Wismar Business School
Faculty of Hochschule Wismar

Master of Business Systems

Module Descriptions

2016

Fakultät für Wirtschaftswissenschaften / Wismar Business School
Postadresse: Hochschule Wismar / Postfach 12 10 / 23952 Wismar
Besucheradresse: Philipp-Müller-Straße 14 / 23966 Wismar
Telefon: +49 3841 753-7617 / Fax +49 3841 753 7131
E-Mail: Uwe.Laemmel@hs-wismar.de / www.wi.hs-wismar.de/Uwe.Laemmel

Wismar Business School

Master of Business Systems

Aim

This Masters-Programme is primarily designed to develop participants who wish to take greater control over, and make a more direct contribution to change in their organisations via the development and implementation of information systems. Such managers will also wish to improve their knowledge of management and organisations, allowing them to better understand the context of information systems. Professionals who wish to improve the success rate of the information systems they develop may also wish to 'mainstream' their career path by upgrading their management skills and knowledge.

- Become a Master in 2 years: 3 theory semesters and a thesis semester.
- Workplace based learning: Combine your workplace experience with IT management competency.
- Write term papers that apply theory to your company's problems.
- Do action research: Address a real world problem by scientific methods.
- Your studies end with an oral defence (Viva Voce) of your thesis research.

The Master's Degree of Business Systems (MBS) will be awarded by Wismar University, University of Technology Business and Design, Wismar, Germany.

Duration:	2 years (4 Semester)
Prerequisites:	Bachelor degree in a Business related subject
Content:	Information Technology in Business – Management – Computer Science – Social Skills
Specialities:	Focus on information technology from the business perspective, distance learning, workplace related, project work integrated, Master Thesis requires an oral defence
Web:	Hochschule Wismar: www.hs-wismar.de Wismar Business School: www.wi.hs-wismar.de WINGS – Wismar International Graduation Service: www.wings.hs-wismar.de Master of Business Systems: wings-fernstudium.de/mbs www.wi.hs-wismar.de/~laemmel/MBS
Contact:	Uwe Lämmel, Prof. Dr.-Ing.; 🖂 uwe.laemmel@hs-wismar.de ☎ +49 3841/753-7617 www.wi.hs-wismar.de/uwe.laemmel
Mail address:	Hochschule Wismar, University of Technology, Business and Design Wismar Business School Post Box 1210, D-23952 Wismar, Germany
Fax:	+49 3841 753 7131

The Master of Business Systems runs in co-operation with:

Innovation Africa, contact Dr Roger Silverberg, 🖂 rbs@netactive.co.za ☎ +27 21 7889 658

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Curriculum

The first year programme is aimed at training the student in managerial skills required in technology-oriented companies. In addition to basic courses in project management, information systems knowledge management and business systems, there is a course specifically addressing the question of communicating between engineers or other technical personnel and non-technical professionals. It reinforces the skills through a business systems project to be completed in close contact with industry.

The second part (year) deepens the level of skills acquired in the first year, offering highly up-to-date issues in management of complex systems. The Business Systems project will continue and elevates the student's studies to an advanced academic level through the thesis requirement. The course allows the student to choose one elective from the list below.

While requiring high academic standard in approach, argumentation, and presentation, the thesis will be about problems encountered in the real industrial world. It will show the student's ability to solve down-to-earth problems using scientific methods and his ability to use abstraction to such a degree that creative solutions showing new approaches and thought concepts emerge.

Successful completion of all the courses in the curriculum satisfies the requirements for a Master's Degree of Business Systems (MBS) to be awarded by Wismar University, University of Technology Business and Design, Wismar, Germany.

Graduates from this course should have acquired skills allowing them assess the merits of IT investment, manage companies that heavily use and/or do business with IT technology, and to integrate the talents and knowledge of all personnel (management, marketing, engineering) for the benefit of the company's future activities

Core Subjects

Subjects **Term**	**1.**	**2.**	**3.**	**4.**
Research and Information Technology in Business	5			
Business Process Design	5			
IT Management and Controlling	5			
Integrative Industrial Thought	5			
Knowledge Management		5		
Database Systems and Data Management		5		
Computer Models for Business Decisions		5		
Business Systems Project 1		5		
Software Systems Design and Development			5	
Enterprise Resource Planning Systems			5	
Business Systems Project 2			5	
Elective subject 1			5	
Elective Subject 2			5	
Master Thesis				25
ECTS[1]:	**20**	**20**	**25**	**25**

Elective Subjects

Subjects **Semester:**	**3.**
Human Resource Information Systems	5
Marketing Decision Systems	5
Supply Chain Management	5
Economic Policy	5
Applied e-Business	5
Contemporary Issues in Business Information Systems	5
Multimedia Applications in Business	5

[1] European credit points ECTS: European Credit Transfer System.

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Core Modules

Subject: **Research and Information Technology in Business**
Mandatory subject in the first year
Faculty: Uwe Lämmel, Prof. Dr.-Ing.

Content: The module gives an introduction in to research and scientific writing using information technology in Business as a topic. The modules gives overview on the various applications of computer science technologies in business. The students will extend their knowledge in business information systems. It will be shown how information technology can help all individuals in all functional areas to be more effective and efficient. An introduction is given into development models for information technology systems. Various systems design methods will be applied to describe the information flow in real world situations.
ECTS: 5

Subject: **Business Process Design**
Mandatory subject in the first year
Faculty: Jan Helmke, Prof. Dr.

Content: Business Processes consists of sequences of actions necessary for a certain business task. The module covers the modelling of Business Processes including reference models, the ARIS toolset for process modelling, the process analysis, and the business process reengineering. Students learn to develop business process models and will be able to apply modelling methods, techniques and tools.
ECTS: 5

Subject: **IT Management and Controlling**
Mandatory subject in the first year
Faculty: Gunnar Prause, Prof. Dr.

Content: The course is intended to develop understanding of both strategic and operational issues of IT – management and Controlling. On completion of the course, the students know the concepts and methods of IT - management, IT – controlling and IT – auditing as well as the applications and ways to analyse, evaluate and control IT – related projects and processes, to identify and assess related risks so that they are able to solve problems and inefficiencies in IT - management.
ECTS: 5

Subject: **Knowledge Management**
Mandatory subject in the first year
Faculty: U. Lämmel, Prof. Dr. Ing./ J. Cleve, Prof. Dr. rer. nat.

Content: The students get skills in knowledge management with a focus on the representation of business knowledge. Computer-based knowledge processing is used for decision support in management. Business Rules are used to fix experience of enterprise expert in order to improve further decisions. Knowledge Networks can be used to store enterprise knowledge in order to solve the problem: “If Siemens knew what Siemens could know”. Knowledge Networks are usually displayed as Topic Maps. Representation of knowledge will be trained by several case studies. Available software will be used to train knowledge management skills.
ECTS: 5

Subject: **Integrative Industrial Thought**
Mandatory subject in the first year
Faculty: Gunnar Prause, Prof. Dr.

Content: Industry depends on management to lead, marketing to market, and engineering to produce and design products. It is a well established fact that proponents of the three fields mentioned frequently have communications problems resulting in delays in getting products to market, deciding on the initiation of new product development, or in decisions concerning production, acquisition, investment. Companies that exhibit a close rapport between the three fields (e.g. because all decisions are concentrated in one person) usually are more flexible and quicker in response to a changing business environment. This course will explore the differences in thought processes in management, marketing, and engineering (production and development) with the aim of enabling graduates not only to be able to communicate with their respective partners in such a way that knowledge and methods specific to their fields can be used to maximum efficiency for the benefit of the company. At the same time, bridging the communication gap will enable graduates to avoid irritations and misunderstandings leading to problems preventing optimal collaboration.
ECTS: 5

Subject: **Database Systems and Data Management**
Mandatory subject in the first year
Faculty: Rüdiger Steffan, Prof. Dr.-Ing.

Content: Database systems and especially data warehouses are the centre applications in an enterprise information system. Students will learn to develop and manage database systems including data structures and data management via the internet, object-relational and multidimensional modelling, database security and data protection. Other topics include: architecture of database systems and online analytical processes (OLAP). Relations to Data Mining or Business Intelligence tools will be outlined. The course is related to other modules like Integrated Business Systems or Computer Models for Business Decisions.
ECTS: 5

Subject: **Software Systems Design and Development**
Mandatory subject in the second year
Faculty: Erhard Alde, Prof. Dr. oec.

Content: The students learn to analyze a situation in an enterprise and to design a business information system in order to improve this situation. The course introduces principals, methods, techniques and tools for designing and developing large software systems. Topics included are design patterns, frameworks, architectures, implementation and maintenance, application of the Unified Modelling Language (UML) in the design of Business Information Systems. In a small project work students apply their knowledge to a real world case.
ECTS: 5

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Subject: **Computer Models for Business Decisions**
Elective subject in the first year
Faculty: Uwe Lämmel, Prof. Dr.-Ing. / Jürgen Cleve, Prof. Dr. rer. nat.

Content: Decision can be better if more information is available. The course introduces decision support systems and focus on various data mining techniques. Students learn to handle and process large amount of data. They learn to pre-process data in order to apply various data analyzing techniques. Topics include decision tables, analytical hierarchy process, clustering and classification of data like decision trees, nearest neighbour algorithm, k-means, or various architectures of artificial neural networks. Techniques introduced are applied to real world situations in customer relationship management.
ECTS: 5

Subject: **Business Systems Project**
Mandatory subject in the second year
Faculty: all university teachers can work as a supervisor

Content: Students will complete a project in teams in cooperation with industry. The project will focus on the application or the introduction of IT-technologies, or the adaptation or optimization of corporate processes to work seamlessly with IT-systems. A faculty member will simulate the contractor, together with a company representative. Students will first respond to an RFQ, will, in turn, receive a "contract", and will then commence work on the project, the results of which, at its conclusion, are formally presented to their peers and the project supervisors. A final project report will have to be prepared.
ECTS: 5

Subject: **Enterprise Resource Planning Systems (ERP)**
Mandatory subject in the second year
Faculty: Jan Helmke, Prof. Dr.

content: The course focuses on the technology, the modelling techniques, and management issues surrounding the introduction and the use of ERP-Systems.
The first objective is to learn how to set up database systems that are accessible on the World Wide Web. The second objective is to learn enterprise-wide modelling, which is a necessary prerequisite to building enterprise-wide systems. The third and integrative objective is to get a firm understanding of the issues that organizations face when dealing with implementing pre-packaged ERP systems. The module will consist of at least one lab which will involve looking at a feature of a commercially available ERP system, and several case study discussion lectures. These case studies will be detailed studies of organizations that actually implemented ERP systems.
ECTS: 5

Subject: **Master Thesis**
Second year
Faculty: all faculty members

Content: Every student will work on a personal topic. The topic will usually be extracted from real world situations in our partner companies. Students prepare their thesis and therefore show their skills in problem solving. A written thesis has approximately 70 pages. The results will be presented by the students and in a discussion he or her will defends the results.
ECTS: 25

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Elective Modules

Subject: **Human Resource Information Systems**
Elective subject in the first year
Faculty: Erhard Alde, Prof. Dr. oec.

Content: By the end of the module the student should be able to critically evaluate different models of organisation and their influence on management practice , critically review leadership styles and the concept of managerial effectiveness, and appraise theories of change management and strategies for the management of change; Students will be able to appraise the factors that influence individual and group behaviour within organisations, within an inter-professional and inter-agency context and to critically examine the factors that influence individual motivation and performance and identify strategies for effective staff and personal development; They will also be able to critically evaluate the role of information technology and management in the collection, storage and retrieval of essential data for effective resource management and to demonstrate the ongoing development of reflective skills, focusing on ways in which personal management effectiveness may be enhanced and skills increased
ECTS: 5

Subject: **Marketing Decision Systems**
Elective subject in the second year
Faculty: Kai Heuer, Prof. Dr. rer. pol.

Content: Students learn how to use computer programs to facilitate marketing decision-making, and explore issues using information technology and the information highway. The computer programs may include spreadsheets, suites of programs for specific marketing decisions and information systems as databases. Issues include the future impact on the future of marketing communication and distribution channels (including direct and database marketing), methods for dealing with information load/overload, customer acceptance of interactive media, and the effects of re-engineering on the marketing function.
ECTS: 5

Subject: **Supply Chain Management**
Elective subject in the second year
Faculty: Gunnar Prause, Prof. Dr.

Content: The course is intended to develop understanding of both strategic and operational issues of supply chain management. On completion of the course, the students know the concepts and methods of supply chain management, the applications and ways to analyse multimodal transportation concepts, supply chains and supply relations so that they are able to solve problems and inefficiencies of supply chains..
ECTS: 5

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Subject: **Economic Policy**
Elective subject in the first year
Faculty: Michael Schleicher, Prof. Dr.

Content: The module focuses on key applied macro and microeconomic questions in economies in developed and less developed countries. It seeks to develop an applied analytical command and to give students both a broad survey and key insights into the prime contemporary economic questions.

ECTS: 5

Subject: **Applied e-Business**
Elective subject in the second year
Faculty: Herbert Neunteufel, Prof. Dr. Dr.

Content: The course gives an introduction into e-business and e-commerce, its basics, techniques, and applications.
Within the course the participants develop a small Electronic Business Application. Students learn the background and fundamentals of business to customer (B2C) applications. Topics include description of web-based business cases, application of Java beans as well on a server (deployment) as on a client, development of Java Server Pages. Advantages and current problems of e-business applications will be discussed including e-payment or security.

ECTS: 5

Subject: **Contemporary Issues in Business Information Systems**
Mandatory subject in the second year
Faculty: Wismar: all university teachers will offer a certain module if new trends not covered in other modules will appear

Content: The subject of the course changes according to current developments in the areas of Business Information Systems or Business Administration. Subjects may include new Web technologies, management systems, software engineering for business applications as well as other issues.

ECTS: 5

Subject: **Multimedia Applications in Business**
Elective subject in the second year
Faculty: Jan Helmke, Prof. Dr. oec..

Content: The course gives an introduction into various multimedia applications within Business Information Systems. Applications include marketing or customer training. The students will learn to see the chances of multimedia applications. At the end of the course the students are able to design and develop multimedia applications. Topics included are the use and processing of various media, multimedia equipment, ergonomics, media as a design technique, picture processing, video processing, and computer animations.

ECTS: 5

Schedule

The students get information and material for their personal use. They study the topics themselves. Advice will be given by our faculty. We are using our learn management system Stud.IP for communication: http://studip.hs-wismar.de

For every module a certain amount of contact hours will be offered. At the end the exam takes place.

Annual schedule for contact hours

- A week at the end of February
- A week at the end of June
- A week in mid-July
- A week at the end of November

Module	**Research and Information Technology in Business**
Semester	1
Responsible	Uwe Lämmel, Prof. Dr.-Ing. www.wi.hs-wismar.de/uwe.laemmel
Lecturer	Uwe Lämmel, Prof. Dr.-Ing.
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks, or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used, including email, forum, chat, wiki-pages or online tutorials. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Existing competences in using computers as outlined in the European Computer Driving Licence (ECDL) or ICDL; Workplace experience in a business process in general and use of information technology in such a process.
Module objectives	**Knowledge**: Students learn the scientific approach when addressing a problem in the field of business systems. They are able to carry out a scientific research and evaluate sources with regard to reliability, timeliness and its content. Students learn about IT systems in business from a user's perspective, including software lifecycle models and requirements. **Skills**: Students gain competence to understand the multiple opportunities for the application of information technology in business. Students are able to analyse existing information technology and to compare to the state of the art. Students gain the competence to assess software solutions and to value the possibilities for an effective and efficient application of information systems to ensure the success of an organisation. Students can value the social impact of information technology. **Competences**: Students are able to argue in a structured and logical way and can present results in written or oral form. Working on the topics trains self-management and personal responsibility.
Content	Research in information technology in business: qualitative vs. quantitative research; explanation-oriented and design-oriented research; Planning and managing research including proposals, literature research, writing term papers or oral presentations; Doing research in the area of information technology in business: use of information technology, including hard- and software in an organization, including: – Development of information systems to support business functions including software lifecycle models and various specification diagrams, the role of management in the process – Evaluation and assessment of software based on ISO criteria as a bases for strategic decisions, – Applications in organisations; Students' work place experience is reviewed in terms of the evolving world of information technology.

Examination	Written examination, review of case study, application to course project or term paper and an oral presentation. Assessment details will be provided at the beginning of the course.
Reading list	Research: David Evans, Paul Gruba: How to Write a Better Thesis, Melbourne Univ. Press or Springer, latest edition Erik Hofstee: Constructing a Good Dissertation, Exactica, latest edition Information technology in Business: Turban, E.R. et. all.: Introduction to information technology. Wiley; Laudon,K.C.: Management Information Systems, Prentice Hall; Other textbooks on information technology may work as well. Following the requirements of the European Qualification Framework (EQF) students will be encouraged to elaborate knowledge on their own by running a literature research on the topics addressed in the lecture notes or the set of slides.

Module	**Business Process Design**
Semester	1
Responsible	Jan Helmke, Prof Dr. rer. pol. www.wi.hs-wismar.de/jan.helmke ++49 3841 753 7541
Lecturer	Jan Helmke, Prof Dr. rer. pol.
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Understanding of processes; Management and organisational experience; Knowledge in logic is helpful.
Module objectives	**Knowledge**: Students gain knowledge in the analysis of processes and the development of Business Process Models. **Skills**: Students are able to apply methods and tools to analyse and model business processes. Students can improve business processes by case studies. They manage to achieve strategic goals by process modelling. **Competencies:** Business Process Design requires and trains creative work as well as self-management. They will train their social skills in the case studies by using change methodologies.
Content	Business Process consists of a sequence of activities, necessary to fulfil a business task. Under this headline the following will be discussed: – modelling of business processes by EPC – reference models for business processes, – the ARIS architecture – start of the process: the As-IS-Analysis – the on-going improvement process – Business Process Re-Engineering (BPR) – Continuous Process Improvement In more detail: Business Process Design at its best represents the fusion of information technology and management. Information Technology provides the infrastructure and tools, which fundamentally change organizations, but management provides the strategic business vision that transforms technology into competitive advantage. For Business Process Design to succeed two questions must be answered: - What is the strategic vision for the enterprise? - How to get from here to there? These questions will be answered in the following four primary aspects of Business Process Design: (1) Strategic Visioning

	No matter how powerful an organization's technology is or how effectively you employ management strategies, if you are headed in the wrong direction you will not succeed. Strategic visioning is essential to any level of organizational transformation and functioning. (2) Challenge of Business Process Design Business Process Design is about the simplification of work to achieve higher quality, better results for customers, and lower costs. It is about replacing manual processes with automation, eliminating unnecessary bureaucracy, streamlining and minimizing handoffs across departments, providing the right information at the right time to the right people, eliminating unnecessary work, reducing unnecessary controls, empowering every employee, and getting it right the first time. (3) Business Process Modelling This chapter describes the search of a general BPM application architecture that is conceptually comprehensible and meets real-world requirements. (4) Change methodologies There are two fundamentally different strategies: Process Improvement and Process Innovation. It is worth noting that no one methodology or approach is right for every organization and there are documented successes and failures for every transformational strategy. (4a) Continuous Process Improvement (Kaizen) This change strategy operates under the principle that excellence can be achieved by making a large number of small or incremental improvements continuously over time. The goal is to please both internal and external customers by improving the quality of both processes and outcomes. Work teams and individuals are encouraged and empowered to suggest and implement improvements using a structured set of tools and techniques to correctly identify and define both problems and solutions. (4b) Business Process Reengineering (BPR) The Business Process Reengineering method is described by Hammer and Champy as the fundamental reconsideration and the radical redesign of organizational processes, in order to achieve drastic improvement of current performance in cost, services and speed. Value creation for the customer is the leading factor for BPR and information technology often plays an important enabling role.
Examination	Written examination, case study, term paper and oral presentation, application to course project. Assessment details will be provided during the first semester workshop.
Reading list	Baltzan, Paige; Phillips, Amy: Business Driven Information Systems Davis, Rob; Brabänder, Eric: ARIS Design Platform, Getting Started with BPM Jeston, John; Nelis, Johan: Business Process Management: Practical Guidelines toSuccessful Implementations

Module	**IT – Management and Controlling**
Semester	1
Responsible	Gunnar Prause, Prof. Dr. math. www.wi.hs-wismar.de/gunnar.prause
Lecturer	Gunnar Prause
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used, including email, forum, chat, wiki-pages or online tutorials. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	The students should have bachelor knowledge in business administration, informatics and accountancy. Work experiences are facilitating the understanding of concepts and methods.
Module objectives	Goals: The course is intended to develop understanding of both strategic and operational issues of IT – management and Controlling. On completion of the course, the students know the concepts and methods of IT - management, IT – controlling and IT – auditing as well as the applications and ways to analyse, evaluate and control IT – related projects and processes, to identify and assess related risks so that they are able to solve problems and inefficiencies in IT - management. Learning outcomes: Students are able to observe and analyse strategic and operational issues of IT – management and they are able - to understand the concepts and deal with problems that may appear in IT management, - to perceive interdisciplinary relations in IT – management and controlling and to use that information in decision making - to choose suitable methods and technologies for solving IT – management problems - to analyse problems from multiple viewpoints and to present, discuss and defend their views - to further to develop their team working and management skills via group work - to further acquire knowledge by studying and being able to understand higher level academic approaches of IT – management and controlling.
Content	The successful management of IT systems and organization requires profound knowledge and skills in project and process management as well as in the evaluation and controlling of related IT – activities. Due to increasing complexity in IT sector risk management as well as topics like compliance, fraud and security are gaining continuously importance. The module tries to cope with these developments by discussing the following topics: a. IT – Project Management b. IT – Controlling

	c. IT – Risk Management d. IT – Auditing
Examination	Written examination, review of case study or oral presentation. Assessment details will be provided at the beginning of the semester.
Reading list	B. McNurlin, Barbara; et al. (2009). "Information Systems Management in Practice (8th ed.)". Prentice Hall. Irani, Z.; Love, P. (2001): Information systems evaluation: past, present and future. European Journal of Information Systems, Vol. 10 (4), p. 183-188. Anthony, R. and Govindarajan, V., 2007. Management Control Systems, Chicago, Mc-Graw-Hill IRWIN. R. Moeller; IT Audit, Control, and Security; 2nd ed., Wiley. Rom, A.; Rohde, C. (2007). Management accounting and integrated information systems: A literature review, International Journal of Accounting Information Systems (8:1), pp 40-68. Remenyi, D., Bannister, F., and Money, A. The Effective Measurement and Management of ICT Costs and Benefits, Oxford, 2007. ISBN 0-7506-8328-7.
Notes	Topics are related to management, informatics, security, controlling and projects.

Module	**Integrative Industrial Thought**
Semester	1
Responsible	Gunnar Prause, Prof. Dr. math. www.wi.hs-wismar.de/gunnar.prause
Lecturer	Gunnar Prause
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used, including email, forum, chat, wiki-pages or online tutorials. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	The students should have bachelor knowledge in business administration, informatics and product development. Work experiences are facilitating the understanding of concepts and methods.
Module objectives	Goals: The course is intended to develop understanding of both strategic and operational issues of multi – cultural and multi – disciplinary business operations of innovative companies in network and cluster environments. On completion of the course, the students know the concepts and methods of innovation, entrepreneurship and integrative business operations as well as the applications and ways to analyse multi – cultural and multi – disciplinary concepts so that they are able to solve problems and inefficiencies in their work environment. Learning outcomes: Students are able to observe and analyse strategic and operational issues of integrated industrial activities and business operations and they are able - to understand the concepts and deal with problems that may appear in participating in global networks - to perceive interdisciplinary relations in network environments and to use that information in decision making - to choose suitable methods and technologies for solving integrative industrial problems - to analyse problems from multiple viewpoints and to present, discuss and defend their views - to further develop their team working and management skills via group work - to further acquire knowledge by studying and being able to understand higher level academic approaches of integral industrial thought.
Content	Nowadays, modern and innovative business organizations are operating in multi-cultural and multi-disciplinary environments and the value creation takes place in networks. This business context requires new knowledge and skills from the involved personal. The module tries to tackle these challenges by discussing the following topics: a. Inter-cultural aspects of business operation

	b. Inter-disciplinary and integrated value chains c. Business operations in networks and clusters d. Innovation, entrepreneurship and business models
Examination	Review of case study, oral presentation or written exam. Assessment details will be provided at the beginning of the semester.
Reading list	R. Baum; The Psychology of Entrepreneurship; Psychology Press P. Burns; Entrepreneurship and Small Business; 3rd ed.; Palgrave Macmillan Hofstede, Hofstede, Minkov; Cultures and Organizations: Software of the Mind, 3rd ed.; McGraw – Hill G. Meier zu Köcker, Clusters in Germany; Institute for Innovation and Technology, Berlin, access: http://www.iit-berlin.de/en/publications/clusters-in-germany-1 OECD; Regions and Innovation – Collaborating across Borders; Paris; access: http://www.oecd.org/innovation/regions-and-innovation-collaborating-across-borders.htm A. Osterwalder; Y. Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers; Wiley H.-P. Wiendahl, S. Lutz; Production in Networks; CIRP Annals - Manufacturing Technology, Volume 51, Issue 2, 2002, Pages 573–586
Notes	Topics are related to business culture, innovation, entrepreneurship, network and cluster.

Module	**Knowledge Management**
Semester(s)	2
Responsible	Uwe Lämmel, Prof. Dr.-Ing. www.wi.hs-wismar.de/uwe.laemmel +49 3841 753 7617
Lecturer	Uwe Lämmel, Prof. Dr.-Ing., Jürgen Cleve, Prof Dr. rer. nat.
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used, including email, forum, chat, wiki-pages or online tutorials. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Understanding of projects and their structure. Management and organisational experience. Knowledge in logic is helpful.
Module objectives	**Knowledge**: Students gain competencies in using information technology in knowledge management and in decision making with a focus on strategic decisions. **Skills**: Students are able to map real-world situations into (semi-)formal representation of knowledge. Students know the possibilities, applications, and limits of computer-based knowledge processing and can apply it to even unforeseen situations. Students learn to see knowledge processing as natural part of knowledge management. **Competencies:** Knowledge management requires and trains creative work as well as social skills, since it includes knowledge sharing. Working on the topics trains self-management and personal responsibility.
Content	Knowledge based systems in business applications, knowledge representation and knowledge processing in business as prerequisites for executive management. Knowledge based decision support systems; • Knowledge representation and processing using business rules; • Knowledge management systems using knowledge networks, topic map, or ontologies: Knowledge extraction, knowledge presentation, • other IT based knowledge management systems like semantic wiki-systems. • Strategic role and benefit of IT based knowledge management systems; Techniques will be related to participants' experience from their first academic degree and their workplaces experience. Thus knowledge management will be discussed for real-world situations and processes.
Examination	Review of case study, oral presentation or written exam. Assessment details will be provided at the beginning of the semester.
Reading list	No single textbook exists that covers all the topics addressed in this module. Following the requirements of the European Qualification Framework (EQF) students will be encouraged to elaborate knowledge on their own by running a literature research on the topics addressed in the lecture notes or the set of slides. Some sources: • Ian Graham: Business Rules Management and Service Oriented Architecture: A Pattern Language, Wiley, latest edition • The Business Rules Group: www.businessrulesgroup.org. • Topic Maps e.g. at: www.ontopia.net/topicmaps or www.i-views.de/ More references will be given in the learn management system Stud.IP
Notes	Topics are related to data management, business processes, or project management.

Module	**Database Systems and Data Management**
Semester(s)	2, summer semester
Responsible	Rüdiger Steffan, Prof. Dr.-Ing. www.wi.hs-wismar.de/ruediger.steffan ++49 3841 753 7606
Lecturer	Rüdiger Steffan, Prof. Dr.-Ing.
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Preparatory self-studies according to study guides and on-line tutorials. Students are expected to complete exercises preliminary to the module for refreshing basic knowledge. Private studies based on web seminars and study notes including literature research and case studies using textbooks and selected scientific articles. Application of the gained knowledge, skills and experience to a continuative course project. Scientific presentation and multidisciplinary interpretation of the results. Support is given via learn management systems including references, files, as well as various possibilities for communication like email, forum, chat, or wiki-pages.
Workload	Focused work on the topics during the semester is required. A full-day workshop including assessment test. Preparatory work and case study including term paper require independent and focused attention. Approximately 110 hour self-study.
Credit points	5
Prerequisites	First experience of scientific-oriented project work. Undergraduate business study subjects statistics, controlling, value chain management and introduction to business informatics.
Module objectives	**Knowledge**: Advanced knowledge of modern architectures and design methods of database or rather information systems. Management frameworks that organizes the concept of information management. In-depth understanding of data processing principles and requirements in enterprises involving fundamental business knowledge. Sophisticated data structures. Advanced design methods and information retrieval for business analytics and decision-making. **Skills**: Students can independently conduct and control a database-oriented project with focus on management or decision making rather than programming or technically administrating. They gain proficiency in requirement analysis and the design of different types of databases and performing sophisticated database-driven analytical tasks for controlling (with sales, purchase or marketing knowledge) on various types of data. Students acquire inquisitive attitude towards research in data management topics. **Competencies:** Competence sufficient to identify current and emerging information technologies that may have strategic value for enterprises. Assess where those technologies have value. Manage the implementation of those technologies in the enterprise. Participate or chair in requirements and design. Explain, critique and discuss advanced concepts to other professionals. Ability to apply learned knowledge and approach to a partially new data management topic based on scientific-oriented articles.
Content	Concepts of enterprise database systems and advanced data management. Database Architectures and Organizational Technologies: • Modern Database Architecture and Storage Concepts • Advanced Information Retrieval, Data Exchange and Data Integration • Web-Scale Data Management for the Cloud and Database Security Sophisticated Data Models and Business Decisions: • Advanced Conceptual Modeling, Design and Implementation for Business • Database-driven Analytical Techniques and Methods for Data Science • Pervasive BI-Tools, Packaged Analytic Applications and Web Applications Hands-on case studies to apply the methods and techniques to business problems.

Examination	Review of case study, oral presentation or written exam. Assessment details will be provided at the beginning of the semester.
Reading list	In addtion to the books below (latest edition each), recent scientific-oriented articles are provided (on-line or printed). Each case study project will include additional articles on an even more sophisticated and detailled level (see competence). • B. Bowhill: Business Planning and Control, Chichester: Wiley. • A. Bytheway: Investing in Information: The Information Management Body of Knowledge, Springer. • Data Management Association http://www.dama.org/ • M. Golfarelli, S. Rizzi: Data Warehouse Design: Modern Principles and Methodologies, McGraw-Hill. • W.H. Inmon, D. Linstedt: Data Architecture: A Primer for the Data Scientist: Big Data, Data Warehouse and Data Vault, Morgan Kaufmann. • R. Kimball, M. Ross: The Data Warehouse Toolkit: The Definitive Guide to Dimensional Modeling, Wiley. • W. Lehner, K.-U. Sattler: Web-Scale Data Management for the Cloud, Springer. • S. Mohanty, M. Jagadeesh: Big Data Imperatives: Enterprise Big Data Warehouse, BI Implementations and Analytics, Apress. • Oracle Corp.: Database Documentation/Concepts, https://docs.oracle.com
Notes	Topics are related to Business Process Design, IT Management and Controlling or Computer Models for Business Decisions.

Module	**Computer Models for Business Decisions**
Semester	2
Responsible	Jürgen Cleve, Prof. Dr. rer. nat. www.wi.hs-wismar.de/~cleve +49 3841 753 7527
Lecturer	Jürgen Cleve, Prof Dr. rer. nat., Uwe Lämmel, Prof. Dr.-Ing.
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used, including email, forum, chat, wiki pages or online tutorials. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focussed work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Understanding of projects and their structure. Management and organisational experience. Knowledge in basic mathematics.
Module objectives	**Knowledge**: Students are able to manage mass data and a knowledge extraction process. Students know the benefits, possibilities, applications, and limits of Data Mining in order to solve business analysis issues. They know the “state of the art” in Data Mining. **Skills**: Students learn to develop Data Mining applications and to manage Data Mining projects according to the CRISP-DM model. They know Data Mining applications, its benefits and limits. **Competencies:** Students gain competencies in the application of data analysis in all kinds of business decision processes. Data Mining requires and trains creative work as well as social skills. Working on the topics trains self-management and personal responsibility.
Content	Four key areas are addressed: • The data mining process as part of the decision process: data pre-processing, analysis and interpretation, • Principles of data mining, • Types of data; structured, semi-structured, and unstructured data, • Various data mining techniques; classification, clustering, prognosis, association rules are assessed, using typical real-world situations, Topics are addressed in project work. KNIME - Konstanz Information Miner, www.knime.org - is used for training. Techniques will be related to participants’ experience and workplaces. Thus, knowledge management will be discussed for real-world situations and processes.
Examination	Review of case study, oral presentation or written exam. Assessment details will be provided at the beginning of the semester.
Reading list	The basic textbook is: • Bramer, Max: Principles of Data Mining, Springer, 2013. Details to the relevant chapters are provided at the beginning of the lecture. Following the requirements of the European Qualification Framework (EQF) students will be encouraged to elaborate knowledge on their own by running a literature research on the topics addressed in the set of slides. Some sources: • Robert Callan: The Essence of Neural Networks, Pearson Education, 2002. • Cleve, J.; Lämmel, U.: Data Mining, Hanser, 2014. More references will be given in the learn management system Stud.IP**.**

Notes	Topics are related to data management, business processes, or project management.

Module	**Business Systems Project**
Semester	2 and 3
Responsible	Prof. Dr.-Ing., Uwe Lämmel, Prof. Dr.-Ing.
Lecturer	All faculty
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Self-management- application of project management skills; discussions at the workplace; Support is given via various communication channels, including email, forum, chat, or wiki. The project work is a major contribution to the workplace study approach of the MBS. A faculty member who is a specialist in the field of the project will supervise the project. The project work is a preparation for the master thesis.
Workload	A full day workshop, approximately 85 hours self-study per semester is required. Focused work throughout the semester is required including communications as well with the supervisor as with colleagues.
Credit points	5 / 5
Prerequisites	Competence and skills as provided in the core modules of the MBS in the 1st semester. Experience in business related field as provided in undergraduate studies and work place experience in the use of information technology in business.
Module objectives	The student gain competencies in identifying and addressing real-world problems related to IT in business using proper research approach. Students become familiar with research methodologies and can apply appropriate research to a task. Knowledge, skills and competence acquired in theory modules are applied and extended to a project. Students gain the competence to apply information technology independently, effectively and efficiently to ensure the success of the enterprise. Student's ability to solve workplace related down-to-earth problems using scientific methods will be improved. Communication skill will be trained in the necessary discussions at the workplace and in the presentation of the results to the class.
Content	Research methodology: quantitative vs. qualitative, explanation-oriented and design-oriented research; empirical research using interviews or questionnaires; Literature research as a basis for applied research in business systems. Students will complete a project in cooperation with industry: action research. The project will focus on the application or the introduction of IT-technologies, or the adaptation or optimization of corporate processes to work seamlessly with IT-systems. A faculty member will simulate the contractor. Students will commence work on the project, the results of which, at its conclusion, are formally presented to their peers and the project supervisors. A final project report that has to follow scientific principles has to be prepared.
Examination	Project thesis and oral presentation of results;
Reading list	Literature on scientific writing, e.g.: Evans, Gruba: How to write a better thesis, Melbourne Univ. Press or Springer, lat. ed. Franklin, M.I.: Understanding Research, Coping with the quantitative - qualitative divide, New York: Routledge,2012 Erik Hofstee: Constructing a Good Dissertation, Exactica, latest edition Supervisors will give literature hints related to the project topic.

odule	**Software Systems Design and Development**
Semester(s)	3
Responsible	Prof. Dr. oec. Erhard Alde www.wi.hs-wismar.de/~alde ++49 3841 753 7618
Lecturer	Prof. Dr. oec. Erhard Alde
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learning Management System Stud.IP including information, references, or files. Various communication channels are used, including email, forum, chat, wiki-pages or online tutorials. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Understanding of software systems and experience in software using, Experience in Project Management, Knowledge of business application systems
Module objectives	**Knowledge**: Students gain competencies in using principles, methods and techniques of Software Engineering in the field of Business Systems. **Skills**: Students are able to use instrumental skills (especially the competence to participate in the design and development projects), systemic skills (especially the competence to manage design and development projects) and communicative skills, focused on the work in interdisciplinary teams. **Competencies:** Focus is on achieving the following competencies: • Independent justification of systems design applied to business information systems • Capability for participating in the design of software development and software implementation projects • Capability for applying current design methodologies and tools
Content	The following main issues are addressed: • Work packages of system development • Software Management • Quality Management, Capability Maturity Model Integration (CMMI) • Application of the Unified Modeling Language (UML) and the Business Process Model and Notation (BPMN) in systems development projects Content and Techniques will be related to participants' experience and workplaces. Thus, different aspects of Software Systems Design and Development will be discussed for real-world situations and processes.
Examination	Review of case study, oral presentation and or written exam. Assessment details will be provided at the beginning of the semester.
Reading list	No single textbook exists that covers all the topics addressed in this module. Following the requirements of the European Qualification Framework (EQF) students will be encouraged to elaborate knowledge on their own by running a literature research on the topics addressed in the lecture notes or the set of slides. Sources are current editions of: • Allweyer, Thomas: BPMN 2.0, Introduction to the Standard for Business Process Modeling, Books on Demand • Miles, Russ and Hamilton, Kim: Learning UML 2.0, O'REILLY • Silver, Bruce: A Levels-Based Methodology for BPMN Process Modeling and Improvement, Cody-Cassidy Press • Sommerville, Ian: Software Engineering, Pearson Education International Edition More references will be given in the Learning Management System Stud.IP
Notes	Topics are related to ERP Systems, Business Processes Management, or Project Management.

Module	**Enterprise Resource Planning Systems**
Semester	3
Responsible	Jan Helmke, Prof Dr. rer. pol. www.wi.hs-wismar.de/jan.helmke ++49 3841 753 7541
Lecturer	Jan Helmke, Prof Dr. rer. pol.
Language	English
Curriculum	Core module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Module: Business Process Design
Module objectives	**Knowledge**: Students gain knowledge of the strategic impact of Enterprise Resource Planning Systems as the core application in enterprises. They recognize how to get a competitive edge by using an Enterprise Resource Planning System. **Skills**: Students are able to customize business processes in the Enterprise Resource Planning system in a way to achieve strategic business goals. They can use Enterprise Resource Planning-Systems as a platform to realize strategic connections to customers and suppliers and are able to react adequately to those connections. **Competencies:** This module requires and trains creative work as well as self-management.
Content	Realization of business processes in an Enterprise Resource Planning System Realization of Business Process Reengineering Refection of external effects on Enterprise Resource Planning Systems: - Enterprise Resource Planning Systems in context to business strategy - Enterprise Resource Planning Systems in context to organizational infrastructure - Enterprise Resource Planning Systems in context to technical infrastructure Case studies will be related to participants' experience and workplaces. The problems will be discussed for real-world situations and processes.
Examination	Written exam or case study, term paper and oral presentation, application to course project. Assessment details will be provided during the first semester workshop.
Reading list	Leon, Alexis: Enterprise Resource Planning Magal, Simha R.; Word, Jeffrey: Integrated Business Processes with ERP Systems Monk, Ellen; Wagner, Bret: Concepts in Enterprise Resource Planning

Master of Business Systems			
Module	Code	Credits	Semester
Thesis	**PM 14**	**25**	**4**

Responsible/ Lecturer	All faculty members
Language	English
Curriculum	Final module of the degree programme
Didactic	Self-management- application of project management skills; discussions at the workplace; Support is given via various communication channels, including email, forum, chat, or wiki. Students will be supervised by a faculty member who is a specialist in the topic of the thesis topic.
Study effort	Focused work on the research topic during the semester is required: Approximately 600 hours of working on the research topic and the dissertation including communication with the supervisor.
Prerequisites	All but one module have to be passed before the work on the thesis can begin:
Goals/ Competencies	The aim of a master thesis is defined in the examination regulations. The thesis should demonstrate that the candidate is able to work independently on a problem in his field within a given period using scientific methods. Candidates deepen their knowledge in the field related to the thesis´ topic and develop their competence in research. Personal skills are extended as well: self-management is developed by running the thesis research as a project. Writing and Communication skills are improved.
Content	A master thesis covers a question of scientific interest. By the master thesis the candidate demonstrates that he or she is capable solving a problem • autonomously • within a specified period and • by using scientific methods. The candidate shows that he or she is able to express his or her ideas and conclusions in a scientific text in a sensible and comprehensible manner. A scientific problem is characterized by the line of questioning. It is not a scientific contribution if someone limits himself to a description of research contributions achieved by other people. It is neither a scientific contribution if the course of a project is recorded. The work is scientifically as well if a practical question is answered, e.g. a question raised in industry, by applying scientifically accepted methods. The problem, the issue, or the question is then the »cause« of a scientific investigation.
Assessment	The master's thesis is an examination that concludes the study. The written thesis must be submitted on time to the Central Examination Office at the in triplicate. The dissertation is assessed by two examiners. The supervisor of the thesis is one of the examiners. In a colloquium the candidate has to present the result of his/her research and has to defend his/her thesis.
Literature	Literature on scientific writing, e.g.: Evans, Gruba: How to write a better thesis, Melbourne University Press, 2010. Supervisors will give literature hints related to the thesis topic.
Notes	See the examination regulation for administrative issues

Module	**Human Resource Information Systems**
Semester(s)	3
Responsible	Prof. Dr. oec. Erhard Alde www.wi.hs-wismar.de/erhard.alde +49 3841 753 7618
Lecturer	Prof. Dr. oec. Erhard Alde
Language	English
Curriculum	Elective module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learning Management System Stud.IP including information, references, or files. Various communication channels are used, including email, forum, chat, wiki-pages or online tutorials. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Understanding and experience in Human Resource Management, Experience in using Human Resource Information Systems (HRIS), Knowledge in Enterprise Resource Planning Systems
Module objectives	**Knowledge:** Students gain competencies in implementation of HRIS. **Skills**: Students are able to use independently instrumental skills (especially the competence to model and design HR-processes), systemic skills (especially the competence to manage HRIS-projects) and communicative skills, focused on the work in interdisciplinary teams. **Competencies:** Focus is on achieving the following competencies: • Using Methods of Business Process Modeling in the field of HRIS • Capability for participating in the design and implementation process of HRIS • Capability for applying current HRIS-Components
Content	The following main issues are addressed: • User und Systems Specification for HRIS • Functionality and Architecture of HRIS • Implementation and Using of HRIS in the Context of Enterprise Resource Planning Contents and Techniques will be related to participants' experience and workplaces. Thus different aspects of HRIS will be discussed for real-world situations and processes.
Examination	Review of case study, oral presentation or written exam. Assessment details will be provided at the beginning of the semester.
Reading list	No single textbook exists that covers all the topics addressed in this module. Following the requirements of the European Qualification Framework (EQF) students will be encouraged to elaborate knowledge on their own by running a literature research on the topics addressed in the lecture notes or the set of slides. Sources are current edition of: • Richard Charles Starling: Checklist of Human Resource System Requirements: A Practical Workbook for Rapidly Specifying the Requirements of Your New Human Resource System • Alan Price: Human Resource Management in a Business Context • Derek Torrington and Laura Hall: Human Resource Management • Deborah D. Waddil and Michael J. Marquardt: The Complete Handbook for Technology-enabled Human Resources More references will be given in the Learning Management System Stud.IP
Notes	Topics are related to Software Systems and Design, Enterprise Resource Planning Systems, or Business Processes Management.

Module	**Marketing Decision Systems**
Semester	3
Responsible	Kai Heuer, Prof. Dr. rer. pol. www.wi.hs-wismar.de/kai.heuer
Lecturer	Kai Heuer
Language	English
Curriculum	Elective module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including textbooks and internet sources. Workshops, case study, discussion group, application to course project. Support is given via the Stud.IP system including information, references, files, as well as various possibilities for communication are used like email, forum, chat, or wiki.
Workload	A permanent work on the topics along the semester is required. A full-day workshop, online communications. Case study requiring independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Expertise in a business related subject as part of undergraduate studies. Workplace experience in business. Understanding of projects and their structure. Management and organisational experience.
Module objectives	Participants gain skills in using information technology for decision situations in marketing. Participants can independently prepare and create market surveys and market analysis as well as perform, evaluate and interpret it. Students are able to forsee the impact of market analysis outcomes on strategic decisions.
Content	Objectives of marketing research, marketing research processes, decision situations, Case studies for creating questionnaires, preparation and running of interviews and enquiries, data analysis, interpretation and representation of results, using software for the steps, connection to databases, data mining, knowledge management.
Examination	Written exam, review of case study, application to course project or oral presentation. Assessment details will be provided during the first semester workshop.
Reading list	Will be provided at the beginning of the course.

Module	**Supply Chain Management**
Semester	3
Responsible	Gunnar Prause, Prof. Dr. math. www.wi.hs-wismar.de/gunnar.prause
Lecturer	Gunnar Prause
Language	English
Curriculum	Elective module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used, including email, forum, chat, wiki-pages or online tutorials. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	The students should have master knowledge in informatics and management, integrated industrial business, organization and business processes.
Module objectives	Goals: The course is intended to develop understanding of both strategic and operational issues of supply chain management. On completion of the course, the students know the concepts and methods of supply chain management, the applications and ways to analyse multimodal transportation concepts, supply chains and supply relations so that they are able to solve problems and inefficiencies of supply chains. Learning outcomes: Students are able to observe and analyse strategic and operational issues of multimodal logistics and supply chain management and they are able - to understand the concepts and deal with various kinds of problems that may appear in establishing or participating in supply chains - to perceive interdisciplinary relations in multimodal logistics and supply chain management and to use that information in decision making - to choose suitable methods and technologies for solving multimodal logistics and supply chain problems - to analyse problems from multiple viewpoints and to present, discuss and defend their views - to further to develop their teamworking and management skills via groupwork - to further acquire knowledge by studying and being able to understand higher level academic approaches of supply chain management
Content	Supply Chain Management (SCM) deals with cross-company value creation networks in order to realise an efficient integration of the full value chain between suppliers, manufacturers, retailer and clients. Since all parts of the value chain are involved in SCM the topic is placed in the intersection of Business Administration, Logistics, Informatics and Engineering with a dominating part in Management. a. Fundamentals of Supply Chain Management b. Managing the Performance of Supply Chains

	c. Multimodality and global supply chains d. Smart SCM (Internet of Things and Services, Industry 4.0) e. Green/Sustainable SCM The students should have gained preliminary knowledge on bachelor level in business administration, logistics and informatics.
Examination	Review of case study, oral presentation or written exam. Assessment details will be provided at the beginning of the semester.
Reading list	J. Heizer, B. Render; Operations Management; 11th ed.; Prentice Hall P. Nyhuis, H-P. Wiendahl; Fundamentals of Production Logistics; Springer D. Simchi-Levi; Operations Rules: Delivering Customer Value through Flexible Operations; MIT Press D. Simchi-Levi, P. Kaminsky, E. Simchi-Levi; Designing & Managing the Supply Chain: Concepts, Strategies & Case Studies; H.-P. Wiendahl, S. Lutz; Production in Networks; CIRP Annals - Manufacturing Technology, Volume 51, Issue 2, 2002, Pages 573–586Production in Networks
Notes	Topics are related to management, informatics, business operations and logistics

Module	**Economic Policy**
Semester	3
Responsible	Michael Schleicher, Prof. Dr. rer. pol. www.wi.hs-wismar.de/michael.schleicher
Lecturer	Michael Schleicher
Language	English
Curriculum	Elective module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including textbooks and internet sources. Workshops, case study, discussion group, application to course project. Support is given via the Stud.IP system including information, references, files, as well as various possibilities for communication are used like email, forum, chat, or wiki-pages.
Workload	A permanent work on the topics along the semester is required. A full-day workshops, online communications. Case study requiring independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Workplace experience in business.
Module objectives	Participants get an overview on economic policy solutions for economic problems. They can use economic approaches as well as assess them. Participants are able to transform the results of economic analyses into business decision processes.
Content	Representation and analysis of economic data, introductory economic models for short and long terms; effects of monetary policies and fiscal policies; representation of the Phillips-curve relation.
Examination	Review of case study, oral presentation and exam. Assessment details will be provided at the beginning of the semester.
Reading list	Blanchard, Oliver: Macroeconomics, latest edition

Module	**Contemporary Issues in Business Information Systems**
Semester	3
Responsible	Uwe Lämmel, Prof. Dr.-Ing. http://www.wi.hs-wismar.de/uwe.laemmel
Lecturer	All faculty
Language	English
Curriculum	Elective module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including textbooks and internet sources. Workshops, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, files, and various communication channels are used, including email, forum, chat, or wiki-pages.
Workload	Lecture sessions plus regular and independent practice is essential. Approximately 125 hours study required in total and about 110h for self-studies.
Credit points	5
Prerequisites	Competencies as taught in the modules of the 1st and 2nd semester; workplace experience in business.
Module objectives	Students gain further competencies in subjects currently under discussion in the field of information technology in business. **Knowledge**: Students learn about a field in business systems currently under discussion either internationally or nationally. **Skills**: Students increase their analytical and management skills in addressing an up-to-date topic that has not yet been settled and does not provide long established theory or literature. **Competences**: Students are able to independently link new developments to workplace related down-to-earth problems. Moreover, students can link the subject to other fields addressed in the course. Communication skill will be trained in the necessary discussions at the workplace and in the presentation of the results to the class.
Content	The content may vary according to current developments, student's interest or availability of faculty.
Examination	Project work or alternative accomplishment (term paper) and oral presentation.
Reading list	Will be specified at the beginning of the course depending on the topic

Module	**Applied e-Business**
Semester	3
Responsible	n.n. (bisher Prof. Dr. Dr. Herbert Neunteufel)
Lecturer	Dr Roger Silberberg
Language	English
Curriculum	Elective module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project, computer-supported presentations. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used: email, forum, chat, wiki-pages or online tutorials. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Lecture sessions plus regular and independent practice essential. Approximately 110 hours self-study is required.
Credit points	5
Prerequisites	Competence in using internet tools; fundamental understanding of marketing and business communications as provided in a first business related degree and at workplace; Competences in project management and business processes as provided in the first semester.
Module objectives	Students know how to evaluate the technical as well as the operational aspects of e-commerce, and are enabled to apply this knowledge effectively in practice. Students are able to formulate and evaluate business plans for internet-based business approaches. Students are enabled to assess the relevance of new trends and developments in the field of e-commerce and are able to use it in strategic management. Students get competence to recognise opportunities, benefits and risks associated with the application of the internet as a critical element of modern business. They are able to deduce the demands and requirements for internet applications in the real business world, implement effective solutions, and are able to address social and ethical impacts.
Content	Introduction to computer-supported communication in business, Technical fundamentals, Types of e-commerce and their application, Advantages and weaknesses in e-commerce, The role of e-commerce related to conventional business interaction, Rules and pre-requisites for success, e-Markets, e_payment and security in e-commerce, Constructing relevant e-commerce business plans • Online-Advertising (eAdvertising) • Online market research • Online Customer Relationship Management (eCRM) • Conversion Marketing • Search Engine Optimization • E-mail marketing • Affiliate Marketing International (i.e. cross-cultural) aspects of online marketing will be discussed as well.
Examination	Review of case study, oral presentation or written exam. Assessment details will be provided at the beginning of the semester.
Reading list	Rainer Thome, Heiko D. Schinzer, Martin Hepp: Electronic Commerce and Electronic Business, latest edition

Module	**Multimedia in Business**
Semester	3
Responsible	Jan Helmke, Prof Dr. rer. pol. www.wi.hs-wismar.de/jan.helmke +49 3841 753 7541
Lecturer	Jan Helmke, Prof Dr. rer. pol.,
Language	English
Curriculum	Elective module in the degree programme Master of Business Systems
Type of teaching	Private studies according to study notes including literature research using textbooks or other sources. Workshop, case study, discussion group, application to course project. Support is given via the Learn Management System Stud.IP including information, references, or files. Various communication channels are used. Work-based learning by linking information technology theory with workplace environment and experience.
Workload	Focused work on the topics during the semester is required. A full-day workshop. Case study including term paper requires independent and focused attention. Approximately 110 hours self-study required.
Credit points	5
Prerequisites	Management and organisational experience
Module objectives	**Knowledge**: Students gain knowledge in the development of multimedia and social media strategies to achieve strategic goals of a company. **Skills**: Students are able to realize a social customer relationship management. They can achieve strategic goals by creating value innovations. **Competencies:** This module requires and trains creative work as well as self-management. The development of concepts for Social Customer Relationship Management will train social skills.
Content	The following key topics are addressed by developing a social media strategy: - Multimedia and social media techniques - Customer Relationship Management - Value Innovation - Web 2.0 - Creating of competitive advantages by using multimedia and social media
Examination	Written exam, case study, term paper and oral presentation or application to course project. Assessment details will be provided during the first semester workshop.
Reading list	Andrews, Adrian: Social Media Marketing Gordon, Ian H.: Managing the New Customer Relationship – Strategies to Engage the Social Customer and Build Lasting Value Kim, W. Chan; Mauborgne, Renée: Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant