Module manual

Degree program: Business Information Technology, Dresden University of Cooperative Education and Bautzen University of Cooperative Education (last updated: September 2022)

Module code	Module title	Module description	Semester	ECTS
WI-BS-10	Basic Skills	The module provides students with the fundamental skills required for their studies and enables them to work independently in a targeted manner. Students are introduced to the organization of their studies and later academic work. They are familiarized with fundamental theoretical and practical aspects of academic work. Further focus is placed on the organization of academic works in terms of format and content, as well as on communication theory and rhetorical principles. Students are enabled to plan their work in an appropriate and timely manner and to present academic findings using appropriate software support.	1	5
WI-MDWI-10	Methods of Business Information Technology	Students gain knowledge of cross-sectional methods of business information technology. Along the life cycle of software, the module focuses on systems analysis, systems design, and project management. Basic exercises complement the fundamentals and prepare for project-oriented application in advanced modules.	1	5
WI-PROG-10	Programming	Students gain knowledge of the fundamentals of object-oriented programming. The module provides an introduction to the functionality, structure and application of an object-oriented programming language. Aside from a basic understanding of the development of application systems, the module gives an introduction to the Unified Modeling Language, which is followed up in other technical and professional specializations. The programming language chosen for this module at the respective university (e.g., Java or C++) is taken up in subsequent modules.	1	5
WI-UGU-10	Enterprises in the Global Environment	Students gain an overview of the fundamentals of business administration and economics. They are familiar with the fundamental categories and methods of modern management theory. Furthermore, students acquire basic knowledge of economics, which enables them to analyze and overall business management issues from an overall economic point of view.	1	5
WI-WIMA-10	Business Mathematics	This module provides students with the mathematical tools for successfully studying the contents of business information technology. The following areas of mathematics are particularly important for the combination of business administration and computer science: analysis, linear algebra, financial	1/2	8

		mathematics, descriptive statistics, probability theory, inductive statistics, linear optimization, optimization models, reliability theory and operation theory. The module takes a problem-oriented approach, using primarily instructive examples from practice.		
WI-BWL-23	Business Administration	The module addresses the essential processes of corporate value chains and provides the fundamentals for making economic decisions along these chains. For this purpose, students gain an understanding of the processes of materials management and procurement, production, marketing, sales and distribution and their interdependencies. Suitable methods for their economic description and evaluation are provided in the module part on accounting. Furthermore, the module introduces models and simple methods, in particular from logistics, for the design of material and information flows.	2/3	10
WI-WIEN-20	Business English	This English language module meets the needs of students in cooperative degree programs and provides an introduction to general aspects of economics and computer science in a company environment. It systematically develops key language skills for efficient communication in this field and places great emphasis on helping students boost their lexical range (terminology). This English course also encourages students to sharpen their communication skills and draw on their own experience at work. Authentic material and motivating activities provide constant opportunities for discussion, offer an intercultural perspective, and maximize learner involvement.	1	5
WI-SP-23	Software Project	Students enhance their knowledge of software development through project-oriented work. In the context of a defined case study, students apply their knowledge of software analysis, design, and implementation. They acquire skills in the planning and implementation of software projects. Students strengthen their ability to work in a team and communicate their results.	2.	10
WI-DABA-20	Databases	The module imparts knowledge and skills of modeling, application, and administration of relational database systems. In practical exercises, students can test their skills on concrete database management systems and deepen their knowledge.	2	5
WI-TINF-30	Theoretical Informatics		3	5

		The module focuses on selected topics from the areas of logic and algebra, algorithms and data structures, complexity and automata theory, and formal languages.		
WI-RECHT-34	Law	The module provides an introduction to the fundamentals and general principles of civil law as well as to the methodology of legal work. Students discuss legal cases in order to become familiar with the legal forms of private autonomy (declaration of intent, legal transaction, contract), as well as the types and contents of debt relationships and the rules on performance defaults. In addition, students are familiarized with the fundamental principles of property law. Furthermore, the module imparts knowledge of the special private law of merchants and their auxiliaries with the regulations on the company, the commercial register, and commercial transactions. Finally, students are provided with an overview of the possible legal forms of companies. They are to know the fundamental differences between partnerships and corporations or joint-stock companies regarding formation, management, representation, and liability. The module discusses legal cases to impart the fundamentals of individual and collective employment law. Students are familiarized with the legal conditions for the establishment, content, and termination of an employment contract. They learn how to deal with collective agreements as well as the mechanisms of labor disputes and gain an insight into the right of co-determination. Furthermore, students acquire fundamental knowledge of the legal framework of information and communication technology as well as the special characteristics of Internet law with a focus on competition, copyright, and contract law.	1	8
WI-ERP-30	Enterprise Resource Planning	The module provides fundamental and in-depth knowledge of ERP systems. Apart from a functional overview, the structure and mode of operation of ERP systems are discussed. A market overview and current trends round off the topic. The course content is applied and consolidated in the form of an exercise with a suitable ERP system.	3	5
WI-RAKS-40	Computer Architecture and Communication Systems	The module covers the fundamentals of network and digital technology and, building on this, the organization and interaction of various partially networked hardware components of a computer. On this basis, the module discusses the necessary resources and their allocation by the operating system. Moreover, the individual layers of the Open Systems Interconnection Model (OSI reference model)	4	5

		and common network protocols, standards and application systems in combined wired, mobile, and wireless networks are introduced and explained.		
WI-FIMA-40	Financial Management	The module covers methods for assessing the profitability of investments and business valuation approaches for various financing options. Furthermore, the module deals with the basic principles and systematics of selected types of business taxes (income tax, corporate income tax, trade tax, VAT).	4	5
WI-BP-45	Consulting Project	Students deepen their knowledge of Enterprise Resource Planning through project-oriented work. In the context of a defined case study, students apply their knowledge of the handling of business processes and the implementation of ERP systems. They acquire skills in the planning and implementation of consulting projects. They strengthen their teamwork skills and communicate their results.	4/5	10
WI-ITM-40	IT Management	The module imparts measures and methods to optimally design the business processes of a company by means of the IT organization and to operate the IT required for this purpose. This includes the methods of business process analysis and optimization as well as measures and methods of IT service management and related areas. Students apply and deepen their knowledge of the course content in a practical course using a suitable business process modeling tool.	4	5
WI-ZDT-50	Future Workshop "Digital Transformation"	The module provides an introduction to the topic of digital transformation. Building on basic social structures, as described by the French philosopher André Comte-Sponville, the module addresses the phenomenon of digitalization and enables students to understand and evaluate its multiple - digitally transforming - effects on society, companies, and individuals: on an academic-technological, political-legal, moral, and ethical level. The seminar complements lectures on the topic of digital transformation. Students actively participate in academic discourse. Both content and form of the module allow for the integration of current issues and modern didactics.	5	7
WI-VWL-50	Economics	The module familiarizes students with the aggregate structure of the economy. This includes first the basic instrument, national accounts, and the state as a central macroeconomic actor. The part on "economic policy" contrasts economic theory with intervention in the economic subsystem. In the Federal Republic of Germany, political objectives are formulated primarily in the Stability Act. These are discussed together with considerations of monetary theory. Students are enabled to interpret and analyze economic issues from the perspectives of national economy and	5	5

		economic policy. The part on "Foreign Trade and Globalization" includes the importance of foreign trade for the overall economy in the discussion of economic policy interventions. Real foreign trade focuses on international flows of goods. Monetary foreign trade addresses international money flows and foreign exchange markets. Both sides are contextualized within the international framework. Students understand the importance of globalization for the German economy as a whole.		
WI-COMA-56	Corporate Management	Building on the basic business administration modules, students are familiarized with the functions and interaction of the dispositive functional areas of controlling, organization, and human resources management. Controlling introduces students to the concepts of coordinating and controlling the various objectives of the company. Organization focuses on the importance of organization as a management function by discussing and applying the various design options for structural and process organization, concepts of organizational change, and organizational techniques. In the part on human resources management, students gain knowledge of the range of services offered by human resources management as the sum total of employee-related management and administrative tasks in a company. Furthermore, the approaches and procedures of contemporary quality management are communicated. A business game is used to simulate the fundamental interrelationships of the various functional areas of the company, from service production, to finance and the dispositive areas, and to demonstrate their effects on key performance indicators.	5	8
WI-ITSK-60	IT Services and Concepts	This module covers current approaches to integrative service and information management structures and the associated technologies and concepts. Opportunities and risks of electronic business and the increasing digitalization of information are dealt with in more detail.	6	5
WI-MSS-60	Management Support Systems	In ideal-typical and hypothetical business situations, the module on Management Support Systems encourages students to apply the knowledge acquired in the basic subjects of business administration and computer science. For this purpose, the module covers the main application areas and characteristics of management support systems as well as their underlying technologies. These contents are supplemented by an examination of current topics and basic technologies of data management, processing, and analysis. Students are enabled to analyze, design, and implement simple systems.	6	5

		Students apply the course contents in accompanying projects and thus acquire skills in teamwork and result-oriented and academic work.		
WI-BK-50	Office Communication	This module gives students the opportunity to specialize according to their inclination and place of study. According to the study regulations, students are required to select one specialization from the range of offers. After the selection by the students, an efficiency check has to be carried out at the respective place of study. Specializations can only be realized if the respective efficiency regulations (minimum number of participating students) allow it. In the module "Office Communication", students acquire and deepen practical skills in the areas of office communication and groupware systems.	5	5
WI-SFG-50	Health Care Structures and Funding	This module gives students the opportunity to specialize according to their inclination and place of study. According to the study regulations, students are required to select one specialization from the range of offers. The general admission and implementing rules for elective modules apply. Students are familiarized with the structures and contexts of the health care system and are able to develop solutions to problems. For this purpose, they need to grasp the complexity of the medical business and learn to evaluate the roles of the acting individuals. Students acquire knowledge of important regulations and nomenclatures and understand the language, structure, and processes of the health care system. They are familiar with the specific features of funding the health care system and are thus able to work at the interface between the acting individuals and information technology.	5	5
WI-VRK-50	Consolidation of Computer Architecture and Communication Systems	This module gives students the opportunity to specialize according to their inclination and place of study. According to the study regulations, students are required to select one specialization from the range of offers. The general admission and implementing rules for elective modules apply. In the elective module "Consolidation of Computer Architecture and Communication Systems", students deepen the knowledge acquired in the compulsory module and acquire further knowledge and additional skills. Thus, students not only become familiar with further architectures and special operating systems, but also acquire skills in handling and working productively with them. Special emphasis is placed on future technology such as quantum computers.	5	5

WI-VSE-60	Consolidation of Software Engineering	This module gives students the opportunity to specialize according to their inclination and place of study. According to the study regulations, students are required to select one specialization from the range of offers. The general admission and implementing rules for elective modules apply. The module covers current topics in software engineering that are of practical relevance. The techniques and methods of the modules "Programming" and "Methods of Business Information Technology" are supplemented and consolidated through the use of a case study. The case study applies contents of other modules of the degree program. Focus is placed on a holistic run through of a software development including the phases of analysis, design, and implementation.	6	5
WI-IKK-60	Intercultural Competence	This module gives students the opportunity to specialize according to their inclination and place of study. According to the study regulations, students are required to select one specialization from the range of offers. The general admission and implementing rules for elective modules apply. In this elective module, students gain intercultural, social, and communicative competencies. They are enabled culture-related differences in perception, thinking, feeling, acting, and judging in themselves and others. They can analyze these differences against the background of their own and foreign cultural orientation systems and effectively design communication processes in professional situations.	6	5
WI-MIM-60	Medical Information Management	This module gives students the opportunity to specialize according to their inclination and place of study. According to the study regulations, students are required to select one specialization from the range of offers. The general admission and implementing rules for elective modules apply. The module imparts the most significant requirements for information systems to support healthcare processes enabling students to classify, evaluate, and plan systems. Students understand how different systems interact to form an overall process. They are also able to define interfaces between systems.	6	5
WI-PM_I-12	Practical Module I	In this practical module, students become familiar with their partner company and its elementary processes and activities. They gain an overview of the communication relationships in the company as well as the information systems used. Students are directly integrated into practical teams and thus receive essential impulses for the development of new or the consolidation of previously acquired	1/2	12

		social competences. They deepen the professional knowledge gained in the theoretical modules and apply it in a presentation. They apply and practice work and problem-solving techniques, including the associated IT. Students expand their competence, as well as their methodological and social skills. They practice methods of business information technology in first guided projects. They independently write a project paper, which is evaluated during the on-site seminar.		
WI-PM_II-34	Practical Module II	In this module, students become familiar with further fundamental processes in selected functional areas and thus strengthen their competence as well as their methodological and social skills. They increasingly solve operational tasks at their own responsibility. Students enhance their professional knowledge, their ability to think analytically, critically, and constructively, to analyze and assess specific practical processes, as well as their ability to translate theoretical knowledge into practice and vice versa. Thus, they strengthen their independence, further develop their competencies, and are enabled to take decisions. Students select and apply problem-solving and project management techniques and practice their ability to independently conduct academic work by writing the second project paper.	3/4	
WI-PM_III-50	Practical Module III	In this practical module, students work independently on operational tasks and consolidate their methodological competence of project management. They attend trade fairs or negotiate with customers to acquire sales skills and learn how to deal with conflicts.	5	6
WI-PM_BA-60	Bachelor's Thesis Business Information Technology	With their bachelor's thesis, students demonstrate their ability to independently work on, critically evaluate, and further develop a problem in the field of business information technology within a specified period of time using the previously acquired practical and theoretical knowledge and recognized academic methods. They are able to present the results in a presentation.	6	9