> </ul> <p>Marketing Automation: Tools and Techniques</p> <p>Market research: A / B tests, SEA</p> <p>Reporting and analysis: Key figures, Survey, Analysis, Reporting</p> <p>Competences and industry structures in online marketing - make-or-buy decision</p> <p>E-Commerce:</p> <ul style="list-style-type: none"> <li>• Conceptual distinctions: E-Business, E-Commerce, M-Commerce, E-Procurement, E-Shop, E-Market Place</li> <li>• Forms of online trading and trend to cross-channel trade</li> <li>• IT-systems in online trade: Technical platforms and selection criteria; shop- and backend-functions of cloud-based, average and complex E-Commerce platforms and integration into operating systems; media to display products and current trends, such as augmented reality</li> </ul>
Reading list	To be announced in class at the outset of the module
Further information	This module is offered in English
Required room type	SU-Sem

Module number	B20
English title / German title	<a href="#">Business Intelligence</a> / Business Intelligence
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / Competencies	Students are familiar with the fundamentals of applications in the field of business intelligence, in particular with data bases and data warehouses.  Students acquired knowledge of methods for creating data base models and implementing concrete data base systems.  Existing approaches to data mining and the scope and limitations of the latter are familiar to students. Elementary analyses can be planned and realised.
Requirements	Recommendation: Principles of Mathematics and Statistics, Principles of Business Management
Level	Fourth semester of the degree program
Type of module	Seminar, training course, self-study
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 50 % group exercises</li> <li>• 50 % written examination (60 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	Fundamental concepts and roles of data base management systems <ul style="list-style-type: none"> <li>• Basics of data usage</li> <li>• Tables as a basis of structuring information, administration and evaluation of data, relations, equivalence relations and aggregation</li> <li>• Basics of relational data bases</li> </ul>

	<ul style="list-style-type: none"> <li>• Normalisation and integrity</li> <li>• SQL</li> </ul> <p>Data bases and business management</p> <ul style="list-style-type: none"> <li>• Business processes (OLTP)</li> <li>• Business analysis (OLAP),</li> <li>• Data warehouse and data marts (DWH),</li> <li>• Data mining</li> <li>• Content management systems (CMS),</li> <li>• Customer relationship management (CRM),</li> <li>• Enterprise resource planning (ERP),</li> <li>• E-Commerce and Online Marketing: Customer, product and shopping cart analysis</li> <li>• Web Analytics: usage of, e.g. PIWIK, Awstat, Google analytics</li> </ul> <p>Applications based on MS Excel, MS Access, MySQL, Oracle Database</p>
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in English.
Required room type	SU-Sem, Ü-IT

Module number	B21
English title / German title	<a href="#">Cloud Computing /</a> Cloud Computing
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	<p>Students learned technical foundations, learned to make business decisions about cloud offerings and understand limitations and restrictions. Students know cloud service types (IaaS, PaaS, SaaS) and can differentiate scenarios for private, public and hybrid cloud service models with specific examples.</p> <p>Students learned services and micro-services architectures for building cloud applications. Trade-offs between scale, consistency, availability and performance are understood and choices for compute and data models for cloud applications are known. Students learned specifics of cloud application development and management with techniques for cloud provisioning, deployment, monitoring and control.</p>
Requirements	Recommended: Programming 1+2, Database systems, Software Engineering 1 + 2.
Level	Fourth semester of the degree program
Type of module	Seminar, training course, self-study
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 60% written test</li> <li>• 40% exercise evaluation</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<p>The module introduces to cloud computing covering:</p> <ul style="list-style-type: none"> <li>• <i>Technical foundations</i>: network and distributed computing basics; virtualization, resource sharing, container technologies.</li> <li>• <i>Cloud infrastructure</i>: cloud data centers, data center organization, data center regions, hardware, software, manage-</li> </ul>

	<p>ment, scale.</p> <ul style="list-style-type: none"> <li>• <i>Cloud offerings</i>: cloud resources and services, cloud pricing, cloud business models; cloud service types (IaaS infrastructure-, PaaS platform- and SaaS software- as-a-service) and cloud service models private, public and hybrid clouds.</li> <li>• <i>Cloud applications</i>: services and micro-services architectures; trade-offs between scale, consistency, availability, performance; compute and data models for cloud applications; cloud data stores.</li> <li>• <i>Cloud application development</i>: cloud provisioning, deployment and service management, monitoring and control, resource scaling.</li> </ul>
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in English.
Required Room type	SU-Sem, Ü-IT

Module number	B22
English title / German title	<a href="#">Required Elective Module 1</a> / Wahlpflichtmodul I
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	See description Required Elective Modules
Requirements	See description Required Elective Modules
Level	Fourth semester of the degree program
Type of module	See description Required Elective Modules
Status	Required-Elective Module
Semester when offered	Summer semester
Method of assessment / type of examination	See description Required Elective Modules
Grade assessment	See description Required Elective Modules
Equivalent modules	See description Required Elective Modules
Content	Contents according to Required Elective Module chosen: WP1.1 or WP1.2
Reading list	See description Required Elective Modules
Further information	See description Required Elective Modules
Required Room type	See description Required Elective Modules

Module number	B23
English title / German title	<a href="#">Business Project /</a> BWL-Projekt
Credits	10
Workload	300 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w of seminar instruction plus 2 h/w project seminar during the lecture period of the semester: 68+34 = 102 hours</li> <li>• Hours of independent study: 198 hours</li> </ul>
Subject coverage	Advanced Interdisciplinary Studies
Learning objectives / outcomes	<p><u>Innovation Management and Entrepreneurship:</u></p> <p>Students know the basics of Innovation Management and Entrepreneurship as well as their importance and function in the digital economy. They learn specific approaches of Innovation Management and are capable of applying them to given case studies.</p> <p><u>Project Seminar: Visiting/hosting the digital economy:</u></p> <p>The students are able to give a detailed description of single business models in the digital economy, do research on the company's history and evaluate the company development based on critical factors of success. The analysis and assessment of the company can be edited with business-technical terms for a well-founded scientific publication. The students are able to identify players of the digital economy and get in touch with them. Social skills of communication are deepened and the build-up of long-time cooperations has been tested.</p>
Requirements	Recommendation: Principles of Business Management, management and Business Modeling, Agile Project Management
Level	Fourth semester of the degree program
Type of Module	Seminar, project seminar, self-study
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 50% moderation of a lecture</li> <li>• 50% term paper (10 pages)</li> </ul>

Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<p><u>Innovation Management and Entrepreneurship:</u></p> <p>Basic principles of Innovation</p> <ul style="list-style-type: none"> <li>• definition of innovation</li> <li>• dimensions of innovation</li> <li>• innovation practice and input</li> </ul> <p>Innovation as a management task in digital business</p> <ul style="list-style-type: none"> <li>• Technology-, R&amp;D- and Innovation Management</li> <li>• Innovation Management as an innovation process</li> <li>• Innovation Management as a presentation of the innovation-system</li> <li>• obstacles against innovations</li> <li>• promoters for innovations</li> </ul> <p>Principles of Entrepreneurship</p> <ul style="list-style-type: none"> <li>• significance of Entrepreneurship</li> <li>• key elements of Entrepreneurship</li> <li>• innovation and Entrepreneurship</li> </ul> <p>Procedure models of Innovation Management and Entrepreneurship</p> <ul style="list-style-type: none"> <li>• classic vs. agile management methods</li> <li>• principles of agile procedure modules</li> <li>• business model generation</li> <li>• customer development</li> <li>• lean startup</li> </ul> <p>Applicability of Innovation and Entrepreneurship (project work)</p> <p><u>Project Seminar: Visiting/hosting the digital economy:</u></p> <p>Selected companies of the digital economy and their business models: the lectures will be held by multiple guest speakers of the digital economy, who will be recruited and introduced by students. Listening to these lectures online will be possible.</p>
Reading list	<p>Berlin Partner for Business Technology (Hrsg.): Digital Economy in Berlin.</p> <p>IHK Berlin / Handwerkskammer (Hrsg.): Berlin´s economy in figures.</p>
Further information	The module is offered in English. Please take note of the current information posted by your faculty.
Required room type	SU-Sem (Regel-Seminarraum für SU)



Module number	B24
English title / German title	<a href="#">Management Information Systems in Enterprises</a> / Managementinformationssysteme in Unternehmen
Credits	10 ECTS
Workload	300 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w of seminar instruction plus 2 h/w project seminar during the lecture period of the semester: 68+34 = 102 hours</li> <li>• Hours of independent study: 198 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / Competencies	Students are familiar with characteristics of management systems in enterprises and are capable of pointing out their respective roles in business processes.  Students are capable of capturing current technological developments and issues of the digital economy and of disclosing and presenting implications for management information systems as well as general social and economic consequences. They are familiar with advanced search engines and relevant scientific journals and are able to present their results in a seminar paper and a lecture applying appropriate media.
Requirements	Recommendation: Modelling of Business Processes and Services
Level	Fifth semester of the degree program
Type of module	Seminar, group project
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 50% presentation and paper (group work, 10 pages)</li> <li>• 50% examination (60 min.)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	Principles of management systems, inter alia: <ul style="list-style-type: none"> <li>• ERP-systems</li> <li>• Workflow-systems</li> <li>• Business Intelligence systems</li> <li>• Customer Relationship Management (CRM) Systems</li> </ul>

	<ul style="list-style-type: none"> <li>• Supply Chain Management Systems SCM-systems</li> <li>• Knowledge management systems</li> <li>• Architectures and interface concepts</li> <li>• Roles and interaction in differing business processes</li> </ul> <p>Current technological developments and specific topics of the digital economy, like debated in e.g. the Management Information Systems Quarterly (MISQ)-Journal may be discussed. In recent years the following topics were debated: Innovation management in IT-enterprises, IT and business alignment, IT outsourcing and supplier management, Business productivity and cost reduction, Business agility and speed to market, Quality, reliability and effectivity in IT, Profitable IT-innovations, Knowledge management, Enterprise wide IT-architectures, strategic IT-planning</p>
Reading list	Laudon, K., Laudon J.: Management Information Systems - Managing the digital Firm. Pearson.
Further information	This module is offered in English.
Required room type	SU-Sem, Ü-IT

Module number	B25
English title / German title	<a href="#">Required Elective Module 2</a> / Wahlpflichtmodul II
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	See description Required Elective Modules
Requirements	See description Required Elective Modules
Level	Fourth semester of the degree program
Type of module	See description Required Elective Modules
Status	Required-Elective Module
Semester when offered	Summer semester
Method of assessment / type of examination	See description Required Elective Modules
Grade assessment	See description Required Elective Modules
Equivalent modules	See description Required Elective Modules
Content	Contents according to Required Elective Module chosen: WP2.1 or WP2.2
Reading list	See description Required Elective Modules
Further information	See description Required Elective Modules
Required Room type	See description Required Elective Modules

Module number	B26
English title / German title	<a href="#">Required Elective Module 3</a> / Wahlpflichtmodul III
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	See description Required Elective Modules
Requirements	See description Required Elective Modules
Level	Fourth semester of the degree program
Type of module	See description Required Elective Modules
Status	Required-Elective Module
Semester when offered	Summer semester
Method of assessment / type of examination	See description Required Elective Modules
Grade assessment	See description Required Elective Modules
Equivalent modules	See description Required Elective Modules
Content	Contents according to Required Elective Module chosen: WP3.1 or WP3.2
Reading list	See description Required Elective Modules
Further information	See description Required Elective Modules
Required Room type	See description Required Elective Modules

Module number	B27
English title / German title	<a href="#">IT Project</a> / IT Projekt
Credits	10
Workload	300 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction plus 4/w project seminar during the lecture period of the semester: 34+68=102 hours</li> <li>• Hours of independent study: 198 hours</li> </ul>
Subject coverage	Advanced Interdisciplinary Studies
Learning objectives / outcomes	<p><u>Project seminar</u></p> <p>Students apply learnings from Software Engineering I + II and Agile Project Management in a group project yielding a functioning software system of a suitable scope. Students pursue their own project idea or choose from a catalog of projects. A group of 4-5 students then works together on the project. Students practice the end-to-end process from problem definition to a functioning solution. Students practice project management and organization skills as a self-driven team using Scrum.</p> <p><u>Human-Computer Interaction</u></p> <p>Students recognize the relevance of human factors in human machine interaction and are capable of designing interactions in a user oriented fashion. They familiarized themselves with relevant mechanism of human perception and cognition. Students are capable of employing interaction models for analytical and constructive purposes and they are familiar with usability engineering for various devices and interactive media. The relevance of usability in online business, key performance indicators for measuring usability and methods for gaining insight into user experience and optimising the latter are familiar to students. Students acquire theoretical knowledge of both classical and recent interaction paradigms, as well as of laws and standards related to usability and online interaction.</p>
Requirements	Recommendation: Software Engineering 1 + 2, Agile Project Management, Management and Business Modeling
Level	Fifth semester of the degree program
Type of module	Seminar, Project Seminar, self-study
Status	Required module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:

	<ul style="list-style-type: none"> <li>• 100% project report (30 pages)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<p>Students pursue their own project idea or choose from a catalog of projects. A group of 4-5 students then works together on the project.</p> <p>Students practice the end-to-end process from problem definition to a functioning solution. Students practice project management and organization skills as a self-driven team. Scrum is used for project organization. Roles of Product Owner, Scrum Master and Scrum Team are practiced.</p> <p>Requirements from the project domain are elaborated and identified by applying stakeholder analysis, user analysis, problem definition and goal setting. An initial set of domain requirements is recorded in form of user stories in an initial product backlog.</p> <p>Sprint planning is practiced. Sprint backlog is established in a suitable Scrum tool (e.g. in Trello, Jira, Slack).</p> <p>Students design the system incrementally as a prototype starting with graphical design and mockups to comprehensibly designing a desired user experience.</p> <p>Students learn to translate mockups into a functioning prototype which data model, logic and interfaces that are incrementally identified over iterations.</p> <p>Realization includes selecting suitable tools and frameworks and making choices of scoping the first release of the prototype.</p> <p>Principles of software-ergonomics, usability and user experience are practiced including</p> <ul style="list-style-type: none"> <li>• Perception, memory and cognition,</li> <li>• User analysis, user modelling and user centered design,</li> <li>• Design recommendations and patterns for user interfaces,</li> <li>• Interaction modelling and semantic modelling,</li> <li>• Classical and innovative interaction paradigms,</li> <li>• Usability evaluation and usability engineering.</li> </ul>
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in English.
Required room type	SU-Sem, Ü-IT

Module number	B28
English title / German title	<a href="#">Corporate Communication and Change Management</a> / Unternehmenskommunikation und Change Management
Credits	5
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	<p><u>Corporate Communication</u>: Students learn about the instruments of corporate communication and can systematically deploy these according to the requirements of specific subject area and target groups. They take special account of the requirements of the use of digital and analogue communications formats and can plan, assess and use these in a targeted manner. The students can gather information from groups through the use of structured goal and result orientated information gathering techniques, collate this information, and transfer it for further processing in systematically moderated small groups.</p> <p><u>Change Management</u>: The students learn the various contexts in which change takes place and of enterprises' capacity to innovate. To this belong the basic models of the dynamics and organization of business change processes and the possibilities of strengthening individual and organizational resilience as the fundamental condition of change processes in enterprises.</p>
Requirements	Recommendation: Management and Business Modelling, Business Project
Level	Sixth semester of the degree program
Type of module	Lecture with elements of an interactive seminar, exercise
Status	Required elective module
Semester when offered	Summer semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 50% written assignment</li> <li>• 50% written exam</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content

Content	<p><u>Corporate Communication</u></p> <ul style="list-style-type: none"> <li>• The fundamentals of Corporate Communication and its main areas of responsibility</li> <li>• Communication models and theories</li> <li>• Digital and analogue instruments of corporate communication</li> <li>• The success factor: integrated corporate communication</li> <li>• Communication in virtual projects and networks</li> <li>• The preparation of communication plans</li> <li>• Interview and moderation techniques</li> <li>• Information gathering methods</li> </ul> <p><u>Change Management</u></p> <ul style="list-style-type: none"> <li>• Occasions for change processes in businesses (above all the preservation and promotion of innovation capability)</li> <li>• Virtualization and change processes</li> <li>• Individual and organization orientated models for enterprise change</li> <li>• The digital and analogue design of change processes: the dynamics and phases of change processes; dealing with time and scheduling</li> <li>• The methods and instruments of sustainable change (management, communication, information and motivation strategies and their respective instruments)</li> </ul> <p>Tools for the strengthening of individual and organizational resilience. The specifics of digital enterprise structures and virtual work environments will be considered in all areas of responsibility pertaining to Corporate Communication and Change Management.</p>
Reading list	To be announced in class at the onset of the module.
Further information	This module is offered in English.
Required room type	SU-Sem (Regel-Seminarraum für SU)



Module number	B29
English title / German title	<a href="#">Human Resources Management</a> / Human Resources Management
Credits	5
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w of seminar instruction during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	<p>The students learned the fundamental functions of Human Resource Management and can classify them in a general business context.</p> <p>The students are able to:</p> <ul style="list-style-type: none"> <li>• understand the human resource management tasks in digital economy enterprises through the considered application of HR management instruments</li> <li>• demonstrate the application possibilities and limitations of digital tools in HRM</li> <li>• carry out in a targeted way relevant leadership tasks, introduce the factors that influence the performance and motivation of staff as well as master the incentive systems and leadership tools required to optimize performance, in real as well as virtual work environments</li> <li>• apply HRM instruments to different target groups (diversity management)</li> <li>• organize their own resources and design an E Portfolio for the purpose of personal career development</li> </ul>
Requirements	Recommendation: Principles of Business Management
Level	Sixth semester of the degree program
Type of module	Seminar, self-study
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 50% written assignment</li> <li>• 50% written examination</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content

Content	<p>HRM from the perspective of the enterprise</p> <ul style="list-style-type: none"> <li>• The embedding and role of HRM in digital economy enterprises</li> <li>• HRM tasks and tools in the following areas: <ul style="list-style-type: none"> <li>▪ Personnel planning and recruitment</li> <li>▪ Selection of personnel</li> <li>▪ The introduction and integration of personnel into their work environment</li> <li>▪ The deployment and retention of personnel</li> <li>▪ Staff leadership</li> <li>▪ Staff performance evaluation</li> <li>▪ Staff development</li> <li>▪ Staff dismissal</li> </ul> </li> </ul> <p>The specifics of digital enterprise structures and virtual work environments as well as the subject of diversity (like sex, age and culture) will be considered in all areas of responsibility pertaining to HR Management</p> <p>HR from the perspective of the individual:</p> <ul style="list-style-type: none"> <li>• Individual resource management</li> <li>• Individual career planning and development</li> <li>• Creation and maintenance of an E-portfolio</li> <li>• Individual project management</li> <li>• Digital expertize (dealing with the dissolution of boundaries)</li> </ul>
Reading list	To be announced in class at the outset of the module
Further information	This module is offered in English or in German
Required room type	SU-Sem (Regel-Seminarraum für SU)

Module number	B30
English title / German title	<a href="#">Statistical Computing</a> / Statistical Computing
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 2 h/w of seminar instruction and 2 h/w of exercise during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Advanced Mathematics and Natural Sciences
Learning objectives / out-comes	The students know the concepts and methods for statistical data analysis. They acquire knowledge in appropriate software tools to perform statistical analyses, are able to present and interpret their results. They are familiar with the objective of inferential statistics, in particular with hypothesis testing and terms like statistical significance.
Requirements	Recommended: Principles of Mathematics and Statistics
Level	Sixth semester of the degree program
Type of module	Seminar, laboratory training, self-study
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 70% written exam (60-90 min)</li> <li>• 30% data analysis projects during the semester</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	The course is accompanied by laboratory exercises using suitable software tools (spreadsheet software as Microsoft Excel or OpenOffice Calc and statistical software as for example R). The students practice computer-based data analyses in form of small data analysis projects. <p><u>Data Description</u></p> <ul style="list-style-type: none"> <li>• types of variables</li> <li>• description of single variables: absolute and relative frequencies, graphical display, measures of location, measures of dispersion</li> <li>• bivariate and multivariate relationships: contingency tables, correlation, linear regression, graphical display</li> </ul>

	<p><u>Statistical Programming</u></p> <ul style="list-style-type: none"> <li>• import and export of data, handling data matrices</li> <li>• exploratory graphics</li> <li>• control structures and functions</li> <li>• statistical analyses using hypotheses tests (see below)</li> </ul> <p><u>Concepts of Statistical Inference</u></p> <ul style="list-style-type: none"> <li>• probability calculus and random variables</li> <li>• concepts of parameter estimation and confidence intervals</li> <li>• statistical hypotheses testing (in particular: Chi<sup>2</sup>-test of independence in contingency tables, t-tests and Mann-Whitney-tests for location parameters, tests for linear regression models)</li> </ul>
Reading list	<p>Dalgaard, P.: Introductory Statistics with R, Springer</p> <p>Kazmier, L.: Schaum's Outline of Business Statistics, McGraw-Hill</p> <p>Kohn, W.; Öztürk, R.: Statistik für Ökonomen – Datenanalyse mit R und SPSS, Springer</p> <p>Kronthaler, F.: Statistik angewandt: Datenanalyse ist (k)eine Kunst Excel Edition, Springer</p> <p>Kronthaler, F.: Statistik angewandt: Datenanalyse ist (k)eine Kunst mit dem R Commander, Springer</p>
Further information	This module is offered in German or in English.
Required Room type	SU-Sem, Ü-IT

Module number	B31
English title / German title	<a href="#">Empirical Research Methods/</a> Empirische Forschungsmethoden
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w of seminar instruction during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	Students acquired knowledge regarding selected methods in empirical research: <ul style="list-style-type: none"> <li>• concretizing research hypotheses</li> <li>• planning empirical studies systematically</li> <li>• choosing and applying data collection methods</li> <li>• analyzing data</li> <li>• presenting the results of empirical studies</li> </ul>
Requirements	Recommendation: Principles of Mathematics and Statistics
Level	Sixth semester of the degree program
Type of module	Seminar
Status	Required module
Semester when offered	Summer semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• written examination (90-120 min.)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	<ul style="list-style-type: none"> <li>• Planning empirical research</li> <li>• Sample selection</li> <li>• Data collection methods (interview techniques, questionnaire surveys, observational studies)</li> <li>• Sources of errors in conducting empirical research, and strategies to avoid such errors</li> <li>• Preparation, analysis and interpretation of collected data</li> </ul>
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in English or in German.
Required room type	SU-Sem (Regel-Seminarraum für SU)

Module number	B32
English title / German title	<a href="#">Required Elective Module 4</a> / Wahlpflichtmodul IV
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	See description Required Elective Modules
Requirements	See description Required Elective Modules
Level	Fourth semester of the degree program
Type of module	See description Required Elective Modules
Status	Required-Elective Module
Semester when offered	Summer semester
Method of assessment / type of examination	See description Required Elective Modules
Grade assessment	See description Required Elective Modules
Equivalent modules	See description Required Elective Modules
Content	Contents according to Required Elective Module chosen: WP4.1 or WP4.2
Reading list	See description Required Elective Modules
Further information	See description Required Elective Modules
Required Room type	See description Required Elective Modules

Module number	B33
German title / English title	Studium Generale I / <a href="#">General Studies 1</a>
Credits	2,5 ECTS
Workload	75 Stunden: <ul style="list-style-type: none"> <li>• Präsenz von 2 SWS SU oder 2 SWS Ü: 34 Stunden</li> <li>• Selbststudium: 41 hours</li> </ul>
Subject coverage	Allgemeinwissenschaftliche Ergänzungen
Learning objectives / out-comes	Die fachübergreifenden Lehrinhalte dienen der interdisziplinären Erweiterung des Fachstudiums und dem Erkennen von Zusammenhängen zwischen Gesellschaft und ihren Teilsystemen.
Requirements	keine (Ausnahmen können für Fremdsprachen festgelegt werden)
Level	6. Studiensemester
Type of module	Seminaristischer Unterricht, Übungen, Referate, Rollenspiele, Textarbeit - je nach gewähltem Modul.
Status	Wahlpflichtmodul
Semester when offered	Jedes Semester
Method of assessment / type of examination	siehe Beschreibung der jeweiligen Lehrveranstaltung
Grade assessment	siehe Studienplan
Equivalent modules	Module vergleichbaren Inhalts
Content	<p>In den ingenieur- und naturwissenschaftlichen Studiengängen sind dazu Lerninhalte aus folgenden Bereichen zu berücksichtigen:</p> <ul style="list-style-type: none"> <li>• Politik- und Sozialwissenschaften</li> <li>• Geisteswissenschaften</li> <li>• Wirtschafts-, Rechts- und Arbeitswissenschaften</li> <li>• Fremdsprachen</li> </ul> <p>In den wirtschaftswissenschaftlichen Studiengängen sind jeweils Lerninhalte aus folgenden Bereichen zu berücksichtigen:</p> <ul style="list-style-type: none"> <li>• Politik- und Sozialwissenschaften</li> <li>• Geisteswissenschaften</li> <li>• Natur- und Ingenieurwissenschaften</li> <li>• Fremdsprachen</li> </ul>
Reading list	Wird in den jeweiligen Beschreibungen der Lehrveranstaltungen angegeben.
Further information	Dieses Modul wird in deutscher Sprache angeboten.

Required Room type	Ü-Sem (Regel-Seminarraum für SU)
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Module number	B34
German title / English title	Studium Generale II / <a href="#">General Studies 2</a>
Credits	2,5 ECTS
Workload	75 Stunden: <ul style="list-style-type: none"> <li>• Präsenz von 2 SWS SU oder 2 SWS Ü: 34 Stunden</li> <li>• Selbststudium: 41 hours</li> </ul>
Subject coverage	Allgemeinwissenschaftliche Ergänzungen
Learning objectives / out-comes	Die fachübergreifenden Lehrinhalte dienen der interdisziplinären Erweiterung des Fachstudiums und dem Erkennen von Zusammenhängen zwischen Gesellschaft und ihren Teilsystemen.
Requirements	keine (Ausnahmen können für die Fremdsprachen festgelegt werden)
Level	6. Studiensemester
Type of module	Seminaristischer Unterricht, Übungen, Referate, Rollenspiele, Textarbeit - je nach gewähltem Modul.
Status	Wahlpflichtmodul
Semester when offered	Jedes Semester
Method of assessment / type of examination	siehe Beschreibung der jeweiligen Lehrveranstaltung
Grade assessment	siehe Studienplan
Equivalent modules	Module vergleichbaren Inhalts
Content	<p>In den ingenieur- und naturwissenschaftlichen Studiengängen sind dazu Lerninhalte aus folgenden Bereichen zu berücksichtigen:</p> <ul style="list-style-type: none"> <li>• Politik- und Sozialwissenschaften</li> <li>• Geisteswissenschaften</li> <li>• Wirtschafts-, Rechts- und Arbeitswissenschaften</li> <li>• Fremdsprachen</li> </ul> <p>In den wirtschaftswissenschaftlichen Studiengängen sind jeweils Lerninhalte aus folgenden Bereichen zu berücksichtigen:</p> <ul style="list-style-type: none"> <li>• Politik- und Sozialwissenschaften</li> <li>• Geisteswissenschaften</li> <li>• Natur- und Ingenieurwissenschaften</li> <li>• Fremdsprachen</li> </ul>
Reading list	Wird in den jeweiligen Beschreibungen der Lehrveranstaltungen angegeben.

Further information	Dieses Modul wird in deutscher Sprache angeboten.
Required Room type	Ü-Sem (Regel-Seminarraum für SU)

Module number	B35
German title / English title	Praktikum / <a href="#">Internship</a>
Credits	15 ECTS
Workload	12 Wochen Vollzeit oder Teilzeit mit entsprechender zeitlicher Verlängerung in einem Wirtschaftsunternehmen oder einer Organisation/öffentlicher Sektor mit Aufgabenstellungen entlang des Studiengangziels.
Subject coverage	Fachspezifische Vertiefung
Learning objectives / outcomes	<p>Die Praxisphase befähigt, eigenständig und im Team eine oder mehrere verantwortungsvolle Aufgaben in der Wirtschaft oder in Verbänden/öffentlichem Sektor zu übernehmen. Für die Lösung der Aufgabenstellung(en) können zahlreiche im Studium erlangte Kompetenzen erprobt, verbessert und reflektiert werden. Die eigene Rolle und die Bedeutung der Aufgabenstellung im gesamten Betrieb werden deutlich.</p> <p>Die Einschätzung der eigenen Interessen und Kompetenzen für eine zukünftige Berufstätigkeit im Umfeld der digitalen Wirtschaft wird verbessert und konkretisiert.</p>
Requirements	Für den Beginn der Praxisphase müssen Studienleistungen in einem Umfang von 120 LP erbracht sein.
Level	7. Studienplansemester
Type of module	Projektarbeit außerhalb einer Hochschule
Status	Pflichtmodul
Semester when offered	Jedes Semester
Method of assessment / type of examination	Praktikumsbericht mit Rücksprache
Grade assessment	Siehe Studienplan
Equivalent modules	Vgl. RSPO 2016 § 12 (17)
Content	<p>Übernahme betriebstypischer verantwortungsvoller Aufgaben aus einem oder mehreren Gebieten des Studiengangs.</p> <p>Erstellung eines Praktikumsberichts mit vom Studiengang vorgegebener Gliederung.</p> <p>Erstellung eines Exposés für eine mögliche praxisnahe Bachelorarbeit.</p>
Reading list	
Further information	<p>Dieses Modul wird in deutscher oder englischer Sprache angeboten.</p> <p>Das Praktikum kann im In- oder Ausland absolviert werden.</p>

Module number	B36
German title / English title	Abschlussprüfung / <a href="#">Final Examination Module</a> : 1. Bachelor-Arbeit / Bachelor's-Thesis 2. Mündliche Abschlussprüfung / Oral Final Examination
Credits	15
Workload	45 Minuten mündliche Abschlussprüfung
Subject coverage	Fachspezifische Vertiefung
Learning objectives / out-comes	<u>Bachelor-Arbeit</u> Selbstständige Bearbeitung eines wissenschaftlichen Projektes mit schriftlicher Ausarbeitung (ungefähr 45 – 55 Seiten) <u>Mündliche Abschlussprüfung</u> Die mündliche Abschlussprüfung orientiert sich schwerpunktmäßig an den Fachgebieten der Abschlussarbeit. Durch die Abschlussprüfung soll festgestellt werden, ob der/die Studierende gesichertes Wissen in den Fachgebieten, denen die Abschlussarbeit thematisch zugeordnet ist, besitzt und fähig ist, die Ergebnisse der Abschlussarbeit selbstständig zu begründen.
Requirements	Zulassung gemäß jeweils gültiger Rahmenstudien- und -prüfungsordnung
Level	7. Studienplansemester
Type of module	<u>Bachelor-Arbeit</u> Betreute Arbeit; die Betreuung erfolgt gemäß § 29 (7) RSPO durch den/die Betreuer/in der Bachelor-Arbeit <u>Mündliche Abschlussprüfung</u> Präsentation (ca. 15 min) und mündliche Prüfung
Status	Pflichtmodul
Semester when offered	Jedes Semester
Method of assessment / type of examination	Abschlussprüfung
Grade assessment	Benotung der Abschlussprüfung durch Prüfungskommission
Equivalent modules	Keine
Content	Theoretische und/oder experimentelle Arbeit zur Lösung praxisnaher Problemstellungen <u>Mündliche Abschlussprüfung</u> Verteidigung der Bachelor-Arbeit und ihrer Ergebnisse in kritischer Diskussion; Präsentationstechniken
Reading list	Bänsch , Axel (2009): Wissenschaftliches Arbeiten. 10., verbesserte u. erweiterte Auflage, München [u.a.] : Olden-

	<p>bourg Verlag.</p> <p>Gloede, Dieter: Die Gestaltung von Bachelor- und Masterarbeiten. Berichte aus dem Fachbereich I (Wirtschafts- und Gesellschaftswissenschaften) Beuth Hochschule für Technik Berlin, Feb 2012</p> <p>Stickel-Wolf, Christine; Wolf, Joachim (2011): Wissenschaftliches Arbeiten und Lerntechniken: erfolgreich studieren - gewusst wie! 6., aktualisierte u. erweiterte. Auflage, Wiesbaden: Gabler Verlag.</p>
Further information	<p>Dieses Modul wird auf Deutsch oder Englisch angeboten. / This module is offered in German or in English.</p> <p><u>Bachelor-Arbeit</u></p> <p>Dauer der Bearbeitung: 3 – 4 Monate gemäß § 29 (8) RSPO</p> <p><u>Abschlussprüfung</u></p> <p>Nach Vereinbarung zwischen Prüfling und Prüfungskommission kann die Abschlussprüfung auch auf Englisch erfolgen.</p>

**SUPPLEMENT: DESCRIPTIONS OF REQUIRED ELECTIVE MODULES /  
ANHANG WAHLPFLICHTMODULE**

Module number	B22 / WP 1.1
English title / German title	<a href="#">Required Elective Module 1:</a> Principles of Digital Media / Grundlagen der digitalen Medien
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	<p>The students are familiar with the informational, communicational and socio-theoretical basics of digital media. They also have a general overview over relevant topics (such as genesis, types and characteristics of digital media, digital value chain or assessment of the effects of digital technologies) and can categorise these into the various fields of science (such as Media Science, Media Sociology or Economics of Media).</p> <p>The students are capable of understanding and placing the changes that the media is undergoing and the consequences of digitalisation correctly. Moreover, students are able to analyse and evaluate the digital media landscape under societal and economic aspects. Students can utilise the acquired competencies in analytical tasks, especially to find and generate solution approaches with digital media, while considering social, legal and ethical aspects.</p>
Requirements	None
Level	Fourth semester of the degree program
Type of module	Training course, self-study
Status	Required-Elective Module
Semester when offered	Summer semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 50 % group project</li> <li>• 50% e-portfolio (approx. 10.000 characters incl. blanks)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content

Content	<ul style="list-style-type: none"> <li>• Genesis and classification of digital media into the media system</li> <li>• Media, informational and communication-theoretical basics of digital media</li> <li>• Types and characteristics of digital media</li> <li>• Digital media landscape and adding value</li> <li>• Socio-technical developments in the field of digital media (such as social media, mobile media, wearables)</li> <li>• Digitally adding value (such as crowdsourcing, open innovation, social forecasting)</li> <li>• Current applications in economy and society</li> <li>• Changes in the media landscape, digitalisation and assessment of consequences of technological change</li> <li>• Societal effects of digital media</li> <li>• Positive and negative effects of digitalisation</li> <li>• Social, legal and ethical aspects of digital media</li> </ul>
Reading list	<p>Pierre Lévy (1997). <i>Collective Intelligence</i>, Perseus.</p> <p>Clay Shirky (2009). <i>Here Comes Everybody: The Power of Organizing Without Organizations</i>. Penguin Books.</p> <p>Jeff Howe (2008). <i>Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business</i>.</p>
Further information	This module is offered in English.
Required Room type	Ü-Sem

Module number	B22 / WP 1.2
English title / German title	Required Elective Module 1: <a href="#">Integrated Production Systems</a> / Vernetzte Produktionskonzepte
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Principles
Learning objectives / outcomes	The students have understood that the digital economy does not only have an effect on digital products and services through its innovative power, but also changes the industrial production. They are familiar with certain industrial manufacturing concepts and can assess the chances of a digital network in the context of the opportunities and limits of Germany as a production site. They know the possible tasks for business managers regarding the digitalization of the entire value chain and come up with their own solutions to solve these. Concepts of mass customization have been covered thoroughly and in-depth, the terminology has been acquainted and the students think about future innovations.
Requirements	None
Level	Fourth semester of the degree program
Type of module	Training course, self-study
Status	Required-Elective Module
Semester when offered	Summer semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• Written laboratory report with consultation (20 pages)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	History of industrialisation Production sites and global decision of labour Production concepts <ul style="list-style-type: none"> <li>• Manufacturing</li> <li>• Assembly line production</li> <li>• Team work</li> <li>• Customer-specialized mass production</li> </ul>



	<p>Technologies for network production</p> <ul style="list-style-type: none"> <li>• Vertical and horizontal cooperations and networking opportunities</li> <li>• Selected technologies</li> <li>• Barcode, RFID, QR-Code</li> <li>• software-technical Networks (ERP-Systems, XML-market standards)</li> </ul> <p>Production concepts in selected markets and companies, for example</p> <ul style="list-style-type: none"> <li>• Automobile industry</li> <li>• Engineering</li> <li>• Print industry</li> <li>• Grocery and packaging industry</li> </ul> <p>Selected business models of mass customization and their stories</p> <ul style="list-style-type: none"> <li>• Present research will be done. 2014 e.g. individualized granola mixes, photo books, merchandising products and gifts</li> </ul> <p>Product-linked Services</p> <ul style="list-style-type: none"> <li>• Importance of services attached and linked to products</li> <li>• Basic concepts of service-design and service-engineering</li> <li>• Opportunities of digital processes for product-attached services</li> </ul>
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in English.
Required Room type	Ü-Sem

Module number	B25 / WP2.1
English title / German title	<a href="#">Required Elective Module 2</a> <a href="#">Project seminar digital media /</a> Projektseminar Medien
Credits	5
Workload	150 hours: <ul style="list-style-type: none"> <li>• 68 teaching units class attendance during the lecture period of the semester</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	The students are capable of doing empirical analysis for selected case studies from the digital economy and can develop design concepts with digital media.  The students have gathered experience that has practical relevance through the cooperation with companies operating in the digital economy. They have also acquainted new contacts for their professional future.
Requirements	Recommendation: Principles of digital media, Agile Project Management, Human-Computer-Interaction
Level	Fifth semester of the degree program
Type of module	Group project
Status	Required elective module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• 50% presentation (15 min.)</li> <li>• 50% project report (10 pages)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Module with similar content
Content	The students work together on a task in small groups, which is a case study from the digital economy. They thereby go through a process of research and development with the aim of coming up with a self-created solution to the specific problem of the case study. Doing this, the student teams act according to the principles of agile project management.  The project begins with the development of a research concept and ends with a presentation of the results, which will be held in front of experts of the digital economy.  Selected tasks of case studies from the digital economy, e.g.:

	<ul style="list-style-type: none"> <li>• Digital / mobile Value and distribution chains -</li> <li>• Digital competitor -, product- und price strategies</li> <li>• Digital business development and online-/mobile-campaigns</li> <li>• Digital activation and incentive strategies</li> </ul> <p>Empirical analysis:</p> <ul style="list-style-type: none"> <li>• Requirement analysis and requirement engineering</li> <li>• Benchmarking methods, e.g. process and product benchmarking</li> <li>• Competition analyzes and trend scouting in the digital economy</li> </ul> <p>Layout solutions with digital media:</p> <ul style="list-style-type: none"> <li>• Conception of scenarios where these can be applied</li> <li>• Analysis and development of design patterns</li> <li>• Designing prototypes through mock-ups</li> </ul>
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in English.
Required room type	Ü-Sem (Übung, die in einem Regel-Seminarraum stattfindet)

Module number	B25 / WP2.2
English title / German title	Required Elective Module 2: <a href="#">Brand Management</a> / Markenführung
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-related specialization
Learning objectives / outcomes	Students understand the term “brand” in theory and in execution: the definition of the brand term, the characteristics of brands in the digital economy and their assessment in models are understood and discussed through case studies. The goal is to record brands analytically and manage them conceptionally, to shape a brand in the competitive market and manage it through internal branding.
Requirements	Recommended: Marketing
Level	Fifth semester of the degree program
Type of module	Training course, self-study
Status	Required-elective module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• Partial performance: 50 % presentation</li> <li>• Final performance: 50 % examination (60 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Modules with similar content
Content	Definitions and classifications <ul style="list-style-type: none"> <li>• Brand</li> <li>• Brand identity and brand image</li> <li>• Functional benefit</li> <li>• Emotional benefit</li> <li>• Instruments to record and manage brands</li> </ul> Strategic Brand Management <ul style="list-style-type: none"> <li>• Creation of brand identity</li> <li>• Successful brand positioning in the market competition</li> </ul>

	<ul style="list-style-type: none"> <li>• Open innovation through customer centricity</li> </ul> <p>Operative Brand Management in Digital Business</p> <ul style="list-style-type: none"> <li>• Internal operative brand management</li> <li>• Internal branding</li> <li>• Employer branding</li> </ul> <p>External Operative Brand Management</p> <ul style="list-style-type: none"> <li>• Integrated brand communication in classic and digital media</li> <li>• User generated brand communication in social networks</li> </ul>
Reading list	<p>Esch, F.R. et al.: Corporate Brand Management. Springer Gabler.</p> <p>Baetzgen, A. [Hrsg.]: Brand Planning. Schäffer-Poeschel.</p>
Further information	This module is offered in English.
Required Room type	Ü-Sem

Module number	B26 / WP 3.1
English title / German title	<a href="#">Required Elective Module 3</a> <a href="#">Economic Policy for Digital Business</a> / Wirtschaftspolitik für die digitale Wirtschaft
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-Specific Specialization
Learning objectives / outcomes	Students acquired knowledge regarding objectives and instruments of economic policy areas relevant for the digital economy. Students understand digitalization as a process of economic and social transformation and the need for economic policy to contribute to this process by providing the necessary framework for digital business (rules, infrastructure) and by minimizing the negative impacts of structural change.
Requirements	Recommendation: Microeconomics
Level	Fifth semester of degree program
Type of module	Training Course, self-study
Status	Required-Elective Module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• written examination (120 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Modules with similar content
Content	<u>Principles of Economic Policy</u> <ul style="list-style-type: none"> <li>• Market failure and policy failure</li> <li>• The regulatory framework for business</li> </ul> <u>Selected Areas of Economic Policy</u> <ul style="list-style-type: none"> <li>• Competition Policy</li> <li>• Consumer protection</li> <li>• Innovation policy</li> <li>• Structural Policies</li> </ul>
Reading list	Brynjolfsson, Eric; McAfee, Andrew: The second machine age.

	Work, Progress, and Prosperity in a Time of Brilliant Technologies. Norton & Company.
Further information	This module will be offered in English.
Required Room type	Ü-Sem

Module number	B26 / WP 3.3
English title / German title	<a href="#">Required Elective Module 3</a> Digitalization and Society
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Principles of Interdisciplinary Studies
Learning objectives / outcomes	Students understand the interrelations and interdependencies between socio-economic processes of change and the phenomenon of digitization. Students are able to critically question and assess the significance and effectiveness of digitalization in the context of socio-economic transformation. Students deepen their ethical knowledge to develop responsible corporate management within the context of the digital economy.
Requirements	None
Level	Fifth semester of the degree program
Type of module	Training Course, self-study
Status	Required-elective module
Semester when offered	Winter semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: <ul style="list-style-type: none"> <li>• Term paper</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Modules with similar content
Content	<ul style="list-style-type: none"> <li>• Principles and conceptions of the reflexivity between society and the economy</li> <li>• Social and economic transformation processes</li> <li>• Basic concepts of business philosophy, e.g. digitization, responsibility, power, ethics, business enterprise, medialization, power of judgement</li> <li>• Role and challenges of management or corporate governance in digital worlds (Corporate Digital Responsibility)</li> <li>• Problems arising from digitalization that enable global events and entrepreneurial activities without earlier restrictions</li> <li>• Practice in the art of critical enquiry regarding the effects of digitalization on socio-economic matters, like employment,</li> </ul>



	family, mobility, education, sustainability, etc.
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in English.
Required Room type	Ü-Sem

Module number	B32 / WP4.1
English title / German title	<a href="#">Required Elective Module IV</a> Mobile Applications
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-related specialization
Learning objectives / outcomes	<p>Students acquire knowledge regarding</p> <ul style="list-style-type: none"> <li>• technological and functional features of mobile devices as a basis for mobile application, and are capable of distinguishing different types of mobile devices with regard to these features.</li> <li>• the fundamental differences between native mobile applications like those based on iOS or Android), mobile web applications and hybrid solutions, and are capable of identifying the appropriate type of application given concrete requirements.</li> <li>• features of “platforms” for mobile applications, and are capable of distinguishing platforms based on the latter.</li> <li>• typical features of contexts in which mobile applications prove relevant, and are capable of identifying potential added value of mobile application in concrete contexts.</li> <li>• employment of mobile applications in various scenarios of e-business and the digital economy, and are capable of identifying concrete requirements for such scenarios considering the potential added values of mobile applications.</li> <li>• the social impact of mobile applications, and are capable of identifying and analyzing potential conflicts in ethical, social and psychological regards.</li> <li>• business processes can be analyzed regarding optimization by employment of mobile applications.</li> </ul> <p>Using existing components of a web-based mobile applications, students are capable of realizing elementary changes given concrete requirements.</p>
Requirements	Recommended: Software Engineering I-II, Modelling of Business Processes and Services, Human Computer Interaction
Level	Sixth semester of the degree program
Type of module	Training Course, Laboratory Training, self-study
Status	Required-elective module
Semester when offered	Summer semester
Method of assessment / type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the

	<p>form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 60% written examination</li> <li>• 40% written exercises</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Modules with similar content
Content	<p>Mobile devices</p> <ul style="list-style-type: none"> <li>• wireless communication</li> <li>• mobile devices</li> <li>• mobile “platforms”</li> <li>• modalities of mobile user interfaces</li> </ul> <p>Mobile context</p> <ul style="list-style-type: none"> <li>• location-based services</li> <li>• convergence of online and offline content</li> </ul> <p>Mobile business</p> <ul style="list-style-type: none"> <li>• process optimization by employment of mobile applications</li> <li>• m-commerce</li> <li>• second-screen applications</li> <li>• business models for mobile applications</li> </ul> <p>Mobile society</p> <ul style="list-style-type: none"> <li>• mobile applications and social networks</li> <li>• self-tracking</li> <li>• sharing economy</li> </ul> <p>Mobile software development</p> <ul style="list-style-type: none"> <li>• native applications like with iOS or Android</li> <li>• mobile web applications based on HTML, CSS and JavaScript</li> <li>• hybrid solutions</li> </ul> <p>Mobile content management</p>
Reading list	<p>Aaker, D. (2010): Building Strong Brands. Simon &amp; Schuster.</p> <p>Kapferer JN. (2012): The New Strategic Brand Management Advanced Insights &amp; Strategic Thinking. Kogan Page.</p> <p>Keller, K.L. (2012): Strategic Brand Management. Building, Measuring and managing Brand Equity. 4<sup>th</sup> edition, Pearson.</p> <p>Van Preat, D. (2012): Unconscious Branding. How Neuroscience Can Empower (and Inspire) Marketing. St. Martin Press.</p> <p>Wheeler, A. (2017): Designing Brand Identity: An essential Guide for the Whole Branding Team. 5<sup>th</sup> edition. Wiley.</p> <p>More to be announced in class at the outset of the module.</p>
Further information	This module is offered in English.
Required Room type	Ü-IT

Module number	B32 / WP4.2
English title / German title	<a href="#">Required Elective Module IV</a> Media Design
Credits	5 ECTS
Workload	150 hours: <ul style="list-style-type: none"> <li>• Class attendance 4 h/w during the lecture period of the semester: 68 hours</li> <li>• Hours of independent study: 82 hours</li> </ul>
Subject coverage	Subject-related specialization
Learning objectives / outcomes	<p>Students deepened their knowledge of human-computer-interaction concerning the design of interactive systems.</p> <p>They have an overview of design principles for digital media like text, images, audio and moving images. They are able to decide which competences are necessary to design the different kinds of digital media.</p> <p>They know basic concepts and IT-tools to design cross-platform interactive applications. Based on selected media and IT-tools they have made their first practical experiences in producing digital media based on design principles.</p> <p>They understand the elementary elements of media design (object, space, time, interaction). They learned basic skills concerning information architecture, functionality, interactivity and navigation.</p>
Requirements	Recommended: Software Engineering 1 and 2, Human Computer Interaction
Level	Sixth semester of the degree program
Type of module	Laboratory Training through Group Work, self-study
Status	Required-elective module
Semester when offered	Summer semester
Method of assessment / type of examination	<p>The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies:</p> <ul style="list-style-type: none"> <li>• 50 % group work</li> <li>• 50 % written examination (60 min)</li> </ul>
Grade assessment	See study and examination regulations
Equivalent modules	Modules with similar content
Content	Insights in application software for designing digital media combined with basic practical exercises.

	<p>Basic principles for designing digital media:</p> <ul style="list-style-type: none"> <li>• Text design</li> <li>• Design of images</li> <li>• Audio design</li> <li>• Moving images</li> <li>• Interaction design (Use Cases, Prototyping)</li> </ul> <p>Stakeholders in the media industry</p> <ul style="list-style-type: none"> <li>• Media producing companies</li> <li>• Make or buy decisions (cases)</li> </ul> <p>Implementation of a design-focused media project (practical project)</p> <ul style="list-style-type: none"> <li>• Collection, design and processing of digital content (static, dynamic and interactive)</li> <li>• Digital design (basic elements of images, image concepts, colors, abstraction and visualization)</li> <li>• Basic concepts of screen- and interface-design for different kinds of digital media, interactive media-applications and interactive media-systems</li> </ul> <p>Information architecture (structure, navigation, user guidance)</p> <ul style="list-style-type: none"> <li>• Layout and composition (formats, wireframes, composition rules, media optimized design)</li> <li>• Animation and moving images</li> <li>• Interaction design (methods, linear vs. nonlinear, orientation, ergonomics and usability)</li> </ul>
Reading list	To be announced in class at the outset of the module.
Further information	This module is offered in German or in English.
Required Room type	Ü-IT