

MODULE MANUAL SPO2024

COURSE OF STUDY FOCUS

BBA/
DIGITAL BUSINESS
MANAGEMENT
B.SC.

Status: May 2024



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List of abbreviations

CR Credits according to the ECTS system

PLH Examination based on term paper

PLK Examination based on written exam

PLL Examination based on laboratory work

PLM Examination based on oral exam

PLP Examination based on project work

PLR Examination based on presentation

PLS Examination based on research project

PLT Examination based on written thesis

PVL Prerequisite examination

PVL-BVP Prerequisite examination for bachelor interim overall exam

PVL-BP Prerequisite examination for final bachelor graduation

PVL-MP Prerequisite examination for final master graduation

PVL-PLT Prerequisite examination for registration for bachelor thesis

SWS Contact hours per week

UPL Non-graded examination (pass/fail only)



Alignment matrix for teaching the competence goals according to KMK – "Digital Business Management"

	Knowledo Understa	_			ge Applica- Seneration	on and Skills	tegrity onalism
Module	Knowledge Broadening	Knowledge Deepening	Knowledge Comprehen- sion	Application and Transfer	Scientific	Communication and Collaboration Skills	Academic Integrity and Professionalism
First study			•				
Common co					1		1
AQM1050	X	X	X			X	
AQM1150	X	X	X	Х		X	
BIS1060	X	Х	Х			Х	X
ECO1050	X	X		X			X
ECO1150	X	X	X	X			X
GMT1300	X	X	X	X			X
GMT1310	X	Х	X	X			X
GMT2250	X	X	X	X			Х
LAW1050	X	X	X	X		X	
LAW1400	Х	Х	Х	Х		X	
SIC1070						Х	Х
Program sp					1		
DBM1150	X	Х	Х				X
Second stu							
AQM2060	re modules	X	X	X		Х	I
ECO2100	X	X	X	X		, , , , , , , , , , , , , , , , , , ,	X
						V	^
ECO2110	X	X	X	X	X	X	
ESR3100	Х	Х	Х	Х		Х	Х
GMT2300	Х	Х	Х	Х			Х
GMT2350	X	Х	Х	X			Х
GMT3100	X	Х	X	X			X
GMT3400	Х	Х	X	X		Х	Х
GMT4100	Х	Х	X	Х	X	Х	Х
INS3020				Х		Х	Х
SIC1070				Х		Х	Х
EXA4999			Х	Х		Х	Х
THE4999			X		X	Х	Х
Program sp	ecific modu	ıles	1	1	1	I	1
DBM2100	X	Х	X	Х		Х	Х
DBM2150	X	Х		Х			Х
DBM2300		X	X	X	X		X
DBM2500		X	X	X	,	X	X
DBM3100	X	X	X	X	X		X
DBM3300	X		X	X	·	Х	X
DBM4100		Х	X	Х	X		Х



First study section – Common core modules

SIC1070: GENERAL SKILLS AND COMPETENCIES

General Skills and Competencies		
Module ID	SIC1070	
Credits	4	
SWS	3	
Semester	1+3	
Frequency	Every semester	
Associated Courses	 SIC1071 Social and Methodological Skills (1st semester, 2 credits). SIC1502 German B1 according to university test SIC1104 Cross-Cultural Competencies (3rd semester, 2 credits). 	
Prerequisites	None	
Assessment Methods and duration	Social and Methodological Skills: UPL Cross-Cultural Competencies: PLH/PLR	
Requirements for granting of credits	Social and Methodological Skills: Successful participation in all courses (compulsory attendance) Cross-Cultural Competencies: Successful completion of the exam (graded).	
Significance for the Final Grade	Social and Methodological Skills: Not applicable, since the examination is ungraded. Cross-Cultural Competencies: The sub-module counts towards the 2nd study section and is included in the final Bachelor grade with a weight of 2 credits.	
Planned group size	Social and Methodological Skills: 14-18 Cross-Cultural Competencies: 25	
Language	Social and Methodological Skills: English Cross-Cultural Competencies: English	
Module Duration	3 semesters	
Module Coordinator	Foschiani, Stefan; Burkart, Brigitte; Bacher, Urban;	
Lecturer(s)	Social and Methodological Skills: student tutors	



	Cross-Cultural Competencies: Dina von Garlen; Susanne Glas
Subject area / course of study	Overlapping specialties
Applicability in other programs	SIC1071 in all degree programs.
Pedagogical Approach	Seminar teaching
Objectives	Social and Methodological Skills 1. training communication and teamwork: Students will be able to Conduct factual conversations effectively, can effectively conduct conflict talks, recognize destructive, ingrained communication patterns and know successful alternatives, understand how to observe group processes and assess their own behaviour within the group, can consciously perceive their own role in the group and the effect of their behaviour and can influence and control teamwork in a goal-oriented manner. business simulation and business administration case study the students know basic methods to analyze business problems, know business decision-making processes in connection with essential corporate functions have initial ideas on how to solve business management problems. presentation training The students gain confidence when appearing in front of groups can structure and design presentations in a target- and audience-oriented manner can use media, stylistic devices and body language appropriately Cross-Cultural Competencies Students can deal with communication situations in different cultural contexts, have a basic understanding of other cultures, recognize their own cultural background and reflect on it critically, acquire cultural awareness and practice communication in the English language create a learning agreement for a partner university abroad



	Social and Methodological Skills 1. training communication and teamwork Perceptual processes Communication basics Giving and receiving feedback Conversational Characteristics of effective teamwork Team development Roles in a group Leading a group Application of teamwork in a business administration case study
	 2. business simulation + business administration case study Getting to know complex decision-making methods in business settings Making business decisions in small groups Company as a customer-oriented value chain Cooperation of different task and decision makers within a company
Content	 3. presentation training Appearance in front of groups Practice presentation situations Use of media for presentations Giving and taking feedback Visualization and listener orientation
	introduction to the study and examination regulations with elearning module. Conclusion with online test StuPo Digital. Cross-Cultural Competencies
	 General conditions: Cross-cultural communication (CCC) and cross-cultural management (CCM) to successfully interact with representatives of other cultures. The three perspectives: The cultural perspective: what is culture, and how should it be managed? The cross-cultural perspective: what makes cultures comparable, and how to test hypotheses of difference when interacting? The intercultural perspective: how to move beyond cross-cultural differences, and to create complementarities and synergies? GLOBE Study to compare cultural differences Participation in a study program related Go Abroad event and submission of an exemplary Learning Agreement
Relation to other Modules	Social and Methodological Skills • Business simulation: Business administration modules



	 Training: Seminars of the 3rd, 4th and 6th semester - there an evaluation of the teamwork. Presentation training: in all seminars of the further studies - there is an evaluation of the presentations on the basis of the taught criteria. Cross-Cultural Competencies: Preparation for working in international and intercultural teams, a study or internship semester abroad
Literature	Social and Methodological Skills SIK Participant documents Schulz von Thun, F.: Miteinander reden: Störungen und Klärungen. Hamburg Birkenbihl, V.: Communication Training, Heidelberg Hartmann, M. et al: The convincing presentation, Weinheim Herbig, A. F.: Lecture and presentation techniques, Norderstedt Krüger, W.: Leading Teams. Munich Cross-Cultural Competencies Mahadevan, J.: Lecture Notes Cross Cultural Communication GLOBE Studies (https://globeproject.com/studies)
Additional Remarks	Contact time: 3 SWS x 15 = 45 SWS + self-study 105 hours Social and Methodological Skills The 1st part (training in communication and teamwork) and the 2nd part (business simulation) take place during the introductory week of the first semester. They are embedded in the introductory week for the freshmen. The work in small groups also serves to socialize the freshmen. The 3rd part (presentation training) takes place at the beginning of the second semester of study. The training is conducted by student tutors who also provide peer mentoring for the freshmen. To prepare for the presentation training, it is recommended to work through the e-learning tool PowerPoint. Cross-Cultural Competencies The course is offered in English.
Last edited	March 2023



LAW1050: FOUNDATIONS OF CONTRACT LAW

Foundations of Contract Law		
Reference number	LAW1050	
Semester of study	1	
Credits	5	
sws	4	
Frequency	Every semester	
Related courses	LAW1051 Foundation of Contract Law	
Participation requirement	None	
Type of examination / duration	PLK - 60 minutes	
Prerequisite for the award of credits	Successful completion of the examination	
Value of the module grade for the final grade	The module is included in the preliminary grade of the first study section with a total of 5 credits. The average score of the preliminary examination counts towards the final grade with a total of 30 credits (examination performance of the first study section, §17 Para. 3 StuPO).	
Planned group size	max. 80 students	
Teaching language	English	
Duration of the module	1 semester	
Responsible for the module	Head of Interdisciplinary Legal Department	
Lecturers	Professors from the Business Law program and adjunct lecturers	
Subject area	Law	
Usability in other modules/courses of study	All business administration degree programs	
Teaching form	Lecture with exercises	
	<u>Expertise</u>	
Goals	Students will master the juridical method of solving cases according to the basis of claims.	
	Critical thinking and analytical skills	



	Students will be able to use analytical skills constructively and critically to solve problems.
Content	 Introduction to Law and the Legal Method Basics of Civil Law (sources of law, BGB, HGB, natural and legal persons, etc.) Basics of Contract Law (conclusion of contract including representation, validity of legal transactions, consumer contracts, general terms and conditions, fulfilment and limitation).
Connection to other modules	Foundation for "Law in Business" and all other legal lectures
Literature	 Gildeggen/Lorinser/Willburger et al, Private Commercial Law Eisenmann/Quittnat/Tavakoli, Legal Cases from Private Commercial Law Führich, Private Commercial Law Mehrings, Fundamentals of Private Commercial Law Müssig, Private Commercial Law Wörlen/Metzler-Müller, BGB AT In each case in the latest edition -
Workload	150 hours, consisting of 60 hours contact time and 90 hours preparation and follow-up (self-study)
Keywords	Law, Civil law
Last change	March 2023



GMT1300: BUSINESS ADMINISTRATION I

Business Administration I		
Reference number	GMT1300	
Semester of study	1	
Credits	6	
sws	6	
Frequency	Every semester	
Related courses	GMT1301 Management of Business Functions (4 credits) GMT1302 Foundations of Accounting (2 credits)	
Participation requirements	None	
Type of examination / duration	Management of Business Functions: PLK - 60 minutes Foundations of Accounting: UPL - 60 minutes	
Prerequisites for the award of credits	Successful completion of the examination	
Importance of the module for the final grade	The ungraded examination performance (Foundations of Accounting) is not included in any grade. The rest of the module is included in the preliminary grade of the first study section with a total of 4 credits. The average score of the preliminary examination counts to-	
	wards the final grade with a total of 30 credits (examination performance of the first study section, §17 Para. 3 StuPO).	
Planned group size	max. 80 students	
Teaching language	English	
Duration of the module	1 semester	
Responsible for the module	Sander, Frauke and Trauzettel, Volker	
Lecturers	Professors of the ABWL department and adjunct lecturers	
Subject area	General Business Administration	
Usability in other modules/courses of study	All business administration degree programs	
Teaching form	Lecture with exercises	
Goals	Management of Business Functions: The lecture is the first part of three modules on the essential functions of a company and on the challenges in the context of	



digital transformation, which are aimed at the following objectives:

- Students understand basic business management relationships and important objectives of a company.
- They have a basic understanding of the tasks and economic issues in the individual operational areas of a company.
- They understand the importance of customer orientation as a guideline for all entrepreneurial actions and the company as an entire value creation process oriented towards the customer.
- They understand the challenges of digital transformation and its impact on the emergence and resolution of new operational issues.

This first part "Management of Business Functions" focuses on the following objectives:

- The students understand the basic principles of economic action and can transfer these to the functions of marketing, production and materials management.
- The students know basic problems in the functions of marketing, production and materials management and are able to analyze them, work out adequate decision criteria and develop procedures for solving problems.
- They understand how to assess the effects of entrepreneurial decisions in the areas of marketing, production and materials management on the results of the company and its social environment.

Foundations of Accounting:

The students master the recording of the essential business transactions of a company in its internal and external accounting department and understand their significance. They can estimate the effects of the business transactions on the components of the annual financial statement and the internal income statement.

Foundations of Accounting:

- Accounting obligation
- Inventory and stocktaking
- · Stock and profit and loss accounts
- · Accounting of business transactions
- Basic features of the balance sheet and profit and loss account

Content

Management of Business Functions:

- · Basic business terms and principles
- Design of operational functions, especially
 - Marketing
 - Materials management: procurement & logistics
 - Production
- Ethical issues



Connection to other modules	Preparation for all other business administration modules
	Management of Business Functions:
	 Appelfeller, W.; Feldmann, C.: Die digitale Transformation des Unternehmens, Springer Gabler
	 Harwardt, M.: Management der digitalen Transformation, Springer Gabler
	 Mariott, S.; Glacki, S.: Entrepreneurship: Starting and Operating A Small Business, Pearson
	Nothhelfer, R., Foschiani, S., Rade, K., Trauzettel, V.: Klausurtraining für allgemeine Betriebswirtschaftslehre, De Gruyter
	 Schierenbeck, H.: Grundzüge der Betriebswirtschafts- lehre, Oldenburg
	 Thommen, JP. and Achleitner, AK.: Allgemeine BWL - Umfassende Einführung aus management-ori- entierter Sicht, Springer Gabler
	Thommen, J.P.; Achleitner, AK.: Allgemeine Betriebs- wirtschaftslehre Arbeitsbuch. Repetition questions - tasks - solutions, Springer Gabler
Literature	 Wöhe, G., Döring, U: Einführung in die allgemeine BWL, Vahlen
Literature	Fundamentals of Accounting:
	 Coenenberg, et al, Introduction to Accounting, Schäffer-Poeschel
	 Grimm-Curtius, H. and Duchscherer, M.: Finanzbuch- haltung nach dem GKR und IKR - Lehrbuch mit Buch- haltungs-Software, Oldenbourg
	 Heinhold, M.: Buchführung in Fallbeispielen, Schäffer - Poeschel
	 Horngren/Sundem/Elliott/Philbrick, Introduction to fi- nancial accounting, Prentice Hall
	 Schmolke, S. and Deitermann, M.: Industrielles Rechnungswesen - GKR, Winklers Verlag Gebr. Grimm
	 Wedell, H.: Grundlagen des Rechnungswesens, Band 1, Buchführung und Jahresabschluss, NWB
	 Weygandt/Kimmel/Kieso, Financial accounting IFRS edition, John Wiley & Sons
	 Wöhe, G.: Grundzüge der Buchführung und Bilanz- technik, Vahlen Däumler,
	In each case in the current edition
Workload	Students are expected to spend an additional 90 hours for preparation, independent literature study, exercises and elearning in addition to the 6 x 15 = 90 SWS attendance time.
Other	The two associated lectures of this module are offered within one semester.



	For participants with previous knowledge of accounting, an early examination is offered in the sub-module "Foundations of Accounting" already in the first third of the semester.
Keywords	Bookkeeping, annual financial statements, accounting, principles of economic action, marketing, production, materials management
Last change	February 2023



ECO1050: ECONOMICS I

Economics I	
Module ID	ECO1050
Semester	1
Credits	6
SWS	4
Frequency	Every semester
Associated Courses	ECO1051 Introduction and Microeconomics
Prerequisites	None
Assessment Methods and duration	PLK - 60 minutes
Requirements for granting of credits	Successful passing of the examination performance
Significance for the Final Grade	The credit-weighted average grade of the preliminary examination (examination results of the first study section, §17 para. 3 StuPO) is included in the final grade with a weight of 30 credits.
Planned group size	max. 80 students
Language	English
Module Duration	1 semester
Module Coordinator	Beck, Hanno
Lecturer(s)	Professors and lecturers of the department "Economics"
Subject area / course of study	Economics
Applicability in other programs	All degree programs
Pedagogical Approach	Lecture + Exercise
Objectives	Changes in the economy as a whole and economic policy decisions have a considerable influence on the success of individual businesses. The economic modules are designed to give students the ability to independently assess the macroeconomic framework for individual economic activity. Such knowledge is indispensable for decision-making competence in many business functions, especially for investment decisions, from which in turn other business decisions are derived. The module teaches principles of regulatory and competition policy and familiarizes students with microeconomic approaches to



	the analysis of economic problems in closed economies. In detail, the following objectives are pursued: • Students will be able to identify the essential elements that determine the success of an economic system and the competitiveness of a location. • They are able to assess decisions on competition policy and competition law with a view to the consequences for the individual and the economy as a whole. • You will learn to apply microeconomic analysis techniques to understand the functioning of markets under different market forms and under government intervention.
Content	 Subject, basic concepts and methods of economics Economic systems (ideal types and real types), ordoliberalism and social market economy Demand and supply on goods markets, elasticities, production and cost functions Price formation: perfect and imperfect competition, monopolistic price formation, oligopoly markets government intervention in market pricing: Maximum prices, minimum prices, taxes, internalization of external effects. Competition concepts and competition policy
Relation to other Modules	Methodological basics are created, which are expanded in the VWL module "International Economic Relations" in the context of foreign trade and applied independently in the "Economic Policy Seminar". The derivation of supply on goods markets is linked to general business administration (production and cost theory). The derivation of demand for goods, pricing in different market forms and competition policy have numerous points of contact with marketing issues. Competition theory and policy complement business courses on pricing and legal courses on competition and antitrust law.
Literature	 Beck, Hanno, Economics. Micro- and macroeconomics Krugman, Paul/Wells, Robin, Economics. Mankiw, Nicholas G./Taylor, Mark P., Basic Economics. Pindyck, Robert S./Rubinfeld, Daniel L., Microeconomics. Samuelson, Paul A./Nordhaus, William D., Economics. The international standard work on macroeconomics and microeconomics. Stiglitz, Joseph E./Walsh, Carl E., Microeconomics, Volume I on Economics. Varian, Hal R., Principles of Microeconomics.



	Wienert, Helmut, Grundzüge der Volkswirtschaftslehre, Vol. 1: Introduction and Microeconomics.
Workload	The course requires 4 x 15 = 60 h attendance time. In addition, approx. 120 h are required for preparation, independent literature study, working through the legal texts and exercises.
Additional Remarks	The module is also offered in English as part of the International Study Program. Credits earned in English will count toward the existing Credt requirement in English.
Keywords	Microeconomics, microeconomics, economics
Last edited	April 2023



AQM1050: MATHEMATICS

Mathematics	
Module ID	AQM1050
Semester	1
Credits	5
SWS	4
Frequency	Every semester
Associated Courses	AQM1043 Analysis and Linear Algebra (3 credits) AQM1051 Financial Mathematics (2 credits).
Prerequisites	None
Assessment Methods and duration	Analysis and Linear Algebra: PLK - 90 minutes Financial Mathematics: PLK - 60 minutes
Requirements for granting of credits	Analysis and Linear Algebra: successful passing of the examination performance Financial Mathematics: successful passing of the examination performance
Significance for the Final Grade	The credit-weighted average grade of the preliminary examination (examination results of the first study section, §17 para. 3 StuPO) is included in the final grade with a weight of 30 credits.
Planned group size	max. 200 students
Language	English
Module Duration	1 semester
Module Coordinator	Kuhlenkasper, Torben
Lecturer(s)	Professors of the Department of Quantitative Methods and Lecturers
Subject area / course of study	Quantitative methods
Applicability in other programs	All business administration courses, "Financial Mathematics" is also used in the "Business Law" course.
Pedagogical Approach	Lecture with exercises



	The students
Objectives	 can translate simple economic facts into mathematical models are able to analyze economic functions by applying differential and integral calculus Understand basic concepts of optimization methods by applying the method of Lagrange multipliers. master the handling of linear systems of equations and matrices Upon successful completion of the course, are equipped with mathematical knowledge that will allow them to access advanced courses in Statistics and Quantitative Planning. know classic financial products master classical financial mathematical procedures and methods of interest calculation, annuity calculation, investment calculation and redemption calculation can critically assess various offers from financial providers for investing money and taking out loans know how modern financial instruments (especially interest rate derivatives) work and how they are used, as well as their opportunities and risks
Content	The module consists of the two courses "Analysis and Linear Algebra" and "Financial Mathematics". Within the first course, the concepts of analysis of functions with one variable (limit / continuity, homogeneity / elasticity, differential and integral calculus) are first worked out. Furthermore, the basic concepts of matrix-vector calculus (incl. determinant, inverse) and the solution of linear systems of equations are the subject of this course. Building on these two areas, the basic methods of analysis of functions with several variables (partial homogeneity, partial elasticity, partial / total differential, differential calculus, multiple integrals, optimization under constraints) are discussed. The course "Fundamentals of Financial Mathematics" provides the necessary mathematical tools for the financial mathematics part of the course (exponential / logarithm functions, sequences, series). Basics of interest calculation serve as a basis for the following chapters. Investment theory, annuity calculation, repayment calculation and a chapter on prices and yields of securities introduce students to entrepreneurial decision-making situations. An introduction to interest rate financial derivatives provides an insight into modern corporate financial planning.
Relation to other modules	Methodological foundations are laid for all other subjects from the areas of Applied Quantitative Methods, General Economics and Business Administration. Furthermore, this subject is the basis for the specialization subjects Financing and Accounting.
Literature	Analysis and Linear Algebra • Sydsaeter/Hammond: Mathematics for Economists, Munich



	 Schwarze: Mathematics for Economists - Volume 1: Fundamentals, Herne. Schwarze: Mathematics for Economists - Volume 2: Differential and Integral Calculus, Herne Schwarze: Mathematics for Economists - Volume 3: Linear Algebra, Linear Optimization and Graph Theory, Herne Tietze: Einführung in die angewandte Wirtschaftsmathematik, Wiesbaden.
	 Financial Mathematics Wüst, K.: Finanzmathematik - Vom klassischen Sparbuch zum modernen Zinsderivat, Wiesbaden. Kuppinger, B.: Finanzmathematik, Wiley, Weinheim Martin, T.: Finanzmathematik, Leipzig Kobelt/Schulte: Financial Mathematics, Berlin Beicke/Barckow: Risk-Management mit Finanzderivaten, Munich et al. Müller-Möhl, E.: Options and Futures. Stuttgart. Hull, J.: Options, Futures and Other Derivatives, Munich. Renger, K.: Finanzmathematik mit Excel, Wiesbaden. Tietze, J.: Einführung in die Finanzmathematik, Wiesbaden
Workload	Analysis and Linear Algebra: 2 x 15 SWS = 30 SWS attendance time. In addition, approx. 60 h are required for preparation, independent literature study, exercises and e-learning. Financial Mathematics: 2 x 15 SWS = 30 SWS attendance time. In addition, approx. 30 h are required for preparation, independent literature study, exercises and e-learning.
Additional Remarks	The module assumes knowledge of a basic mathematics course in high school. In the written exam of Analysis and Linear Algebra, basic mathematical skills are tested. The course Fundamentals of Analysis and Linear Algebra is also offered in the winter semester as a Fast Track with 4 SWS/week and an early exam before Christmas. The course Fundamentals of Analysis and Linear Algebra is also offered in the winter semester as Fast Track (with an early exam before Christmas).
Keywords	Interest calculation, Differential and integral calculus, Linear equations, Investment calculation, Pension calculation, Redemption calculation, Modern financial products
Last edited	April 2023



BIS1060: INFORMATION SYSTEMS

Information Systems	
Module ID	BIS1060
Semester	1
Credits	5
sws	4
Frequency	Every semester
Associated Courses	BIS1061 Business Information Systems (2 credits) BIS1062 Information Systems Hands-on Training (2 credits) BIS1063 Information Systems Self Study Unit (1 credit).
Prerequisites	None
Assessment Methods and duration	Business Information Systems and Information Systems Hands-on-Training: PLL+PLK - 60 minutes Exercises on the computer: PLL Information Systems Self Study Unit: UPL
Requirements for granting of credits	The awarding of credits for the module requires the successful passing of the preliminary examination performance. Credits for the Introduction to Business Information Systems and the exercises on the computer: require the successful passing of the respective examination performance.
Significance for the Final Grade	The preliminary examination credit does not count towards any grade. The rest of the module is included in the preliminary grade of the first study section with a weighting of 2 credits each.
	The credit-weighted average grade of the preliminary examination (examination results of the first study section, §17 para. 3 StuPO) is included in the final grade with a weight of 30 credits.
Planned group size	Business Information Systems: max. 100 students Exercise and e-learning: small groups
Language	English
Module Duration	1 semester
Module Coordinator	Burkard, Werner
Lecturer(s)	Professors of the study program Business Informatics
Subject area / course of study	Business Informatics
Applicability in other programs	All study programs



Pedagogical Approach	Lecture + Exercise + E-Learning
Objectives	 know categories of information systems, their functions and field of application. can apply methods for modeling the organizational, functional, data and control view. know basics of information system project management. know selected technical basics of information and communication systems. Have a basic understanding of security measures in the operation of information systems. can apply spreadsheets to simple business problems. can map simple data structures in a database and create evaluations.
Content	 Information technology in business and society Introduction to central concepts of information processing with computers Structure, operation and classification of computers Overview of operational information systems Information systems management and operation Modeling of operational information systems Creation process of an information system: planning/design/development Office information systems at a glance Teamwork: communication forms, groupware, workflow, knowledge management ERP systems at a glance: Management of companywide resources and processes Components of ERP systems Networking basics for business economists: network economics and portals Consumer information systems and CRM (customer relationship management) Information systems between companies and suppliers: from EDI to EAI Information systems to support management Data management and analysis with data warehouse, OLAP and data mining Selected exercises / discussion of tasks / e-learning modules
Literature	Thesmann, St. / Burkard, W.: Wirtschaftsinformatik für Dummies, 2. Auflage, Weinheim Hansen, H. R. / Neumann, G.: Wirtschaftsinformatik 1, Bd.1 Grundlagen und Anwendungen, Stuttgart
Workload	Course, exercises and e-learning require 4 x 15 = 60 SWS attendance time. In addition, approx. 90 h are required for preparation, independent literature study, own supplementary exercises and e-learning.
Last edited	April 2023



LAW1400: CORPORATE LAW

Corporate Law	
Reference number	LAW1400
Semester of study	2
Credits	6
sws	6
Frequency	Every semester
Related courses	LAW1401 Contract Management LAW1402 Contracts and Digitalization
Participation requirement	None
Type / duration of examination	PLK - 90 minutes
Prerequisite for the award of credits	Successful completion of the examination
Value of the module grade for the final grade	The module is included in the preliminary grade of the first study section with a total of 6 credits. The average score of the preliminary examination counts towards the final grade with a total of 30 credits (examination performance of the first study section, §17 Para. 3 StuPO).
Planned group size	max. 80 students
Teaching language	English
Duration of the module	1 semester
Responsible for the module	Head of Interdisciplinary Legal Department
Lecturers	Professors from the Business Law programme and adjunct lecturers
Subject area	Commercial law
Usability in other modules/courses of study	All business administration degree programmes
Teaching form	Lecture and exercise
	<u>Expertise</u>
Goals	Students will master the juridical method of solving cases according to the basis of claims.
	Critical thinking and analytical skills



	Students will be able to use analytical skills constructively and critically to solve problems.
Content	Contract Management Introduction to the general and special law of obligations (overview of the types of contract; overview of default) General default (delay, impossibility, breach of ancillary obligations) Warranty under the law of sale: Basic concepts of property law Acquisition of property Overview of loan collateral Tort and product liability Sample contracts
	 Main features of the new law of obligations 2022 Conclusion of contract in the digital space Insight into data protection law Important basic concepts of intellectual property law (e.g. protection of intellectual property on the internet) Sale of consumer goods and special features of the sale of consumer goods with digital elements Consumer contracts on digital products (§ 327ff. BGB) Exemplary in-depth topic (e.g. legal tech)
Connection to other modules	Continuation of Foundations of Contract Law; basis for all further law lectures.
Literature	 Gildeggen/Lorinser/Willburger et al., Private Commercial Law Brönneke/Föhlisch/Tonner (eds.), The New Law of Obligations Brox/Walker, General Law of Obligations Brox/Walker, Special Law of Obligations Eisenmann/Quittnat/Tavakoli, Legal Cases from Private Commercial Law Führich, Private Commercial Law Hemmer/Wüst/Tyroller / D'Alquen, The New Law of Obligations 2022 Langkamp The New Law of Obligations 2022 Mehrings, Fundamentals of Private Commercial Law Müssig, Private Commercial Law Wörlen/Metzler-Müller, Law of Obligations General Part Wörlen/Metzler-Müller, Law of Obligations Special Part Wörlen/Kokemoor, Property Law
Workload	180 hours, consisting of 90 hours contact time and 90 hours preparation and follow-up (self-study)
Keywords	Law, Civil law
Last change	October 2022



GMT1310: BUSINESS ADMINISTRATION II AND CORPORATE TAXATION

Business Administration II and	d Corporate Taxation
Reference number	GMT1310
Semester of study	2
Credits	5
SWS	5
Frequency	Every semester
Related courses	GMT1311: Management: Organizational Structures and Decisions (2 SWS / 2 Credits) TAX1012: Corporate Taxation (3 SWS / 3 Credits)
Participation requirements	None
Type of examination / duration	PLK - 120 minutes
Prerequisite for the award of credits	Successful completion of the examination
Value of the module grade for the final grade	The module is included in the preliminary grade of the first study section with a total of 5 credits. The average score of the preliminary examination counts towards the final grade with a total of 30 credits (examination performance of the first study section, §17 Para. 3 StuPO).
Planned group size	max. 80 students
Teaching language	English
Duration of the module	1 semester
Responsible for the module	Trauzettel, Volker and Häfele, Markus
Lecturers	Professors of the ABWL department, professors of the "Taxation and Auditing" course and adjunct lecturers (for the course on corporate taxation with StB qualification)
Subject area	General Business Administration / Taxes and Auditing
Usability in other modules/courses of study	All degree programs except BWL/Media Management and Digital Media and BBA/International Business. In the degree programs Business Administration/Accounting, Controlling and Financial Management; Business Administration/Business Law as well as Business Administration/Taxes and Auditing, the course "Corporate Taxation/Operational Taxation" comprises 4 SWS/4 ECTS (cf. following separate module description GMT2250).
Teaching form	Lecture with exercises

	Management: Organizational Structures and Decisions: The class is the second part of three modules on the essential functions of a company and on the challenges in the context of digital transformation, which are aimed at the following objectives:
	The students understand basic business management relationships and important objectives of a company.
	They have a basic understanding of the tasks and eco- nomic issues in the individual operational areas of a com- pany.
	They understand the importance of customer orientation as a guideline for all entrepreneurial actions and the company as an entire value creation process oriented towards the customer.
	They understand the challenges of digital transformation and its impact on the emergence and resolution of new operational issues.
	In the second part of "Management: Organizational Structures and Decisions", the focus is on the following objectives:
Goals	The students understand how to assess the impact of, in particular, constitutive corporate decisions on the company and its social environment.
	 They are familiar with basic problems in business organiza- tion and are able to analyze them, work out adequate deci- sion-making criteria and develop procedures for solving problems.
	Corporate Taxation:
	The students understand the different tasks of tax law, finance and business taxation.
	They use the legal texts to determine the taxable facts and their assessment bases in various types of tax.
	They recognize the effects of the turnover tax system (turnover tax as a transitory item or as a cost component).
	The students will be able to determine the income tax burdens (including the tax assessment base) of individuals (including case studies on income tax assessment) as well as companies (especially partnerships and corporations) and entrepreneurs (partners).
	 They recognize the effects of taxes on business management decisions (option for compulsory VAT for small entrepreneurs, choice of legal form, distribution policy, equity or debt capital).
Content	 Constitutive corporate decisions (location and legal form) Effects of business management decisions on company results Design of operational functions, in particular the company organisation Ethical issues
	Fundamentals of the taxation system



	 Value added tax (tax liability, EU internal market, reporting of value added tax, deductible input tax, VAT as a cost, basic options) Income tax (tax liability, types of income, determination of taxable profit, determination of the income tax burden, assessment cases) Trade tax in outline Corporate income tax in outline Recognize the total income tax burden using case studies and exercises Basic comparison of legal forms (partnerships and corporations)
Connection to other modules	 Management: Organizational Structures and Decisions: Preparation for all business administration modules of the second study section. Corporate Taxation: Sound knowledge from RW I (accounting) is expected and applied in the determination of taxable profits. The choice of legal form (management: structures and decisions) is analyzed from a tax point of view; tax burdens are compared. Cross-connections to accounting (accounting and financial management); primarily dealt with here are the differences between commercial and tax law profit determination.
Literature	 Drosse, V. and Vossebein, U.: Allgemeine Betriebswirtschaftslehre, MLP - Repetitorium, Gabler Verlag Hopfenbeck, W.: Allgemeine Betriebswirtschafts- und Managementlehre, Verlag Moderne Industrie Jung, H., General Business Administration, R. Oldenbourg Verlag Luger, A.E.: Allgemeine BWL Bd. 1: Der Aufbau des Betriebes, Hanser Verlag Mariott, S.; Glacki, Steve: Entrepreneurship: Starting and Operating A Small Business, Pearson Nothhelfer, R., Foschiani, S., Rade, K., Trauzettel, V.: Klausurtraining für allgemeine Betriebswirtschaftslehre, De Gruyter Schierenbeck, H.: Grundzüge der Betriebswirtschaftslehre, Oldenburg Verlag Straub, T.: Einführung in die allgemeine BWL, Pearson. Thommen, JP. and Achleitner, AK.: Allgemeine BWL - Umfassende Einführung aus management-orientierter Sicht, Gabler Verlag Thommen, J.P.; Achleitner, AK.: Allgemeine Betriebswirtschaftslehre Arbeitsbuch. Repetition questions - tasks - solutions, Springer Gabler



	 Wöhe, G., Döring, U.: Einführung in die allgemeine BWL, Verlag Vahlen Stobbe, Thomas: Steuern Kompakt, Grefe, Cord: Corporate Taxes, Ludwigshafen Important tax laws (NWB or Beck texts) Latest edition in each case
Workload	Management: Organizational Structures and Decisions: Students are expected to spend an additional 30 hours for preparation, independent literature study, exercises and elearning in addition to the 2 x 15 = 30 SWS attendance time. Corporate taxation: The course requires 3 x 15 = 45 SWS attendance time. In addition, approx. 45 hours are required for preparation, independent literature study, working through the legal texts and exercises. For the degree programs Business Administration/Accounting, Controlling and Financial Management; Business Administration/Business Law as well as Business Administration/Taxes and Auditing, the course "Corporate Taxation/Operational Taxation" amounts to 4 SWS/4 ECTS.
Keywords	Entrepreneurial processes, functions, organization, constitutive decisions (legal form, choice of location), corporate taxation
Last updated	February 2023



ECO1150: ECONOMICS II

Economics II	
Module ID	ECO1150
Semester	2
Credits	5
sws	4
Frequency	Every semester
Associated Courses	ECO1151 Macroeconomics
Prerequisites	None
Assessment Methods and duration	PLK - 60 minutes
Requirements for granting of credits	Successful passing of the examination performance
Significance for the Final Grade	The credit-weighted average grade of the preliminary examination (examination results of the first study section, §17 para. 3 StuPO) is included in the final grade with a weight of 30 credits.
Planned group size	max. 80 students
Language	English
Module Duration	1 semester
Module Coordinator	Strotmann, Harald
Lecturer(s)	Professors of the Department of Economics and Lecturers
Subject area / course of study	Economics
Applicability in other programs	All degree programs
Pedagogical Approach	Lecture
Objectives	Changes in the economy as a whole and economic policy decisions have a considerable influence on the success of individual businesses. The economic modules are designed to give students the ability to independently assess the macroeconomic framework for individual economic activity. Such knowledge is indispensable for decision-making competence in many business functions, especially for investment decisions, from which in turn other business decisions are derived. The module familiarizes students with macroeconomic approaches



	to the analysis of economic problems in closed economies. Specifically, the following objectives are pursued:
	 Students will be able to identify the essential elements that determine the success of an economic system and the competitiveness of a location. Macroeconomic analysis gives students access to explanations of the most important macroeconomic factors affecting business activity: unemployment, inflation, economic growth, structural change and cyclical fluctuations. They are able to explain these phenomena and evaluate economic policy options for correcting macroeconomic imbalances and their consequences for business decisions.
Content	 Subject, basic concepts and methods of economics classical macroeconomic approach (full employment, flexible prices) Keynesian macroeconomic approach (underemployment, price rigidities) Monetary theory and monetary policy, interest rate and inflation explanation Causes and possibilities of government influence on economic fluctuations Economic growth: determinants and limits Structural change: causes and effects
Relation to other Modules	 Methodological basics are created, which are expanded in the VWL module "International Economic Relations" in the context of foreign trade and applied independently in the "Economic Policy Seminar". Macroeconomic developments and their determinants are relevant at many points in general business administration, e.g. when it comes to interest rate and price developments or location decisions. Selected partial aspects are of particular importance for individual courses of study, e.g. economic fluctuations for procurement and sales decisions.
Literature	 Beck, Hanno, Economics. Micro- and macroeconomics Blanchard, Olivier/Illing, Gerhard, Macroeconomics Krugman, Paul/Wells, Robin, Economics. Mankiw, Nicholas G./Taylor, Mark P., Basic Economics. Mankiw, Nicholas G., Macroeconomics. Samuelson, Paul A./Nordhaus, William D., Economics. The international standard work on macroeconomics and microeconomics. Wienert, Helmut, Grundzüge der Volkswirtschaftslehre, Vol. 2: Makroökonomie
Workload	Each of the two courses requires 4 x 15 SWS = 60 SWS attendance time. In addition, approx. 60 h are required for independent literature study, exercises, e-learning and exam preparation.
Additional Remarks	The module is also offered in English as part of the International Study Program.



Keywords	Macroeconomics, macroeconomics, economics, basics
Last edited	April 2023



AQM1150: DESKRIPTIVE STATISTICS AND MATHEMATICAL OPTIMIZATION

Quantitative Methods I	
Module ID	AQM1150
Semester	2
Credits	5
sws	4
Frequency	Every semester
Associated courses	AQM1151 Descriptive Statistics (3 credits). AQM1142 Mathematical Optimization (2 credits)
Prerequisites	None
Assessment Methods and duration	Descriptive Statistics (3 credits): PLK - 60 minutes. Mathematical Optimization (2 credits): PLK - 60 minutes
Requirements for granting of credits	Descriptive Statistics: successful passing of the examination performance Mathematical Optimization: successful passing of the examination performance
Significance for the Final Grade	The credit-weighted average grade of the preliminary examination (examination results of the first study section, §17 para. 3 StuPO) is included in the final grade with a weight of 30 credits.
Planned group size	max. 200 students
Language	Englisch
Module Duration	1 semester
Module Coordinator	Kuhlenkasper, Torben
Lecturer(s)	Professors of the Department of Quantitative Methods and Lecturers
Subject area / course of study	Quantitative methods
Applicability in other programs	All business administration courses
Pedagogical Approach	Lecture
Objectives	Descriptive Statistics The students 1. understand the importance of simple statistical concepts in an economic setting; 2. learn the statistical language R;



	 can analyze economic data sets using descriptive statistical functions in R; can calculate and interpret decision-relevant information from a data set using graphs and descriptive univariate ratios; have the ability to correctly apply and interpret bivariate techniques of correlation and regression. can apply simple techniques of time series analysis, such as index and forecast calculation, and interpret their results. can apply basic concepts of propability calculations; can recognize and avoid statistical sources of error and attempts at manipulation.
	Mathematical Optimization The students can think in a model-oriented way, know and understand the basic principles of quantitative business planning, know when and how to use the presented methods in business planning and can solve application-oriented problems independently using an algorithmic approach.
	The course "Descriptive Statistics" addresses the basic methods of univariate and bivariate procedures, which are applied to business examples with the help of own or computer-based calculations. Content ranges from survey and scaling, to presentation and univariate analysis of quantitative data, to analysis of bivariate relationships. An introduction to probability theory is given.
Content	In the course "Mathematical Optimization", the fundamentals of a model-theoretical approach as the basis of quantitative corporate planning as well as the most important methods of linear planning calculation are taught. This includes in particular the methods of linear programming and quantitative project planning. Emphasis is placed on the application of solution methods to business problems and on their economic interpretation. For this purpose, a number of didactically useful examples from the planning practice of the respective business administration functional areas are discussed. In addition, special emphasis is placed on the use of computer-aided solutions.
Relation to other modules	Methodological foundations are laid for the subjects of inductive statistics, operations research, computer-aided management methods, economics, and for individual aspects of business administration and data analysis.
Literature	 Descriptive Statistics Handl, A., Kuhlenkasper, T: Einführung in die Statistik Theorie und Praxis mit R, Heidelberg. Cleff, T.: Descriptive Statistics and Modern Data Analysis. A computer-based introduction with Excel, SPSS and Stata, Wiesbaden. Bortz, J.: Statistik für Human- und Sozialwissenschaftler, Berlin et al.



	 Fahrmeier, L.: Statistics. Der Weg zur Datenanalyse, Berlin et al. Schwarze, J.: Statistik 1, Statistik 2 und Aufgabensammlung, Berlin Anderson, D. R., Sweeney, D.J., Williams T.A.: Statistics for Business and Economics, Mason Mathematical Optimization Gritzmann, P.: Grundlagen der mathematischen Optimierung, Springer, Wiesbaden. Koop, A., Moock, H.: Lineare Optimierung - Eine Anwendungsorientierte Einführung in Operations Research, Spektrum Akademischer Verlag. Jarre, F., Stoer, J.: Optimization, Springer, Berling. Runzheimer, B., Cleff, T., Schäfer, W.: Operations Research Band 1: Lineare Planungsrechnung und Netzplanchnik, Wiesbaden Gohout, W.: Operations Research, Munich, Vienna Domschke, W., Drexl, A.: Introduction to Operations Research, Berlin et al. Hillier, F. S., Lieberman, G. J.: Introduction to Operations Research, Boston u.a. Taha, H. A.: Introduction to Operations Research, New Jersey
Workload	Descriptive Statistics: 2 x 15 = 30 SWS attendance time. In addition, approx. 60 h are required for preparation, independent literature study, exercises and internet/e-learning. Mathematical Optimization: 2 x 15 = 30 SWS attendance time. In addition, approx. 30 hours are required for preparation, independent literature study, exercises and internet/e-learning.
Additional Remarks	The course Descriptive Statistics is also offered in English in the summer semester as part of the International Study Program. This English-language course is offered as a fast-track course with 4 SWS/week and an early exam well before the normal exam period. Credits earned in English will count toward the existing credit requirement in English.
Keywords	regression, analysis, data collection, data reduction, data summary, probability, analysis of contingency correlation
Last edited	April 2023



GMT2250: FOUNDATIONS OF COST AND PERFORMANCE ACCOUNTING

Foundations of Cost and Performance Accounting	
Module ID	GMT2250
Semester	3
Credits	5
SWS	4
Frequency	Every semester
Associated courses	GMT2251 Foundations of Cost and Performance Accounting
Prerequisites	None
Assessment Methods and duration	PLK - 90 minutes
Requirements for granting of credits	Successful passing of the examination performance
Significance for the Final Grade	The module is weighted with its credits in the Bachelor final grade.
Planned group size	max. 80 students
Language	English
Module Duration	1 semester
Module Coordinator	Kropp, Matthias
Lecturers	Professors of the ABWL department and lecturers
Subject area / course of study	General business administration
Applicability in other modules / courses of study	All business administration courses
Pedagogical Approach	Lecture



	The students will be able
Objectives	 to define and explain the central goals, terms, tasks and contents of cost and activity accounting. to independently carry out cost type, cost center and cost unit calculations. They will also be able to calculate contribution margin and operating result and work out solutions for different questions from practice. independently carry out cost type, cost center and cost unit calculations as well as contribution margin and operating result calculations and work out solutions for different questions from practice.
Content	 Basic concepts of cost accounting Cost Element Accounting Cost Center Accounting Cost Object Controlling Partial costing Decision-oriented cost accounting / direct costing
Relation to other modules	Preparation of all other BWL - modules of the second study section, builds on the BWL modules of the first study section.
Literature	 Coenenberg, A.G.: Kostenrechnung und Kostenanalyse. Schäffer-Poeschel Däumler, KD., Grabe, J.: Kostenrechnung 1, Grundlagen Däumler, KD., Grabe, J.: Cost Accounting 2, Contribution Margin Accounting Haberstock, L.: Kostenrechnung, Bd. 1: Einführung: mit Fragen, Aufgaben und Lösungen, S + W Steuer- u. Wirtschaftsverlag Joos-Sachse, Th.: Controlling, Cost Accounting and Cost Management, Gabler Olfert, K.: Kostenrechnung, Kiehl-Verlag Taschner, A./Charifzadeh, M.: Management and Cost Accounting, Wiley
Workload	It is expected that the students spend 90 h for preparation, independent literature study, exercises and e-learning, in addition to the 4 x 15 = 60 SWS attendance time.
Additional Remarks	The module is offered in the winter semester as part of the International Study Program as an English-language fast track with 6 contact hours/week and an early exam before Christmas
Keywords	Accounting, Calculation, Cost Accounting
Last edited	March 2023



First study section – Program specific module

DBM1150: DIGITAL BUSINESS

Digital Business	
Module ID	DBM1150
Semester	1 and 2
Credits	6
SWS (contact h per week)	5
Frequency	Once a year, winter term (DBM1151) and summer term (DBM1152)
Associated Courses	DBM1151 Digital Business Management (1 SWS / 1 ECTS), DBM1152 Business Process Management (4 SWS / 5 ECTS)
Prerequisites	None
Assessment Methods	DBM1151 Digital Business Management: PLK, 30 Minutes DBM1152 Business Process Management: PLP + PLH
Requirements for granting of credits	Passing the respective examination in the associated courses
Significance for the Final Grade	The module is weighted with its credits in the Bachelor's final grade.
Planned Group Size	35
Language	English
Modul duration	2 Semester
Modul coordinator	Boßlau, Mario
Lecturer(s)	Boßlau, Mario; Berbig, Dominik; Morelli, Frank
Discipline	Information Systems
Teaching approach	Seminary teaching
Applicability in other programs	-
Objectives	 Students understand the core concepts and principles of digital business management and business process management, develop digital strategies and understand how to implement them, evaluate the impact of emerging technologies on business operations and strategy,



	 apply principles of change management in the context of digital transformation, use data-driven decision making and analytics in business operations, learn to design and optimize business processes apply the process lifecycle for continuous process improvement understand how process modeling supports business objectives The module primarily serves to the following competencies: Knowledge Broadening, Knowledge Deepening, Knowledge Comprehension, Academic Integrity and Professionalism
Content	 DBM1151 Digital Business Management Fundamentals of digital business management Digital strategy development and implementation Role of emerging technologies in business Digital business models and their implementation Change management for digital transformation Data-driven decision making and analytics DBM1152 Business Process Management Business process management lifecycle Basics of process modeling and process modeling languages (e.g., BPMN) Fundamentals of process modeling, process management, and concepts of process optimization using transaction systems Transformation of business process requirements in IT solutions and the relevance of integration aspects within ERP systems (e.g. SAP ERP) Key success factors for the implementation of a transaction system
Relation to other Modules	This module forms the basis for the later modules and is also incorporated into all other courses of the program, where basic knowledge of software development is required.
Literature	 DBM1151 Digital Business Management Kane, G. C. (2019). The Technology Fallacy: How People Are the Real Key to Digital Transformation. The MIT Press. Ross, J. W., Beath, C. M., & Mocker, M. (2019). Designed for Digital: How to Architect Your Business for Sustained Success. The MIT Press. Westerman, G., Bonnet, D., & McAfee, A. (2014). Leading Digital: Turning Technology into Business Transformation. Harvard Business Review Press. Schmarzo, B. (2013). Big Data: Understanding How Data Powers Big Business. Wiley. DBM1152 Business Process Management Dumas, M., La Rosa, M., Mendling, J., & Reijers, H. A. (2018). Fundamentals of Business Process Management. Springer. Weske, M. (2019). Business Process Management: Concepts, Languages, Architectures. Springer.



	Silver, B. (2017). BPMN Quick and Easy Using Method and Style: Process Mapping Guidelines and Examples Using the Business Process Modeling Standard. Cody-Cassidy Press. The latest edition in each case			
	DBM1151 Digital Business Managemen	DBM1151 Digital Business Management		
	Contact time	(1 x 15h)	15	h
	Preparation and follow-up		15	
	Case study		30	h
Workload	DBM1152 Business Process Manageme	<u>ent</u>		
	Contact time	(4 x 15h)	60	h
	Preparation and follow-up		20	h
	Case study		50	
	Exam preparation		20	h
Additional Remarks	-			
Keywords	Digital Business Management, Digital Strategy, Emerging Technologies, Change Management, Digital Transformation, Data-Driven Decision Making, Business Analytics, Digital Leadership, Process Management, Business Process Modeling, Process Lifecycle, BPMN (Business Process Model and Notation), Process Analysis, Process Efficiency, Process Improvement, Process Optimization, Business Process Management Tools, Business Process Transformation			
Last update	May 2024			



Second study section – Common core modules

GMT2300: MANAGING DIGITAL TRANSFORMATION

Managing Digital Transformat	Managing Digital Transformation	
Module ID	GMT2300	
Semester	3	
Credits	5	
SWS	4	
Frequency	Every semester	
Associated courses	GMT2301: Management in the Digital Age (2 SWS / 2 Credits) GMT2302: Digital Transformation: Technologies and Application Areas (2 SWS / 3 Credits)	
Prerequisites	BIS1060: Information Systems	
Assessment Methods and duration	PLK - 60 minutes	
Requirements for granting of credits	Successful completion of the respective examination	
Significance for the Final Grade	The whole module is included into the Bachelor final grade.	
Planned group size	max. 80 students	
Language	English	
Module Duration	1 semester	
Module Coordinator	Frauke Sander / Annabel Linsel and Thomas Schuster	
Lecturer(s)	Professors of the ABWL department, professors of the Business Information Systems program and adjunct lecturers	
Subject area / course of study	General Business Administration Business Information Systems	
Applicability in other programs	All study programs	
Pedagogical Approach	Lecture with exercises	
Objectives	The students have a fundamental understanding of the challenges in operational management processes that are becoming increasingly significant in the context of digital transformation.	



	 know design options for digital business models and are able to analyze them in a structured manner. In particular, they can develop solutions that address the challenges of digital transformation. are familiar with basic problems in operational human resources management and are able to analyze them, work out adequate decision-making criteria and develop procedures for solving problems. have a basic understanding of the concept of digital transformation, its elements, the stage of development and
	 the significance for the competitiveness of companies. know current technological basics of this development and understand how to assess the effect of selected technologies on various corporate functions and processes.
	The course builds on the basic courses on business administration and business information systems of the first study section and supplements the content taught there, particularly regarding the aspects of digital transformation.
	The contents include in detail:
	Management processes in the age of digital transformation
	Design of (digital) business models
	Design of operational functions, especially human resource management
Content	Digital transformation technologies and their application in the company
	 Overview of relevant technologies in the context of digital transformation and their fields of application in the company: Data Literacy Artificial Intelligence
	Process MiningBlockchain
	- Cloud computing
	- IT security
	Ethical issues in the digital age
Relation to other modules	Preparation for all business administration modules of the second study section.
	Appelfeller, W.; Feldmann, C.: Die digitale Transformation des Unternehmens, Springer Gabler
Literature	 Erner, M.: Management 4.0 - Unternehmensführung im digitalen Zeitalter, Springer Gabler
	 Gassmann, O; Frankenberger, K.; Choudury, M.: Geschäftsmodelle entwickeln, Hanser
	 Harwardt, M.: Management der digitalen Transformation, Springer Gabler
	Kaiser et al. (eds.): Digitale Arbeitswelt, Springer Gabler
	Mariott, S.; Glacki, S.: Entrepreneurship: Starting and Operating A Small Business, Pearson



	Nothhelfer, R., Foschiani, S., Rade, K., Trauzettel, V.: Klausurtraining für allgemeine Betriebswirtschaftslehre, De Gruyter Thomas J. P. and Achleitner, A. K.: Allgemeine
	 Thommen, JP. and Achleitner, AK.: Allgemeine BWL - Umfassende Einführung aus management-ori- entierter Sicht, Springer Gabler
	Thommen, J.P.; Achleitner, AK.: Allgemeine Betriebs- wirtschaftslehre Arbeitsbuch. Repetition questions - tasks - solutions, Springer Gabler
	 Hansen, H.R.; J. Mendling, J. and Neumann, G.: Wirt- schaftsinformatik, Berlin; Boston: De Gruyter Olden- bourg.
	 Bruhn, M. and Hadwich, K.: Artificial Intelligence in Service Management. Springer.
	Barton, T. and Müller, C.: Artificial Intelligence in Application. Springer.
	The latest edition of each
Workload	Students are expected to spend an additional 90 hours for preparation, independent literature study, exercises and elearning in addition to the 4 x 15 = 60 SWS attendance time.
Keywords	Digital transformation, management process, business models, human resource management, digital transformation technologies
Last edited	February 2023



ECO2100: INTERNATIONAL ECONOMICS

International Economics	
Module ID	ECO2100
Semester	3
Credits	5
sws	4
Frequency	Every semester
Associated courses	ECO2011 International Economics
Prerequisites	None
Assessment Methods and duration	PLK - 60 minutes
Requirements for granting of credits	Successful passing of the examination performance
Significance for the Final Grade	The module is weighted with its credits in the Bachelor final grade.
Planned group size	max. 80 students
Language	English
Module Duration	1 semester
Module Coordinator	Strotmann, Harald
Lecturer(s)	Professors of the Department of Economics
Subject area / course of study	Economics
Applicability in other programs	all business administration courses
Pedagogical Approach	Lecture
Objectives	Changes in the economy as a whole and economic policy decisions have a considerable influence on the success of individual businesses. The economic modules are designed to give students the ability to independently assess the macroeconomic framework for individual economic activity. Such knowledge is indispensable for decision-making competence in many business functions, especially for investment decisions, from which in turn other business decisions are derived. The module extends the economic analysis of closed economies to



	 include international contexts, which have become considerably more important for companies due to the globalization of value chains. In detail, the following objectives are pursued: Students grasp the close integration of the German economy into the global economy. They know the advantages and disadvantages of different exchange rate systems and the determinants of exchange rate developments. They understand the benefits of the international division of labor and the drivers of the globalization process. They are familiar with the most important international organizations (IMF, World Bank, WTO, etc.) and can assess their importance for international economic relations.
Content	 Balance of Payments Analysis Currency theory and policy international trade in goods and services international capital flows Effects of globalization on industrialized and developing countries international regulatory framework (global governance)
Relation to other modules	The economic analysis of real and monetary aspects of international economic relations is relevant for all business administration courses, as globalization now touches all industries, company sizes and operational functions.
Literature	 Appleyard, Dennis R./Field, Alfred J./Cobb, Steven L., International Economics Feenstra, Robert C./Taylor, Alan M., International Economics. Krugman, Paul/Obstfeld, Maurice, International Economics Mankiw, Nicholas G./Taylor, Mark P., Basic Economics. Wienert, Helmut, Grundzüge der Volkswirtschaftslehre, Vol. 2: Makroökonomie
Workload	The lecture requires 4 x 15 SWS = 60 SWS attendance time. In addition, approx. 90 h are required for independent literature study, exercises, e-learning and exam preparation.
Additional Remarks	Successful completion of the module is a prerequisite for the modules THE4999 of the seventh semester (except for the degree programs "Business Administration / International Business" and "Business Administration / International Marketing"). The module is also offered in English as part of the International Study Program. Credits earned in English will count toward the existing credit requirement in English.
Keywords	International economics, economics, foreign trade, economics
Last edited	August 2019



AQM2060: INFERENTIAL STATISTICS AND QUANTITATIVE ANALYTICS

Inferential Statistics and Quantitative Analytics	
Module ID	AQM2060
Semester	3
Credits	5
sws	4
Frequency	Every semester
Associated courses	AQM2061 Inferential Statistics (3 credits). AQM2062 Quantitative Analytics (2 credits)
Prerequisites	None
Assessment Methods and duration	Inferential Statistics: PLK - 60 minutes Quantitative Analytics: PLR/PLH/PLL - 60 minutes
Requirements for granting of	Inferential Statistics: Successful passing of the examination performance
credits	Quantitative Analytics: Successful passing of the examination performance
Significance for the Final Grade	The module is weighted with its credits in the Bachelor final grade.
Planned group size	Fundamentals of inductive statistics: max. 200 students. Operations Research: max. 100 students
Language	English
Module Duration	1 semester
Module Coordinator	Kuhlenkasper, Torben
Lecturers	Professors of the Department of Quantitative Methods
Subject area	Quantitative methods
Applicability in other modules / courses of study	All business administration courses, except BBA / International Marketing
Pedagogical Approach	Lectures with exercises
Objectives	Inferential Statistics
	The students



	 understand simple procedures of inductive statistics and can implement them with R; master the basic rules of probability theory; know the concepts of probability distributions (chisquare, binomial, hypergeometric, Poisson, Student, normal and F-distributions) and can apply them to economic issues; can calculate and interpret confidence intervals for means, variance and proportions; can apply basic nonparametric tests; can perform and interpret parametric one-sample and two-sample T-tests; can perform and interpret the non-parametric chi-square test. Quantitative Analytics The students
	 can represent course-specific problems in quantitative models, can solve course-specific problems independently using an algorithmic approach, know computer-assisted solutions to problems specific to the course of study.
Content	Students will gain insight into probability theory, parameter estimation procedures, the various types of frequency procedures, hypothesis testing, and interpretation of the major parametric and non-parametric testing procedures. In the Quantitative Analytics course, the methods of Mathematical Optimization are supplemented by applied methods of business planning, whereby the respective topic focus depends on the composition of the respective platoon. Topics include transportation and location planning, simulation and queuing theory, portfolio approaches to strategy evaluation, methods for investment and financing planning, game theory for understanding cooperative and non-cooperative (economic) behaviour, etc. Emphasis is placed on demonstrating the solution methods on business problems and on their economic interpretation. For this purpose, a number of didactically useful examples from the planning practice of the respective functional areas of business administration will be discussed.
Relation to other modules	Methodological foundations are laid for the subjects of computer-aided management methods as well as for individual aspects of business administration of the second study section and the respective specialization.
Literature	 Inferential Statistics Handl, A., Kuhlenkasper, T.: Einführung in die Statistik – Theorie und Praxis mit R, Heidelberg. Bortz, J.: Statistik für Human- und Sozialwissenschaftler, Berlin et al. Fahrmeier, L.: Statistics. Der Weg zur Datenanalyse, Berlin et al. Zöfel, P.: Statistics for Social Scientists, Munich.



	 Schwarze, J.: Statistik 1, Statistik 2 und Aufgabensammlung, Berlin Anderson, D. R., Sweeney, D.J., Williams T.A.: Statistics for Business and Economics, Mason Quantitative Analytics Runzheimer, B., Cleff, T., Schäfer, W.: Operations Research Band 1: Lineare Planungsrechnung und Netzplanchnik, Wiesbaden Gohout, W.: Operations Research, Munich, Vienna. Domschke, W., Drexl, A.: Introduction to Operations Research, Berlin et al. Homburg, C.: Quantitative Betriebswirtschaftslehre, Wiesbaden Hillier, F. S., Lieberman, G. J.: Introduction to Operations Research, Boston u.a. Taha, H. A.: An Introduction to Operations Research, New Jersey Thonemann, U.: Operations Management, Munich
Workload	Inferential Statistics: 2 x 15 SWS = 30 SWS attendance time, additionally approx. 60 h for preparation, independent literature study, exercises and internet/e-learning Quantitative Analytics 2 x 15 SWS = 60 SWS attendance time, additional approx. 30 h for preparation, independent literature study, exercises and internet/e-learning
Additional Remarks	Successful completion of the module is a prerequisite for the module THE4999. The course Inferential Statistics is also offered in the winter semester as part of the International Study Program as an English-language fast track with 4 SWS/week and an early exam before Christmas. If this course is held in English, a successful completion of 3 credits on the existing credit requirement in English is suggested.
Keywords	Linear programming (simplex), Corporate planning, Implementation of planning calculation, hypothesis testing, probability distributions, confidence intervals
Last edited	April 2023



ECO2110: ADVANCED STUDIES AND APPLICATIONS IN ECONOMICS

Advanced Studies and Applic	cations in Economics
Module ID	ECO2110
Semester	3 + 4
Credits	5
SWS	3
Frequency	Every semester
Associated Courses	Semester 3: ECO2111 Scientific Writing; Media Competence and Information Research Semester 4: ECO2112 Seminar in Economic Policy
Prerequisites	Scientific Writing; Media Competence and Information Research: None. Seminar in Economic Policy: passing the PVL Scientific work; media competence, information acquisition/research.
Assessment Methods and duration	PVL + PLH + PLR
Requirements for granting of credits	For both courses: successful passing of the examinations in each case
Significance for the Final Grade	The module is included in the Bachelor's final grade with a weighting of 5 credits.
Planned group size	Scientific Writing; Media Competence and Information Research: plenary session (up to 350 participants) with tutorial exercises. Seminar in Economic Policy: max. 24 students
Language	English
Module Duration	2 semesters
Module Coordinator	Strotmann, Harald
Lecturers	Professors of the Department of Economics and Lecturers
Subject area / course of study	Economics
Applicability in other modules / courses of study	All business administration degree programs with the exception of the "BBA / International Marketing" degree program
Pedagogical Approach	Lecture/Workshop + Seminar

Objectives	Changes in the economy as a whole and economic policy decisions have a considerable influence on the success of individual businesses. The economic modules are designed to give students the ability to independently assess the macroeconomic framework for individual economic activity. Such knowledge is indispensable for decision-making competence in many business management functions, especially for investment decisions, from which in turn other business management decisions are derived. The module consolidates the knowledge acquired so far by independently applying economic methods to a selected economic problem while observing the subject-specific rules of scientific work. In detail, the following objectives are pursued: • You demonstrate mastery of the techniques of scientific work. You are competent in dealing with the media and are familiar with the targeted research, processing, preparation and communication of information. • You will independently apply your knowledge of economics to economic policy issues in the Economic Policy Seminar.
Content	Scientific Writing (acquisition of the basics in the lecture and guided application in the tutorial exercises): Preparatory work for the seminar and final thesis Literature research for the seminar and final paper Literature acquisition, assessment and management Discussions with the supervisor and other experts Structuring the seminar paper and final paper Manuscript preparation Citation in a scientific paper Manuscript Control Seminar in Economic Policy (term paper on a selected economic issue and presentation and discussion of the central results in the seminar), e.g. from the following areas: Labor market policy and theory Poverty and development Economics of Education Demography and economic development Immigration in Germany and Europe Energy policy in Germany and Europe Financial market crises and banking supervision Research and innovation policy Monetary policy and theory Globalization and competition between locations Resource use and sustainability Sports Economics Entrepreneurship and Corporate Governance Behavioural Economics Monetary and fiscal policy



Relation to other modules	The Seminar in Economic Policy builds on the three preceding Economics modules. The techniques of scientific work practiced in the Economic Policy Seminar through intensive supervision contribute significantly to the acquisition of methodological competence and the preparation of a qualified Bachelor thesis.
Literature	Brink, Alfred, Anfertigung wissenschaftlicher Arbeiten. A process-oriented guide to the preparation of bachelor's, master's and diploma theses. Franck, Norbert/Stary, Joachim (eds.), The Technique of Scientific Work. A practical guide Theisen, Manuel R., ABC des wissenschaftlichen Arbeitens. Successful in school, university and career In addition, we recommend that you take a look at the homepage of the Department of Economics, where you will find further documents and literature references in addition to the faculty's guidelines for writing papers in economics under Studium/Wissenschaftliches Arbeiten.
	Seminar in Economic Policy: depending on the specific seminar topic
Workload	The module requires 3 SWS x 15 = 45 SWS attendance time. Of these, 1 SWS x 15 are allocated to the course "Scientific Writing" (1 credit) and 2 SWS x 15 to the course "Seminar in Economic Policy" (4 credits). In addition, approx. 105 h are required for preparation, independent literature study, preparation of the term paper and preparation of the seminar presentation. Of these, 15 h are allotted to the course "Scientific Writing" and 90 h to the course "Seminar in Economic Policy".
	Successful completion of the module is a prerequisite exam for the module THE4999.
Additional Remarks	The competences taught in the course "Scientific Writing; Media Competence and Information Recherche" will be examined separately by means of a preliminary examination; without passing this examination, students will not be admitted to the seminar.
	Registration for the Seminar in Economic Policy and the assignment of topics takes place in the pre-semester. The majority of the term paper is written during the semester break.
	The Seminar in Economic Policy is also offered in English. Seminar credits earned in English will count toward the existing 5 credit requirement in English.
Keywords	Scientific Writing, economic policy seminar, seminar, economics
Last edited	August 2019



GMT2350: FINANCIAL ACCOUNTING AND FINANCIAL MANAGEMENT

Financial Accounting and Financial	ancial Management
Module ID	GMT2350
Semester	4 (but see notes)
Credits	7
sws	6
Frequency	Every semester
Associated courses	GMT2351 Financial Accounting and Financial Management I (3 credits) GMT2352 Financial Accounting and Financial Management II (4 credits)
Prerequisites	None
Assessment Methods and duration	PLK - 90 minutes
Requirements for granting of credits	Successful passing of the examination performance
Significance for the Final Grade	The module is weighted with its credits in the Bachelor final grade.
Planned group size	max. 80 students
Language	English
Module Duration	1 semester
Module Coordinator	Eichner, Korbinian
Lecturers	Professors of the ABWL Department
Subject area / course of study	General business administration
Applicability in other modules / courses of study	All study programs
Pedagogical Approach	Lecture with exercises
Objectives	The students • know the legal and business fundamentals of the preparation of commercial and international financial statements and • can assess the informative value of the financial statements.



	 can analyze the parts of a financial statement and assess and propose accounting policy measures. know the essential criteria for assessing the profitability of operational investments and can apply, evaluate and compare methods of investment appraisal. know the essential sources of financing of the company. They can assess the various sources in terms of their prerequisites and their advantages and compare them qualitatively and quantitatively in terms of their effects on the company's results. know the main instruments of credit protection and can determine the capital requirements and debt servicing capacity of a company.
Content	 Fundamentals of the annual financial statements (legal basis, tasks and elements, recognition and measurement principles) Balance Sheet, Income Statement, Notes and Management Report Balance sheet analysis and balance sheet policy Operational investment management Financial planning and capital structure design External and internal financing Credit protection, debt service capability Fundamentals of international accounting (IAS / IFRS)
Relation to other modules	Builds on the business administration modules of the first study section
Literature	 Bacher. U.: Bilanzierung, Investition und Finanzierung, nwb-Verlag Coenenberg, A.: Jahresabschluss und Jahresabschlussanalyse, Verlag Moderne Industrie Däumler, KD.: Betriebliche Finanzwirtschaft, Verlag NWB Hillier, D. et al, Corporate Finance, McGraw-Hill. Meyer, C.: Bilanzierung nach Handels- und Steuerrecht, Verlag NWB Nothhelfer, R.: Financial Accounting, De Gruyter Oldenbourg Nothhelfer, R. et al: Übungsbuch zur Finanzwirtschaft, Oldenbourg Olfert/Reichel: Financing, Friedrich Kiehl Verlag Perridon, L. and Steiner, M.: Finanzwirtschaft der Unternehmung, Verlag Vahlen Schildbach/Stobbe/Brösel: Der handelsrechtliche Jahresabschluss, Sternfels Verlag Wissenschaft und Praxis Zantow, R.: Financing, Pearson
Workload	6 x 15 = 90 SWS attendance time still 120 h for preparation, independent literature study, exercises and accompanying work
Additional Remarks	The module is offered for the study programs "Business Administration / Taxes and Auditing" and "Business Administration / International Marketing" in semesters 2 +3, for the study program "Business Administration / Controlling, Finance and Accounting" it is already offered in semester 3.



	Successful completion of the module is a prerequisite for the THE4999 module.
	The module is also offered in English at least once a year in the summer semester as part of the International Study Program. The credits achieved in English will be counted towards the existing credit requirement in English.
Keywords	Accounting, Financial Management, Financing Investment, Financial Management
Last edited	March 2023



GMT3100: BUSINESS MANAGEMENT

Business Management	
Module ID	GMT3100
Semester	5 and 6
Credits	5
SWS	4
Frequency	Every semester
Associated courses	Semester 5: GMT3025 Management Simulation (2 credits) Semester 6: GMT3013 Strategic Management (3 credits)
Prerequisites	Completed first stage of studies
Assessment Methods and duration	Management Simulation: UPL Strategic Management: PLK - 60 minutes
Requirements for granting of credits	Management Simulation: successful passing of the examination performance Strategic Management: successful passing of the examination performance
Significance for the Final Grade	The ungraded examination performance (Management Simulation) is not included in any grade. The remainder of the module is included in the Bachelor's final grade with a weighting of 3 credits.
Planned group size	Management Simulation: max. 25 students Strategic Management: max. 80 students
Language	Management Simulation: English Strategic Management: English
Module Duration	2 semesters
Module Coordinator	Foschiani, Stefan; Terporten, Michael
Lecturer(s)	Professors of the ABWL Department
Subject area / course of study	General Business Administration
Applicability in other modules / courses of study	All degree programs with the exception of BBA/International Marketing
Pedagogical Approach	Management Simulation: Business game Strategic Management: Lecture with case study
Objectives	The students



	 understand the process of developing appropriate business objectives and managing their implementation in practice (management - process). Understand the company as a customer-oriented value creation process know methods for its analysis and improvement. are familiar with various management principles, techniques and models and can assess and apply their advantages and disadvantages as well as their impact on the management and results of a company. have a holistic view of a commercially managed company and can assess the consequences of business decisions on the company's results. know basic strategies for increasing corporate value and know how to apply these to corporate functions. possess skills for the goal-oriented management of a company (especially business planning processes), as well as for dealing with team conflicts and complex decision-making situations that have to be mastered under time pressure and uncertain future expectations.
Content	This course "Corporate Governance" considers the strategic problems that a company faces and the current explanatory principles and tools that lead to a solution. The main topics are: Introduction to Strategic Management, the strategic options, the operational audit, the analysis of the performance chain, benchmarking, the analysis of the industry, competitive analysis, evaluation of the strategic position, the forecast of the future as well as the corporate culture and mission statement.
Relation to other modules	Builds on the previous business administration modules.
Literature	 A participant manual is provided for the Management Simulation. Strategic Management: Barney / Hesterly (2012): Strategic Management and Competitive Advantage, Pearson Bea, F.X./Haas, J.: Strategisches Management, Verlag Lucius & Lucius Grant, R. M., "Contemporary Strategy Analysis", Blackwell Publishing Johnson, G./ Whittington, R./Scholes, K./ Angwin, D./ Regner, P. (2013): Exploring Corporate Strategy, Pearson Johnson, G. und Scholes, K. and Whittington, R., Exploring Corporate Strategy 8th Edition, Prentice Hall Korndörfer, W.: Unternehmensführungslehre, Gabler Kotler / Berger / Bickhoff (2010): The Quintessence of Strategic Management, Berlin / Heidelberg Mintzberg, H./Lampel, J./Quinn, J./Ghoshal, S.: The Strategy Process, Prentice Hall. Steinmann, H./Schreyögg, G.: Management, Schäffer-Poeschel



	Welge, M. and Al-Laham, A.: Strategic Management: Fundamentals, Process, Implementation, Gabler - Verlag Latest edition in each case
Workload	In addition to the 4 x 15 = 60 SWS attendance time (over 2 semesters), students are expected to spend an additional 90 h for preparation, independent literature study, exercises and accompanying work.
Additional Remarks	The Management Simulation takes place as part of the practical semester of the degree programs as a block event during the lecture-free period. It takes place in small groups, so that number of participants is limited. Advance registration is required. The sub-performance "Strategic Management" can also be completed as part of an equivalent performance during a semester of study abroad.
	The module is also offered in English as part of the International Study Program; participation restrictions apply to the Business Simulation sub-credit. Credits earned in English will count towards the existing credit requirement in English. Please note that not every semester an English-language course is offered and that the number of English-language seminar places is limited in any case.
Keywords	Corporate Governance, Management
Last edited	April 2023



GMT3400: MANAGEMENT IN SPECIFIC INDUSTRIES

Management in Specific Industries	
Module ID	GMT3400
Semester	6
Credits	6
sws	5
Frequency	Every semester
Associated courses	 GMT3404 Business Administration of Industry in the Digital Age GMT3405 Business Administration of Banks in the Digital Age GMT3406 Business Administration of Mobility in the Digital Age GMT3424 Retail Management in the Digital Age (in English) GMT3425 International Management in the Digital Age (in English) GMT3426 Investment Banking, Corporate Finance and Digital Skills (in English) IDS3010 Interdisciplinary Studies Deviating/additional offers are possible.
Prerequisites	Completed first stage of studies
Assessment Methods and duration	PLK - 90 minutes (for IDS3010 depending on the courses taken by the Faculty of Engineering).
Requirements for granting of credits	Successful passing of the exam
Significance for the Final Grade	The module is weighted with its credits in the Bachelor final grade.
Planned group size	max. 80 students
Language	English
Module Duration	1 semester
Module Coordinator	Sander, Frauke
Lecturers	Professors of the ABWL Department



Subject area / course of study	General Business Administration
Applicability in other modules / courses of study	All degree programs with the exception of BBA/International Marketing
Pedagogical Approach	Lecture with exercises
	The students can apply the so far acquired knowledge and skills to the management of a company in a specific industry (such as manufacturing, retail, banking). They know the special conditions and problems of doing business in the respective industry and can therefore also take on initial projects and management tasks relatively quickly.
	Business Administration of Industry in the Digital Age The students
	 can apply the knowledge and skills acquired in the previous business administration modules to the management of a manufacturing company. are familiar with the special conditions and problems of doing business in this industry and are therefore able to take on their first professional and personal management tasks relatively soon.
	Business Administration of Banks in the Digital Age The students
Objectives	 can apply the knowledge and skills acquired in previous business studies to the management of a financial institution. know the investment objectives and can assess and evaluate all common forms of investments (deposits, bonds, shares, investment funds, derivatives). can apply a bank's credit services to companies and their accounting systems. know the essential instruments of loan protection/credit risk mitigation.
	 can determine a company's debt service capacity and thus arrive at a sound credit assessment. are familiar with the interdependencies and the special conditions of the banking industry and can therefore take on their first professional and personal management tasks in this field relatively quickly.
	Business Administration of Mobility in the Digital Age
	 can apply the knowledge and skills acquired in the previous business administration modules. acquire knowledge about the special conditions, problems and technical terms of economic work in companies of the mobility industry (especially the automotive industry) are proficient in methods of R&D management, production control and logistics



 and therefore have the qualifications to take on their first professional and personal management tasks relatively quickly.

Retail Management in the Digital Age (English only):

The students

- know the institutional characteristics of retail companies (retailers are service providers),
- are familiar with typical tasks and problems in retail companies, such as site selection, customer-oriented product range development, brand policy, employee management, especially in sales,
- obtain knowledge in the management of commercial enterprises and service enterprises

<u>International Management in the Digital Age (English only):</u>

The students:

- know the possible forms of the internationalization process of a company and can work successfully in an international environment.
- are able, based on the knowledge and skills acquired, to market products and services internationally and to handle the necessary financing processes accordingly.
- are familiar with the special conditions and problems of internationally operating companies and can therefore take on their first professional and personal management tasks in this area relatively quickly.

Investment Banking, Corporate Finance and Digital Skills

Upon completion of the module, students will possess:

- An overview of the objectives and main subject areas of corporate finance.
- An understanding of how investment banking can assist in achieving these objectives,
- A solid understanding of how to identify and evaluate value enhancement potential of capital projects,
- the ability to approximate the value of a company from an income, cost and market value perspective,
- An in-depth understanding of long-term corporate finance with equity and debt instruments,
- An understanding of how a company's capital structure decision affects its enterprise value.
- In-depth knowledge of specialized areas of Corporate Finance Mergers & Acquisitions, Corporate Restructurings, LBOs and Corporate Governance.

Interdisciplinary studies

The students

- broaden their horizons by taking courses offered by the faculty of engineering
- know technical/IT framework conditions of the industry

Special business administration:

Business Administration of Industry in the Digital Age

The lecture focuses on the topics "Research and Development in Manufacturing" as a key function for future competitiveness, as well as production and logistics in the context of increasing globalization.

Business Administration of Banks in the Digital Age

This lecture covers, among other things, the special features of credit institutions institutions and their regulations as well as the banking system in Germany. In addition, the various forms of investments (deposits, bonds, shares, etc.) and the credit business (forms of credit, loan expiration, security, credit-wothiness) are dealt with, with particular emphasis on typical banking risks, especially interest rate and credit risk.

Business Administration of Mobility in the Digital Age

In the first part, Prof. Dr. Haugrund deals with topics relating to the beginning of the value chain in the automotive industry. Starting with fundamental questions about future global mobility, areas of responsibility for strategic R&D in the automotive industry are mapped out. Subsequently, questions of R&D management are dealt with in detail. Selected focal points of the areas of production and logistics at suppliers as well as at OEMs round off the first part of the lecture. Building on this, Prof. Dr. Terporten focuses on the subsequent part of the value chain such as sales and aftersales organizations. The discussed topics go beyond the automotive industry and shed light on the challenges of mobility management as a whole.

Retail Management in the Digital Age (English only):

This course covers the fundamentals of retail management. The functions, trade marketing, procurement and logistics, employee management and corporate management are deepened specifically for this industry. Practical examples and projects are used to work out specific tasks in retail companies.

The course is aimed at students who wish to work professionally in a retail company. It is also aimed at students who will work in sales and marketing in companies whose customers are trading companies. Due to the proximity of retail services to services, you will also gain insight into the specific characteristics of service companies.

International Management in the Digital Age (English only):

This lecture deals with the internationalization process of the company, international marketing and the legal framework of foreign activities.

Investment Banking, Corporate Finance and Digital Skills

In the course Prof. Dr. Eichner deals with the following topics: Principles of Investment Banking, Principles of Corporate Finance, Capital Budgeting and Value Creation, Corporate Valu-

Content



	ation, Capital Structure and Policy Structure, Mergers & Acquisitions and Capital Restructuring, LBOs and Corporate Governance. The Investment Banking and Corporate Finance course aims to provide students with analytical skills to make corporate finance decisions in practice from a corporate value enhancement perspective. Interdisciplinary studies The contents taught depend on the chosen course: For the module, different modules predefined on the part of the department "General Business Administration" or courses of other faculties can be provided.
Relation to other modules	Builds on the previous business administration modules.
Literature	Depending on the special business administration offered, latest edition in each case: Business Administration of Industry in the Digital Age Günter Specht/Christoph Beckmann/Jenny Amelingmeyer: R&D Management, Competence in Innovation Management Dietmar Vahs/Ralf Burmester: Innovationsmanagement, Von der Produktidee zur erfolgreichen Vermarktung, Edited by Bernd P. Pietschmann and Dietmar Vahs, Klaus Brockhoff, Research and Development, Planning and Control Business Administration of Banks in the Digital Age Bacher, U.: Bank Management, Hartung-Gorre Becker/Peppmeier: Banking Management, Ludwigshafen Hartmann-Wendels/Pfingsten/Weber: Bankbetriebslehre, Springer Steiner/Bruns: Securities Management, Stuttgart Business Administration of Mobility in the Digital Age Günter Specht/Christoph Beckmann/Jenny Amelingmeyer: R&D Management, Competence in Innovation Management Dietmar Vahs/Ralf Burmester: Innovationsmanagement, Von der Produktidee zur erfolgreichen Vermarktung, Edited by Bernd P. Pietschmann and Dietmar Vahs Klaus Brockhoff: Research and development, planning and control



- Salima Sheila Douven: Brand effects in the automotive supply industry: A cross-cultural comparison considering alternative marketing orientations by Salima Sheila Douven, Wiesbaden.
- Hans G Brunn: Globalization and Product Life Cycles in the Automotive Sector: Methods, Concepts and Results from an Econometric Perspective, 2009.
- Andreas Crone and Henning Werner: Crisis Management in the Automotive Supply Industry, Berlin 2008
- Dusan Gruden: Environmental Protection in the Automotive Industry: Engine, Fuels, Recycling, 2008
- Oliver Kertész and Klaus M. Miller: Brand Equity in the Automotive Industry: Willingness to Recommend and Price Premium Acceptance, 2007
- Helmut Becker: Ausgebremst: Wie die Autoindustrie Deutschland in die Krise f\u00e4hrt, 2007
- Hannes Brachat, Willi Dietz, and Stefan Reindl: Fundamentals of Automotive Economics, 2005
- Becker, H. 2007, Auf Crashkurs. Automobilindustrie im globalen Verdrängungswettbewerb, Berlin Heidelberg.
- Ebel, B. (Ed.): Automotive Management. Strategie und Marketing in der Automobilwirtschaft; mit 34 Tabellen, Berlin 2004.

Retail Management in the Digital Age (English only):

- Berman, Berry/Evans, Joel R., Retail Management: A Strategic Approach, Upper Saddle River (NJ)
- Dunne, Patrick/ Carver, James/ Lusch, Robert F.: Retailing, Thomson South-Western
- Levy, Michael/Weitz, Barton A./Grewal, Dhruv: Retailing Management, 9th ed. McGraw-Hill
- MunichMüller-Hagedorn, Lothar (1998), Der Handel, Stuttgart
- Tietz, Bruno (1993), The Trading Company, Munich

International Management in the Digital Age (English only):

- Czinkota, M.R., Ronkainen, I.A. et. al, International Business.
- Griffin, R.W., Pustay, M.W., International Business.
- Hollensen, S. (2014): Global Marketing, Pearson
- Johannson, J.J., Global Marketing

Investment Banking, Corporate Finance and Digital Skills

- Berk, J./DeMarzo, P.: Corporate Finance, Addison Wesley.
- Brealey, R./Myers, S./Allen, F.: Principles of Corporate Finance, McGraw-Hill.
- Damodaran, A.: Applied Corporate Finance, Wiley,
- Damodaran, A.: Investment Valuation, Wiley.
- Häcker, J./Ernst, D.: Applied International Corporate Finance, Vahlen.
- Ross, S./Westerfield, R./Jaffe, J.: Corporate Finance, McGraw-Hill.



	Vernimmen, P./Quiry, P./Dallocchio, M./Le Fur, Y./Salvi, A.: Corporate Finance - Theory and Practice, Wiley.
	Interdisciplinary studies Depending on the specific subject chosen
Workload	5 x 15 = 75 SWS contact hours and 105 h for preparation, independent literature study, exercises and accompanying work
Additional Remarks	At least three elective courses are offered each semester, at least one of which is in English.
	The module may also be taken as part of an equivalent performance during a semester of study abroad.
	English language electives are offered as part of the International Study Program. Credits earned in English will count toward the existing credit requirement in English.
Keywords	Retail Banking, International Business Simulation
Last edited	April 2023



GMT4100: ADVANCED TOPICS IN MANAGEMENT

Advanced Topics in Management	
Module ID	GMT4100
Semester	6
Credits	5
SWS	2
Frequency	Every semester
Associated courses	GMT4101 Management Seminar
Prerequisites	Completed first stage of studies
Assessment Methods and duration	PLR/PLH/PLP/PLM
Requirements for granting of credits	Successful completion of the examination
Significance for the Final Grade	The module is weighted with its credits in the Bachelor final grade.
Planned group size	max. 24 students
Language	English
Module Coordinator	Nothhelfer, Robert
Lecturers	Professors of the ABWL department and lecturers
Subject area / course of study	General Business Administration
Applicability in other modules / courses of study	All business degree programs, except BBA/Digital Enterprise Management.
Pedagogical Approach	Seminar teaching
Objectives	Within a short period of time, students are able to familiarize themselves with specific, complex economic issues, penetrate and analyze them, and come up with their own solutions. They understand how to summarize and professionally present the solutions in writing, both scientifically and for practical implementation.
Content	Selected scientific and practice-oriented topics from the field of business administration
Relation to other modules	Builds on the courses of the previous business administration modules.



Literature	Depending on the topics offered in each case
Workload	2 x 15 = 30 SWS attendance time and 120 h for preparation, independent literature study, exercises and accompanying work (esp. scientific paper and presentation).
	The module takes place in small groups, there are limitations on the number of participants. Pre-registration is required. Immediately following pre-registration, attendance at a kick-off event is mandatory.
	There are two timed formats for the module:
Additional Remarks	 The module is offered in the 7th semester as a block within the first 6 or 7 weeks of lectures. The topics are assigned at the end of the lecture period of the previous semester, so that the majority of the homework can be completed during the lecture-free period. In addition, the seminar is also offered in the last half of the lecture period, in which case registration for this seminar takes place at the beginning of the lecture period. The target group of this seminar format are students who are not yet back at the university at the end of the pre-semester, e.g. due to a semester abroad or internship.
	The module can also be taken as part of an equivalent performance during a semester of study abroad. If the seminar performance is provided in English, the credits will be counted towards the existing credit requirement in English. Please note that English-language courses are not offered every semester and that the number of English-language seminar places is limited in any case.
Keywords	Corporate Governance, Management
Last edited	April 2023



ESR3100: ETHICS AND SOCIAL RESPONSIBILITY

Ethics and Social Responsibility (electives)	
Module ID	ESR3100
Semester	6
Credits	5
sws	4
Frequency	Every semester
Associated Courses	 Electives: ESR3101 Business Ethics: Economic and Social History Perspectives. ESR3102 Business Ethics (in English) ESR3103 Environmental Management ESR3104 Sustainable Development ESR3105 Sustainable Development (in English) ESR3106 Ethics, Business and Society (in English) ESR3107 Corporate Environmental and Sustainable Management (in English) ESR3108 Ethics, Business and Society (Other / alternative events possible)
Prerequisites	Completed first stage of studies
Assessment Methods and duration	PLK/PLR/PLH/PLM; PLK - 60 minutes
Requirements for granting of credits	Successful completion of the examination
Significance for the Final Grade	The module is weighted with its credits in the Bachelor final grade.
Planned group size	max. 80 students
Language	English
Module Duration	1 semester
Module Coordinator	Volkert, Jürgen
Lecturers	Professors of the Faculty of Economics and Law, especially from the Department of Economics
Subject area	Economics



Applicability in other modules / courses of study	All Business Administration Courses
Pedagogical Approach	Lecture with exercises
Objectives	Expansion of the economic value perspective to include ethical and social perspectives as well as their consequences for the increasingly significant social responsibility of companies in - globalization. The aim is to impart fundamental knowledge and skills for dealing with different demands on companies as well as approaches for expanded value and conflict management.
Content	The course is offered as an elective with the aforementioned specializations. All specializations deal with questions of corporate responsibility against the background of different value concepts and social demands in different cultures. The resulting restrictions and conflicts for entrepreneurial action as well as different alternatives for their goal-oriented consideration are discussed.
	In the specialization ESR3102/ESR3106/ESR3108, the importance of different values and norms for companies and society are discussed. The focus is on the goal-oriented handling of conflicts and dilemma situations with the help of ethics management systems, while at the same time clarifying the importance of order and individual ethics. Furthermore, special ethical challenges and strategies for the perception of corporate responsibility in globalization are discussed.
	In the specialization ESR3103/ESR3107, the consideration of ecological requirements in entrepreneurial activities is dealt with from an operational perspective. The focus is on sustainable development and the consequences this has for the economy. Conflicts of objectives are highlighted and solution strategies as well as concrete decision-making instruments are presented as examples.
	The specialization ESR3104/3105 provides insights into socio- economic processes and challenges regarding the need for sustainable development. The focus of the course is on the economic and social aspects of sustainability and their interre- lationships. Students will understand the opportunities, chal- lenges and responsibilities that arise from good governance, from society, from firms and from the national economy. An- other goal is the competent handling of globalization criticism.
	The specialization "ESR3101 addresses social and economic conflicts from a historical context. It shows long-term economic and social structures in society, which are important for understanding today's economic and socio-political conflicts and an economic and social policy based on them.
Workload	Contact time 4 x 15 = 60 SWS and self-study to the extent of 90 h
Additional Remarks	The module may also be taken as part of an equivalent performance during a semester of study abroad.



	English language modules are also offered in English as part of the International Study Program. Seminar credits earned in English will count toward the existing credit requirement in Eng- lish.
Last edited	August 2019



INS3020: INTERNSHIP SEMESTER

Internship Semester	
Module ID	INS3020
Semester	5
Credits	28
SWS	2
Frequency	Every semester
Associated courses	Internship (26 credits) Accompanying course of the internship (2 credits)
	Registration for the internship semester takes place ex officio at the beginning of the 4th semester of study.
Associated Courses	If the first study section has not been completed at the begin- ning of the 4th semester, the internship semester will be com- pulsorily postponed and cannot be started in the 5th semester.
Prerequisites	Accompanying lecture to the practical semester: UPL / Participation
Assessment Methods and duration	The Internship semester must be evidenced by an internship contract of at least 100 working days (after adjustment for vacation/illness) and internship reports.
	The Accompanying course of the internship for the practical semester requires a successful passing of the examination performance and participation
Requirements for granting of credits	The module does not count towards the bachelor's final grade.
Diamad ways sine	Internship: not applicable
Planned group size	Accompanying course of the internship: max. 80 students
Language	Englisch
Module Duration	1 semester
Module Coordinator	Depending on the course of study
Lecturers	Professors of the university
Subject area	Respective study program
Applicability in other modules / courses of study	Depending on the course of study



Pedagogical Approach	Seminar-based teaching (Accompanying lecture)
Prerequisite modules / courses	Completed first stage of studies (=entry requirement for internship semester)
Objectives	Ilearn to navigate the environment of their internship site are able to apply the skills they have acquired during their previous studies get to know the fields of application of the previous study contents and expand their knowledge
Content	The internship semester must be completed in an occupational field appropriate to the occupational field of the respective degree program. An internship abroad is possible.
Literature	None
Workload	The internship semester consists of 26 credits and requires a period of at least 100 working days in the internship. The accompanying block course requires a total of 30 SWS attendance time. In addition, approx. 30 h are required for their preparation.
Additional Remarks	The internship semester can be postponed upon request via the respective internship semester supervisor in the degree program, e.g. in order to bring forward a semester of study abroad. An internship abroad is not recognized under the International Study Program and cannot be counted toward the existing credit requirement in English.
Last edited	August 2019



EXA4999: FINAL EXAMINATIONS

Final Examinations	
Module ID	EXA4999
Semester	7
Credits	5
sws	2
Frequency	Every semester
Accepted Courses	Scholarly Colloquium (2 credits)
Associated Courses	Oral Examination (oral exam) (3 credits)
Prerequisites	Successful completion of the first study section
Frerequisites	Enrollment is only possible from the 6th semester onwards.
Assessment Methods and duration	COL4999 Scholarly Colloquium: UPL / Attendance.
Assessment Methods and duration	ORA4999 Bachelor Examination: PLM
Poquiroments for granting of	Scholarly Colloquium: Participation
Requirements for granting of credits	Bachelor examination: successful passing of the examination performance
Significance for the Final Grade	The Scholarly Colloquium does not count towards the bachelor's degree grade, while the oral bachelor's examination counts towards the bachelor's degree grade with a weighting of 3 credits.
Planned group size	max. 3 students
	Scholarly Colloquium: English
Language	Bachelor Examination (oral exam): English
Module Duration	1 semester
Module Coordinator	Respective program director
Lecturer(s)	All courses and fields of study
Subject area / course of study	Respective dean of studies/program director
Applicability in other programs	All business administration courses
Pedagogical Approach	Scholarly Colloquium: teaching talk



Objectives	Scholarly Colloquium: The students discuss the essential contents of the planned bachelor thesis with the first reviewer are able to present the most important aspects of the chosen topic, engaging in critical discussion. structure the chosen topic in a meaningful way Oral Examination: The students are able to answer questions regarding the content of their major in particular
Content	Scholarly Colloquium: Presentation of the contents of the planned or just started bachelor thesis and its critical discussion with the first examiner Oral Examination: Reflection, esp. of the contents of the study program emphasis
Relation to other modules	Final event for the modules of the respective study program
Literature	Depending on the course of study and topic of the final thesis
Workload	Scientific colloquium: 60h Bachelor Examination (oral exam): 90 h for preparation / self-study
Additional Remarks	The oral Bachelor examination requires separate registration with the examination office. The "Scholarly Colloquium" can also be completed in English. However, credits earned in English will only count towards the existing credit requirement if the thesis was also written in English.
Keywords	Thesis preparation, final exam
Last edited	August 2019



THE4999: THESIS

Thesis		
Module ID	THE4999	
Semester	7	
sws	None	
Frequency	Anytime	
Associated course	- (Thesis)	
Prerequisites	Completed first study section and Completion of coursework in the 3rd and 4th semesters of study.	
Assessment Methods and duration	PLT	
Requirements for granting of credits	Passing the examination performance	
Significance for the Final Grade	The module is included in the Bachelor's final grade with a weighting of 12 credits.	
Planned group size	Not applicable	
Language	English	
Module Duration	3 months	
Module Coordinator	Respective dean of studies/program director	
Lecturers	Professors of the university	
Subject area	All courses and fields of study	
Applicability in other modules / courses of study	All business administration courses	
Pedagogical Approach	Scientific work	
Objectives	work on a topic scientifically and to analyze its aspects critically develop possible solutions	
Contents	Preparation of a comprehensive scientific paper (thesis)	



Relation to other modules	Depends on the chosen topic
Literature	Depends on the chosen topic
Workload	360 hours of self-study/thesis preparation
Additional Remarks	The duration of the thesis is three months. If the thesis is written in English, its credits will count toward the credit requirement in English.
Keywords	Thesis
Last edited	August 2019



Second study section – Program specific modules

DBM2100: BUSINESS PROCESS ENGINEERING

Business Process Engineering		
Module ID	DBM2100	
Semester	3	
Credits	7	
SWS (contact h per week)	6	
Frequency	Once a year, winter term	
Associated Courses	DBM2101 Fundamentals of Process Analysis (2 SWS / 2 Credits) DBM2102 Process Mining (4 SWS / 5 Credits)	
Prerequisites	-	
Assessment Methods	PLP/PLH/PLK - 60 minutes	
Requirements for granting of credits	Passing the respective examination in the associated courses	
Significance for the Final Grade	The module is weighted with its credits in the Bachelor's final grade.	
Planned Group Size	DBM2101 Fundamentals of Process Analysis max. 50 students per group DBM2102 Process Mining max. 25 students per group	
Language	English	
Modul duration	1 Semester	
Modul coordinator	Mario Boßlau	
Lecturer(s)	Berbig, Dominik; Morelli, Frank; (NG); (NG)	
Discipline	Digital Business Management	
Teaching approach	Seminary teaching	
Applicability in other programs	Offered at the same time in the Bachelor's degree programs: Business Administration / Business Informatics Business Administration / Purchasing, Logistics and Supply Chain Management	
Objectives	DBM2101 Fundamentals of Process Analysis	



	 Students understand process analysis techniques, evaluate the performance of business processes, identify opportunities for process improvement, use process analysis to drive business decisions, and understand the role of process analysis in process management. DBM2102 Process Mining Students understand the principles of process mining, understand algorithms behind process mining, know how to discover processes from event log data, check process conformance and enhance process models, apply process mining techniques in business contexts, and understand the role of process mining in process management. The module primarily serves to the following competencies: Knowledge Broadening, Knowledge Deepening, Knowledge Comprehension, Application and Transfer, Communication and Collaboration Skills, Academic Integrity and Professionalism
Content	 DBM2101 Fundamentals of Process Analysis Introduction to Process Analysis: Understanding the importance and role of process analysis in organizations. Process Measurement: Learning how to define and measure key performance indicators (KPIs) for processes. Process Automation including an introduction to Robotic Process Automation (RPA). Process Metrics & Algorithms: Checking properties and improving of processes Tools for Process Analysis: Practical work with popular process analysis tools and software. Case Studies and Applications: Analysis of real-world examples to understand the application of process analysis. DBM2102 Process Mining Introduction to Process Mining: Overview and importance. Process Discovery: Core of process mining. Techniques and algorithms like the Alpha-algorithm, Heuristics Miner, and Inductive Miner. Conformance Checking: Comparison of discovered and expected models. Process Enhancement: Improvement of existing processes. Process Mining Tools: Practical work with tools like ProM, Disco, and Celonis. Advanced Techniques: Topics like trace clustering, genetic process discovery, and multi-perspective process mining.
Relation to other Modules	None
Literature	DBM2101 Fundamentals of Process Analysis



	 N. Russell, W. M. P. V. D. Aalst, and A. H. M. T. Hofstede, Workflow Patterns: The Definitive Guide, 1st ed. Cambridge, MA: The MIT Press, 2016. Weske, M. (2019). Business Process Management: Concepts, Languages, Architectures. Springer Jeston, J. (2022). Business Process Management: Practical Guidelines to Successful Implementations. Taylor & Francis. 			
	 DBM2102 Process Mining van der Aalst, W. M. P. (2018). Proceed in Action. Springer. Reinkemeyer, L. (2020). Process Mingles, Use Cases and Outlook, Springer. Ferreira, D. R. (2020). A Primer on Four Skills with Python and Graphviz Springer. Leemans, S. J. J. (2022). Robust Proguarantees: Process Discovery, Coand Enhancement (1st ed. 2022 Editor) 	ining in Action ger. Process Minir (2nd ed. 2020 ocess Mining nformance C	n: Pri ng: Pi) Edi i with heck	nci- racti- tion).
	The latest edition in each case			
	DBM2101 Fundamentals of Process An	<u>alysis</u>		
	Contact time	(2 x 15h)	30	h
	Case study		30	h
Workload	DBM2102 Process Mining			
	Contact time	(4 x 15h)	60	h
	Preparation and follow-up		20	h
	Case study		50	h
	Exam preparation		20	h
Additional Remarks	-			
Keywords	Process Management, Business Process Modeling, Process Analysis, Process Efficiency, Process Improvement, Process Mining, Event Logs, Process Discovery, Conformance Checking, Process Enhancement, Process Performance Measurement, Data Science in Business Process, Real-world Process Analysis, Process Management Techniques, Process Optimization, Process-driven Decision Making			
Last update	January 2024			



DBM2150: ALGORITHMS AND DATA STRUCTURES

Algorithms and Data Structures	
Module ID	DBM2150
Semester	3
Credits	5
SWS (contact h per week)	4
Frequency	Once a year
Associated courses	DBM2151 Algorithms and Data Structures (4 SWS / 5 Credits)
Prerequisites	None
Assessment methods	PLL+PLK – 60 Minutes
Requirements for granting of credits	Passing the respective examination in the associated courses
Significance for the final grade	The module counts weighted with its credits in the Bachelor's final grade.
Planned group size	35 students
Language	English
Modul duration	1 Semester
Modul coordinator	(NG)
Lecturer(s)	(NG)
Discipline	Digital Business Management
Teaching approach	Seminar lessons & programming exercises
Applicability in other programs	Also suitable for students of computer engineering.
Objectives	 Students know important algorithms and can classify their practical relevance know data structures and are familiar with their implementation in a programming language (Java/Python) are proficient in a programming language (Java/Python) can develop object-oriented solutions using well-known algorithms



Content	 Algorithms, optimized variants and their implementation in a programming language (Java) Efficient data structures and their implementation Data Types and Variables, Expressions, Operators, and Control Structures Basic concepts of object-oriented programming Working with an integrated development environment (IDE) Processing of programming tasks with a focus on information retrieval The module primarily serves to the following competencies: Knowledge Broadening, Knowledge Deepening, Application 		
	and Transfer, Academic Integrity and Professionalism		
Relation to other modules	This module forms the basis for the later modules and is also incorporated into all other courses of the program, where basic knowledge of software development is required.		
	DBM2151 Algorithms and Data Structures:		
	Contact Hours (4 x 15h)	60 h	
Workload	Preparation and follow-up	20 h	
	Working on Exercises	50 h	
	Exam preparation	20 h	
Literature	 Bloch, J. Effective Java. Addison-Wesley Professional. Cormen, T. H., Leiserson, C. E., Rivest, R. L., & Stein, C. Introduction to Algorithms. The MIT Press. Downey, A. B., Think Data Structures: Algorithms and Information Retrieval in Java. O'Reilly Media. Heineman, G., Learning Algorithms: A Programmer's Guide to Writing Better Code. O'Reilly Media. Link, J. Softwaretests mit JUnit. Dpunkt Verlag. Wengrow, J. A Common-Sense Guide to Data Structures and Algorithms. Pragmatic Bookshelf. The latest edition in each case. 		
Additional remarks	-		
Keywords	Algorithms, Data Structures, Object Oriented Pro	gramming	
Last update	January 2024		



DBM2300: DATA MANAGEMENT

Data Management	
Module ID	DBM2300
Semester	4
Credits	7
SWS (contact h per week)	5
Frequency	Once a year, each summer term
Associated Courses	DBM2301 Database Systems (4 SWS / 4 Credits) DBM2302 Data Management and Handling (1 SWS / 3 Credits)
Prerequisites	Algorithms and Data Structures
Assessment Methods	DBM2301: PLP+PLK - 60 Minutes DBM2302: PLP+PLH – 60 Minutes
Requirements for granting of credits	In each case: Passing the respective examinations
Significance for the Final Grade	The module counts weighted with its credits in the Bachelor's final grade.
Planned Group Size	max. 35 students
Language	English
Modul duration	1 Semester
Modul coordinator	Schuster, Thomas
Lecturer(s)	Schuster, Thomas; (NG)
Discipline	Digital Business Management
Teaching approach	Interactive approach including tutorials and trainings
Applicability in other programs	Also suitable for students of engineering disciplines.
Objectives	DBM2301 Database Systems Students know the goals and tasks involved in managing a DB, the DB design levels, the structure of a DB system, and the tasks and concepts of data integrity and data access assurance, can model data structures for specific application tasks from a semantic and logical point of view, and



	 can define, manipulate, query and cific data with SQL and using a porment system. DBM2302 Data Management and Han Students understand the fundamental concert learn to exchange data between davices, develop skills for handling and productata, apply Python programming for data mation, and loading (ETL), understand and use REST APIs for cessing, and gain proficiency in Python libraries others for data processing. The module primarily serves to the following Knowledge Deepening, Knowledge Coand Transfer, Science Innovation, Acafessionalism 	dling pts of data propatabases and vecessing large vecessing large vecessing large veces a extraction, tracking data exchange like Pandas, Necessing compete temprehension,	e manage- cessing, veb ser- columes of ansfor- ge and pro- lumpy and encies: Application
Content	DBM2301 Database Systems Management and modeling of data Conceptual semantic data modelin Modeling relational data structures Data definition using SQL Data manipulation using SQL External views of the data using SQL Coptimization of database queries Procedural programming in database Procedural programming in database DBM2302 Data Management and Han Data processing fundamentals in Fourth Interaction between databases and Processing large volumes of data of Data extraction, transformation, and REST APIs and data handling Advanced Python libraries for data	g QL ases <u>dling</u> Python d web services (Big Data) id loading (ETL	.)
Relation to other Modules	This module forms a basis for the later ment and is also incorporated into all oness Informatics program, where datal quired.	ther courses o	f the Busi-
Workload	DBM2301 Database Systems Contact hours Preparation and follow-up Project DBM2302 Data Management and Han Contact hours	(4 x 15h) dling (1 x 15h)	60 h 20 h 40 h



	Preparation and follow-up Case Study	15 h 60 h
Literature	 DBM2301 Database Systems Obe, R. O., Hsu, L. S. (2017). PostgreSQL: Up arning: A Practical Guide to the Advanced Open Sobase. O'Reilly Media. Date, C.J. (2019). Database Design and Relational Normal Forms and All That Jazz. Apress. Riggs, S., Ciolli, G. (2022). PostgreSQL 14 Admir Cookbook. Packt Publishing. DBM2302 Data Management and Handling McKinney, W. (2022). Python for Data Analysis: Digling with Pandas, NumPy, and Jupyter. O'Reilly I Grus, J. (2019). Data Science from Scratch: First with Python. O'Reilly Media. Fielding, R. T., & Taylor, R. N. (2002). Principled of the modern Web architecture. ACM Transactions net Technology. The latest edition, further references can be found in thing management system 	urce Data- al Theory: istration vata Wran- Media. Principles design of on Inter-
Additional Remarks	-	
Keywords	Database, Relational Database Systems, Data Interop	erability
Last Update	January 2024	



DBM2500: AI AND MACHINE LEARNING

Al and Machine Learning		
Module ID	DBM2500	
Semester	4	
Credits	5	
SWS (contact h per week)	2	
Frequency	Every term	
Associated courses	DBM2501 AI and Machine Learning (2 SWS / 5 Credits)	
Prerequisites	Successfully completed first stage of study	
Assessment methods	PLP	
Requirements for granting of credits	Successful passing of the exam	
Significance for the final grade	The module is weighted with its credits in the Bachelor's final grade.	
Planned group size	max. 25 students	
Language	English	
Modul duration	1 Semester	
Modul coordinator	Schuster, Thomas	
Lecturer(s)	Schuster, Thomas	
Discipline	Digital Business Management	
Teaching approach	Project	
Applicability in other programs	Depending on the topic, it is also suitable for students of computer engineering and industrial engineering.	
Objectives	 Students understand the basic principles of AI and Machine Learning (ML) gain hands-on experience with scikit-learn, TensorFlow, and Keras develop and train Machine Learning models using Python understand how to use cloud services for training and deploying ML models learn to evaluate the performance of ML models apply machine learning techniques to solve real-world problems. The module primarily serves to the following competencies: Knowledge Deepening, Knowledge Comprehension, Application and Transfer, Communication and Collaboration Skills, Academic Integrity and Professionalism 	
Content	Fundamentals of Al and Machine Learning Practical use of scikit-learn for Machine Learning	



Relation to other Modules	 Deep Learning using TensorFlow and Keras Data processing and model training in Python Introduction to cloud-based Machine Learning services Solid knowledge of all program related courses in semesters 1			
Literature	 Machine Learning Mastery. VanderPlas, J. (2016). Python Data Essential Tools for working with Data Géron, A. (2022). Hands-On Mach Learn, Keras, and TensorFlow: Co Techniques to Build Intelligent Systo'Reilly Media. Nield, T. (2022). Essential Math for Control of Your Data with Fundame Probability, and Statistics. O'Reilly Norvig, P., & Russell, S. (2021). Ar Modern Approach, Global Edition (Brownlee, J. (2020). Master Machine Learning Algorithms. Machine Learning Mastery. VanderPlas, J. (2016). Python Data Science Handbook: Essential Tools for working with Data. O'Reilly. Géron, A. (2022). Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems (3rd Edition). O'Reilly Media. Nield, T. (2022). Essential Math for Data Science: Take Control of Your Data with Fundamental Linear Algebra, Probability, and Statistics. O'Reilly Media. Norvig, P., & Russell, S. (2021). Artificial Intelligence: A Modern Approach, Global Edition (4th edition). Pearson. The latest edition, further references can be found in the learning management system. 		
Workload	Contact time	(2x15)	30 h 100 h	
WOIKIOAU	Project work Prepare and conduct final presentation		20 h	
Additional Remarks	-			
Keywords	Flow, Keras, Python, Deep Learning, N Services, Model Evaluation, Real-world cessing, Al Tools and Techniques, Al F Cloud, Neural Networks, Supervised Le	Artificial Intelligence, Machine Learning, Scikit-learn, Tensor-Flow, Keras, Python, Deep Learning, Model Training, Cloud Services, Model Evaluation, Real-world Applications, Data Processing, Al Tools and Techniques, Al Problem Solving, Al in Cloud, Neural Networks, Supervised Learning, Unsupervised Learning, Reinforcement Learning, Predictive Modelling		
Last update	January 2024			



DBM3100: ELECTIVES PROFILE

Electives Profile		
Module ID	DBM3100	
Semester	4 (Profile I) + 6 (Profile II)	
Credits	15	
SWS (contact h per week)	10	
Frequency	each semester	
Associated courses	Profile I: Management Skills BIS2242 Project Management (2 SWS / 3 Credits) BIS3014 Production Planning with Transactional Systems (2 SWS / 3 Credits, English) PLS3011 e-business and Supply Chains (2 SWS / 3 Credits, English) BREM3116 Change Management (2 SWS / 3 Credits, German) BREM3114 Seminar Lean Management (2 SWS / 3 Credits, English) BIS3102 Digital Service Innovation (2 SWS / 3 Credits, English) BIS3103 Digital Business Design (2 SWS / 3 Credits, English) Profile II: Process Engineering & Data Analytics BIS3067 Advanced Process Mining (2 SWS / 3 Credits, English) Profile II: Process Engineering & Data Analytics BIS3107 Information Security in Business Processes (2 SWS / 3 Credits, English) BIS3104 App Development (2 SWS / 3 Credits, English) BIS3061 Internet of Everything (2 SWS / 3 Credits, English) BIS3067 User Interface & Experience Design (4 SWS / 6 Credits, English) BIS3108 GI Challenge (2 SWS / 3 Credits, English) Profile (extension): Interdisciplinary Studies (2 SWS / 3 Credits German or English) Two courses should be taken in the fourth semester (Profile I, scope 6 credits) and the additional courses (Profile II, scope 9 credits) should be taken in the sixth semester. At least one subject must be selected from each of the two profile areas.	
Prerequisites	Successfully completed first stage of study	
Assessment methods	PLH+PLR – 45 / 60 Minutes	
Requirements for granting of	In each case: Passing the respective examinations.	



credits	Profile subject courses amounting to 12 credits must be successfully completed. At least one subject from each profile must be taken.	
Significance for the final grade	The module is weighted with its credits in the Bachelor's final grade.	
Planned group size	max. 25 students	
Language	English or German	
Modul duration	2 Semester	
Modul coordinator	Program director of Digital Business Management	
Lecturer(s)	Lecturers of different programs / subject areas	
Discipline	Digital Business Management	
Teaching approach	Individual profile offers can also be taken by other programs.	
Applicability in other programs	Lectures with exercises	
Objectives	The module is intended to offer students the opportunity to set an individual, course-related specialization. The goals differ depending on the profile subject offering. Students should deepen their knowledge in the areas of Digital Management, Data and Process Analytics. Students • know how to manage large project teams, • know methods for the analysis of processes and information systems, • can use and improve operational information systems with regard to specific problems, • are able to apply analytical or simulative methods in the field of process analysis to operational issues, • are able to design digital service solutions, • can process and analyze large amounts of data and use them to develop insights and forecasts, and • can implement distributed application systems and mobile applications. The module primarily serves to the following competencies: Knowledge Broadening, Knowledge Deepening, Knowledge Comprehension, Application and Transfer, Scientific Innovation, Academic Integrity and Professionalism	



	Profile I: Management Skills Principles in agile and classic project more of the Transactional processing systems in low Service Engineering E-business and supply chains Change management theories and practice and practice in the Transaction Digital service innovation Digital business design Profile II: Process Engineering & Data Analysis	gistics ctices	nt	
Content	 Advanced process analytics and techn mining Information security in real-world busin Development principles for mobile and Engineering of data-aware applications Privacy and ethics in technology User Interface & Experience Design Internet of Everything concepts GI Challenge Profile: Interdisciplinary Studies (extension This is a supplementary subject that expaniects with interdisciplinary competencies. 	ess proces distributed	sses d syst	ems
Relation to other Modules	Depending on the selected WPF offer			
	User Interface & Experience Design			
	Contact time	(4x15)	60	h
	Pre- and post-processing		90	h
	Exam preparation		30	h
	GI Challenge			
Workload	Contact time	(2x15)	30	h
VVOIRIOAU	Pre- and post-processing		60	h
	Elaboration of term paper		30	h
	Project		60	h
	All other offers			
	Contact time	(2x15)	30	h
	Pre- and post-processing		60	h
Literature	The module or an individual course of the module can also be completed as part of a semester abroad. Modules or courses related to the focus of the degree are eligible for recognition. Most elective courses, can be organized as fast-track offers with an examination well before the normal examination period.			
Additional Remarks	-			



Keywords	Profile I: Strategic Decision-Making, Project Management, Transactional Processing, E-Business, Supply Chains, Change Management, Lean Management, Internet of Everything. Profile II: Process Mining, Information Security, User Experience, App Development, Data Privacy, Ethics, Digital Service, Digital Business Design, GI Challenge.
Last update	January 2024



DBM3300: APPLIED DIGITAL TRANSFORMATION PROJECT

Applied Digital Transformation Project		
Module ID	DBM3300	
Semester	6	
Credits	7	
SWS (contact h per week)	2	
Frequency	Every term	
Associated courses	DBM3301 Applied Digital Transformation Project (2 SWS / 7 Credits)	
Prerequisites	Successfully completed first stage of study	
Assessment methods	PLP	
Requirements for granting of credits	Successful passing of the exam	
Significance for the final grade	The module is weighted with its credits in the Bachelor's final grade.	
Planned group size	5 groups with 4 students each = 20 students	
Language	English	
Modul duration	1 Semester	
Modul coordinator	Program director Digital Business Management	
Lecturer(s)	Lecturers of program	
Discipline	Digital Business Management	
Teaching approach	Interactive approach including tutorials and trainings	
Applicability in other programs	Also suitable for students of computer engineering and industrial engineering.	
Objectives	 Students identify and structure operational problems related to the use of information systems. design and implement creative solutions for successful information system implementation or optimization of operational processes. achieve a given project goal within a specified time frame in collaboration with other fellow students. independently organize teamwork. The module primarily serves to the following competencies: Knowledge Broadening, Knowledge Comprehension, Application and Transfer, Communication and Collaboration Skills, Academic Integrity and Professionalism	
Content	Current, complex, practical tasks from the field of operational information systems.	



	 The projects are typically carried out in direct collaboration with companies. Coaching of project teams regarding agile methods. The tasks are completed in teams under the guidance and supervision of the lecturer. The results are presented to the client at the end. 		
Relation to other Modules	Solid knowledge from all courses in Business Informatics from semesters 1-5 is required.		
Literature	Up-to-date, topic-related publications		
Workload	Contact time (2x15) 30 Project work 160 Prepare and conduct final presentation 20	h h h	
Additional Remarks	-		
Keywords	Digital Transformation, Applied Technology, Business Innovation, Project Management, Agile Methodologies, Information Systems, Change Management, Organizational Strategy, Data Analytics, Process Optimization, Industry 4.0, Internet of Things (IoT), Artificial Intelligence (AI), Cloud Computing, User Experience (UX), Data Privacy and Security, Emerging Technologies, Digital Business Models, Customer Relationship Management (CRM), E-commerce, Mobile Applications, Social Media Integration, Digital Marketing, Blockchain Technology, Cybersecurity		
Last update	January 2024		



DBM4100: IT GOVERNANCE

IT Governance		
Module ID	DBM4100	
Semester	7	
Credits	8	
SWS (contact h per week)	5	
Frequency	Each term	
Associated courses	DBM4101 IT Governance (4 SWS / 5 Credits) DBM4102 Seminar Emerging Trends in Digital Business Management (1 SWS / 3 Credits)	
Prerequisites	Successfully completed first stage of study	
Assessment methods	DBM4101 IT Governance: PLL/PLH/PLP/PLM/PLK - 60 Minutes DBM4102 Seminar Emerging Trends in Digital Business Management: PLP+PLH/PLH	
Requirements for granting of credits	Passing the exam	
Significance for final grade	The module counts weighted with its credits in the Bachelor's final grade.	
Planned group size	25 Students	
Language	English	
Modul duration	1 Semester	
Modul coordinator	Boßlau, Mario	
Lecturer(s)	Boßlau, Mario; (NG)	
Discipline	Digital Business Management	
Teaching approach	Seminary teaching	
Applicability in other programs	Also suitable for students of other computer science programs and law.	
Objectives	DBM4101 IT Governance Students understand the fundamentals of IT governance and the importance of IT in corporate management,	



- are familiar with the principles and frameworks of IT governance (COBIT, ITIL),
- understand the roles and responsibilities in IT management and the importance of stakeholder communication,
- know the basics of information security and data protection within the context of IT governance,
- understand threats, attacker models, and protection measures in a governance context,
- are familiar with basic security protocols and procedures as well as their application in IT governance (e.g., key management, authentication),
- know the basics of system security and its relevance to IT governance (e.g., spam and phishing, software vulnerabilities, web application security),
- know the legal and technical fundamentals of data protection and their integration into IT governance,
- understand approaches to information security management and their role in IT governance (e.g., IT security lifecycle, BSI Basic Protection),
- can assess information systems regarding compliance with IT security standards and data protection regulations, ensuring alignment with IT governance policies.

<u>DBM4102 Seminar Emerging Trends in Digital</u> <u>Business Management</u>

Students...

- understand the current and emerging trends in digital business
- recognize the impact of AI, Machine Learning, Blockchain, and IoT on business
- understand how Big Data and analytics drive decision making in modern business
- gain insights into how robotics and automation shape the future of work
- develop the ability to adapt business strategies to leverage emerging technologies
- understand how digital transformation affects business operations and strategy.

The module primarily serves to the following competencies: Knowledge Deepening, Knowledge Comprehension, Application and Transfer, Scientific Innovation, Academic Integrity and Professionalism

Content

This module focuses on the principles and practices of IT governance, including the management of IT resources, risks, and cybersecurity. It covers frameworks for IT governance, emerging trends, strategies for managing IT resources and risks, and the principles of cybersecurity.

DBM4101 IT Governance

- Fundamental concepts of IT governance and the role of IT in corporate management
- Principles and frameworks of IT governance (COBIT, ITIL)



	Basic concepts of information security in IT governance Basic security protocols and proce (key management, authentication) IT security approaches relevant to ance (access control, reactive security basics and their ance (spam and phishing, software plication security) Legal and technical fundamentals their integration into IT governance Information security management in IT governance (IT security lifectory to a compliance assessment of informative curity standards and data protection. BM4102 Seminar Emerging Trends Business Management Exploration of current trends The role of AI and Machine Learn in IT and its implications for business in IT and IT an	edures in IT gover) o governance are curity, intrusion of importance for I's re vulnerabilities of data protections of data protections and in Digital in digital business processes usiness operation danalytics on definition of the data of the dat	vernance and complidetection) T governance web apairs, web apairs, web apairs, web apairs, web apairs, with IT seass ass ass ass ass ass	
Relation to other modules	-			
	DBM4101 IT Governance and Cybersecurity			
	Contact time	(4 x 15h)	60 h	
	Preparation and follow-up		40 h	
	Working on case studies		30 h	
Workload	Exam preparation		20 h	
Workload	DBM4102 Seminar Emerging Trends Business Management	<u>in Digital</u>		
	Contact time	(1 x 15h)	15 h	
	Case study		30 h	
	Term paper		35 h	
	Presentation (prepare & conduct)		10 h	
Literature	 DBM4101 IT Governance Caballero I., and Piattini, M., Eds. the Fundamentals to Real Cases. Calder, A. and Watkins, S.: IT Go Guide to Data Security and ISO 2 Page. Johanning, V.: Organization and New Role of IT and the CIO in Dig Springer. 	. Springer. overnance: An In 27001/ISO 2700 Management of	ternational 2, Kogan IT: The	



	 Anderson, R. Security Engineering: A Guide to Building Dependable Distributed Systems. Wiley. Gilman, E., & Barth, D. Zero Trust Networks: Building Secure Systems in Untrusted Networks. O'Reilly Media. Stallings, W., & Brown, L. Computer Security: Principles and Practice. Pearson. DBM4102 Seminar Emerging Trends in Digital Business Management
	 Up-to-date, topic-related publications Kane, G. C. (2022). The Technology Fallacy: How People Are the Real Key to Digital Transformation. The MIT Press. Ross, J. W., Beath, C. M., & Mocker, M. (2019). Designed for Digital: How to Architect Your Business for Sustained Success. The MIT Press. Brynjolfsson, E., & McAfee, A. (2014). The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies. W. W. Norton & Company. Schmarzo, B. (2013). Big Data: Understanding How Data Powers Big Business. Wiley. Thamm, A., Gramlich, M. Borek, A., and van Loon R. (2020). The Ultimate Data and Al Guide: 150 FAQs About Artificial Intelligence, Machine Learning and Data. München: Data Al Press. The latest edition in each case
Additional remarks	-
Keywords	IT Governance, Cybersecurity, IT Risk Management, Data Protection, IT Policies, Security Measures, Cyber Threats, Data Breach Response, Cybersecurity Best Practices, Emerging Trends, Digital Business, AI in Business, Machine Learning, Blockchain, Internet of Things, Big Data, Analytics, Decision Making, Robotics, Automation, Business Strategy, Business Operations, Digital Transformation, Future of Work, Innovation Management, Technology Impact, Business Adaptation.
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