Faculty of Business and Economics
Modules open to Erasmus students
Bachelor's Level
Winter Semester 2025/2026

DISCLAIMER:
Please note that the English translation is provided for information purposes only. The English text is not legally binding. Only the original German document has legal validity. The official language at TU Dresden is German. German jurisdiction applies.

Module number	Module name	Responsible lecturer
WW-BA-114-ATTU WW-D-114-ATTU	Aktuelle Themen der TU Umweltinitiative	Prof. Dr. Dominik Möst ee2@mailbox.tu-dresden.de
Qualification objectives	The students are proficient in environmentally relevant scientific facts. The students are familiar with the current state of development of vari-ous focal points of current environmental topics and are able to trans-fer this to practical issues.	
Contents	The contents of the module are scientifically sound up-to-date content on different focal points of environmental problems on the ecological, economic and social level of sustainability.	
Teaching and learning methods	Lecture: 4 hours per week Seminar: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation		
Usability	BA WiWi, BA WiPäd, D WiIng, D WiInf: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-101-CIMA WW-D-101-CIMA	Cases in Management Accounting	Prof. Dr. Peter Schäfer maac@tu-dresden.de
Qualification objectives	After completing the module, students will be able to identify and struc-ture problems of controlling in corporate practice and its causes, identi-fy and evaluate possible solutions, and develop, present and discuss a suitable solution. On the basis of case studies, students learn to develop solutions to problems of management accounting in corporate practice.	
Contents	The contents of the module are cost accounting systems, budgeting, transfer pricing and variance analyses.	
Teaching and learning methods	Seminar: 2 hours per week Independent study The language of the module is English. The seminar is limited to 16 participants, selection based on the order of enrollment.	
Prerequisites for participation	Basic knowledge of cost accounting and controlling is required, as taught in the Fundamentals of Accounting module, for example.	
Usability	BA Wiwi, D WiInf, D WiIng: Fields Business Administration and Economics, Presenting and Discussing BA WiPäd: Fields Business Administration and Economics Students must choose according to the respective examination regulations. The choice is only permitted for one of the fields mentioned.	
Examination	Combined term paper, 50 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-112-DILO WW-D-112-DILO	Distributionslogistik	Prof. Dr. Rainer Lasch logistik@mailbox.tu-dresden.de
Qualification objectives	The students have in-depth knowledge of logistics. You will be able to apply quantitative methods to design and optimize transportation and transshipment problems, network flow problems, roundtrip and tour problems, and site management. In addition, they can solve tasks in the field of physical distribution. Furthermore, students are able to apply presentation and rhetoric techniques.	
Contents	The contents of the module are transport and transshipment planning, network flow planning, round trip and tour planning, location management and physical distribution.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation	The skills to be acquired in the modules Fundamentals of Accounting, Introduction to Business Administration and Organization, Marketing and Sustainable Corporate Management, Annual Financial Statements, Investment and Financing, and Production and Logistics are required.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Complex assesment, 15 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-EBWL WW-D-EBWL	Einführung in die Betriebswirtschaftslehre und Organisation	Prof. Dr. Michael Schefczyk mandy.windisch@tu-dresden.de
Qualification objectives	Students know the terms and principles of business administration and the basics of organizational management. They master the methodological tools and systematic orientation. Students are able to successfully deal with business management issues, recognize problems of organizational management and assess the effectiveness of organizational design measures.	
Contents	Contents of the module are the basics of business administration, in particular legal forms, marketing, innovations and property rights, technology management, production and procurement, service management, investment and financing, project management, controlling, theories of organizational design, models of organizational differentiation, models of organizational integration, formal and informal organization, motivational organizational design, organizational culture, organizational change and ethical behaviour in organizations.	
Teaching and learning methods	Lecture: 3 hours per week Practical: 1 hour per week Tutorial: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation		
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics It creates the prerequisites for the modules in the compulsory and elective fields, which are listed under “Prerequisites for participation.”	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-114-EENW WW-D-114-EENW	Einführung in die Energiewirtschaft	Prof. Dr. Dominik Möst ee2@mailbox.tu-dresden.de
Qualification objectives	Students are able to reproduce basic terms, definitions, concepts and methods of the energy industry and name relevant parameters of energy sources. In addition, students are able to explain techno-economic rela-tionships, concepts and methods of renewable energies and are able to illustrate fundamental relationships in the energy industry, such as ho-telling, and to calculate physical relationships as well as to analyse practi-cal problems against an energy industry background.	
Contents	The contents of the module are basic terms, relationships and market forms in the energy industry Value chains of conventional and renewable energy sources including their effects on the energy industry, in particular the energy sources oil, gas, coal, nuclear energy, renewable energies as well as the final energy sources electricity and heat as well as practical, current topics from the energy industry.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Seminar: 2 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills to be acquired in the modules Fundamentals of Accounting, In-troduction to Business Administration and Organization, Marketing and Sustainable Corporate Management, Annual Financial Statements, In-vestment and Financing, and Production and Logistics are required. Fur-thermore, English language skills at level B2 of the Common European Framework of Reference for Languages are required.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics, Supplementary Qualifications Students must choose according to the respective examination regulations. The choice is only permitted for one of the fields mentioned.	
Examination	Portfolio, 15 hours	
Workload and Credit points	300 hours, 10 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-114-FSEU WW-D-114-FSEU	Fallstudien in Energie und Umwelt	Prof. Dr. Dominik Möst ee2@mailbox.tu-dresden.de
Qualification objectives	Students can present the contents of a practical case study in writing and illustrate the independently developed results and compare them with current results from research and practice. The students are able to calculate the questions of the case study independently, to organize themselves independently in a group and to work out solutions togeth-er. In addition, students are able to differentiate between different as-pects of the energy industry and sustainable corporate management and to analyze them using methods used in these departments.	
Contents	The content of the module is current issues in the fields of energy man-agement and sustainable corporate management.	
Teaching and learning methods	Seminar: 2 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills to be acquired in the modules Fundamentals of Accounting, Introduction to Business Administration and Organization, Marketing and Sustainable Corporate Management, Annual Financial Statements, Investment and Financing, and Production and Logistics are required. Furthermore, English language skills at level B2 of the Common Euro-pean Framework of Reference for Languages are required.	
Usability	BA Wiwi, D WiInf, D WiIng: Fields Business Administration and Economics, Presenting and Discussing BA WiPäd: Fields Business Administration and Economics Students must choose according to the respective examination regulations. The choice is only permitted for one of the fields mentioned.	
Examination	Combined term paper, 90 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-GREW WW-D-GREW	Grundlagen des Rechnungswesens	Prof. Dr. Peter Schäfer maac@tu-dresden.de
Qualification objectives	Students are familiar with internal and external accounting. They know how cost and performance accounting in companies can be designed to suit the problem, understand how individual business transactions are mapped in financial accounting and know the relationships between the balance sheet and income statement.	
Contents	The module covers cost and activity accounting in companies and the methods of cost type, cost center and cost unit accounting.	
Teaching and learning methods	Lecture: 3 hours per week Practical: 3 hour per week Independent study The language of the module is German.	
Prerequisites for participation		
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics It creates the prerequisites for the modules in the compulsory and elective fields, which are listed under “Prerequisites for participation.”	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-103-IAIM WW-D-103-IAIM	Instrumente und Anwendungen des Industriellen Managements	Prof. Dr. Udo Buscher bwlim@tu-dresden.de
Qualification objectives	Students are able to solve a variety of quantitative problems through the use of suitable mathematical software instruments. By adequately mapping the problems in the software, they recognize the interdepend-encies of the underlying problems and thus strengthen their under-standing of modeling. In addition, they can create scientific papers with LaTeX.	
Contents	The content of the module is the teaching of the basics for creating scientific papers with LaTeX as well as the modeling and programming of mathematical models for the solver Gurobi in the programming lan-guage Python.	
Teaching and learning methods	Seminar: 2 hours per week Independent study The language of the module is German. The seminar is limited to 24 participants, selection based on the order of enrollment.	
Prerequisites for participation	Basic knowledge of business administration, such as that taught in the Production and Logistics module, is required.	
Usability	BA WiPäd: Fields Business Administration and Economics, Supplementary Qualifications BA WiWi, D WiIng, D WiInf: Fields Business Administration and Economics, Methods and Procedures Students must choose according to the respective examination regulations. The choice is only permitted for one of the fields mentioned. The module creates the groundwork for the modules “Advanced Approaches in Industrial Management,” “Current Research Issues in Industrial Management,” and “Current Research Issues in Operations Research.”	
Examination	Complex assesment, 80 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-107-INRL WW-D-107-INRL	Internationale Rechnungslegung	Prof. Dr. Michael Dobler wus@mailbox.tu-dresden.de
Qualification objectives	After completing the module, students will be able to present and explain the basics, instruments and central regulations of accounting according to International Financial Reporting Standards (IFRS). You will be able to apply this knowledge in the preparation and interpretation of IFRS financial statements.	
Contents	The content of the module is the institutional foundations, purposes and instruments of international accounting according to IFRS as well as the requirements for accounting for material balance sheet items according to IFRS.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	The competencies to be acquired in the modules Fundamentals of Accounting, Introduction to Business Administration and Organization, Annual Financial Statements, Investment and Financing, and Linear Algebra in an Economic Context are required.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 60 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-105-INFI WW-D-105-INFI	Investition und Finanzierung II	Prof. Dr. Lars Hornuf arite.schrehardt@tu-dresden.de
Qualification objectives	The students internalize the relationship between risk and return in the evaluation of financial flows from the capital market to the securities level. They can determine efficient securities portfolios, the choice of an adequate discount rate, the optimal debt of a company and the value of an indebted company and project. You can anticipate the rational behavior of individual stakeholders and find incentive-compatible solutions.	
Contents	Students are familiarized with the following important financial models of efficient capital and securities markets: modern portfolio theory, the capital asset pricing model, and capital structure theory. Rational deci-sions and a set of instruments for investors and companies are derived from this. Solution strategies for relevant incentive problems from in-formation asymmetries round off the event.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Tutorial: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	The knowledge and skills to be acquired in the modules Fundamentals of Accounting, Introduction to Business Administration and Organiza-tion, Linear Algebra in an Economic Context and Annual Financial Statements, Investment and Financing are required.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 60 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-101-KOEN WW-D-101-KOEN	Kostenorientierte Entscheidungen	Prof. Dr. Peter Schäfer maac@tu-dresden.de
Qualification objectives	Students can prepare decisions using cost information and other internal accounting information. They are able to perform quantitative analyses based on such information and use the results to derive strategic measures and decisions, as well as compare different cost allocation methods and select appropriate methods for different decision-making problems. In addition, they can explain the goals and challenges of decentralized control and develop decentralized control systems and implement them in organizations.	
Contents	The module covers topics such as results analysis including variance analysis, activity-based costing, target costing, and the management of decentralized units using transfer prices.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	Business management knowledge is required, as taught in the modules Fundamentals of Accounting, Introduction to Business Administration and Organization, Marketing and Sustainable Corporate Management, Annual Financial Statements, Investment and Financing, and Production and Logistics.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 60 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-111-LPII WW-D-111-LPII	Leading People in Innovation	Prof. Dr. Stefan Razinskas orga.wiwi@tu-dresden.de
Qualification objectives	Students will be able to reproduce basic terms, definitions and concepts of innovation management and recognize and assess central approaches to organizational innovation management in terms of their behavioral science conditions, effects and limitations. In addition, they are able to illustrate fundamental management issues of innovative companies, analyze practical problems of innovation management against a social science background and make appropriate design decisions for innovation-promoting behavior management.	
Contents	Behavioral science principles of innovation management. These are based on the work of individuals and teams in innovative companies and the organizational framework conditions in which they carry out their creative activities.	
Teaching and learning methods	Lecture: 2 hours per week, Practical: 2 hours per week, Independent study The language of the module is English.	
Prerequisites for participation	English language skills at basic A-level and the skills to be acquired in the module Introduction to Business Administration and Organization.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 90 minutes	
Workload and Credit points	5 credit points, 150 hours	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-104-MAMI WW-D-104-MAMI	Marketing Mix	Prof. Dr. Florian Siems florian.siems@tu-dresden.de
Qualification objectives	After completing the module, students will understand the various marketing mix instruments. You will be able to apply the analysis tools of the marketing mix instruments, formulate goals based on them and plan and implement the measures.	
Contents	The content of the module is the instruments of the marketing mix, in particular communication, pricing and product policy. This includes the main institutional specificities of these instruments (e.g. specificities for industrial goods and services).	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	The skills to be acquired in the modules Fundamentals of Accounting, Introduction to Business Administration and Organization, Marketing and Sustainable Corporate Management, Annual Financial Statements, Investment and Financing, and Production and Logistics are required. Furthermore, English language skills at level B2 of the Common Euro-pean Framework of Reference for Languages are required.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 60 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-102-NMPR WW-D-102-NMPR	Nachhaltigkeitsmanagement in der Praxis	Prof. Dr. Remmer Sassen lehre_bu@mailbox.tu-dresden.de
Qualification objectives	Students are able to apply various methods of sustainability assessment, in particular life cycle analysis, to products in a simple form. They can thus make ecologically-oriented decisions in a wide range of issues in the entrepreneurial environment.	
Contents	The content of the module is sustainability management instruments, such as life cycle assessment procedures or life cycle analysis according to ISO 14040.	
Teaching and learning methods	Lecture: 2 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the modules Fundamentals of Accounting, Introduction to Business Administration and Organization, Marketing and Sustainable Corporate Management, Annual Financial Statements, Investment and Financing, and Production and Logistics are required. Furthermore, English language skills at level B2 of the Common European Framework of Reference for Languages are required.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-113-PAGI WW-D-113-PAGI	Praktische Aspekte des Gründungs- und Innovationsmanagements	Prof. Dr. Michael Schefczyk mandy.windisch@tu-dresden.de
Qualification objectives	Students are able to understand a scientific or practical problem of a young company/innovation management in a multi-layered way. The students can independently develop materials for all important plan-ning areas and develop a structured solution according to the task. Stu-dents have the ability to work independently and solve problems in a structured way.	
Contents	The contents of the module are relevant aspects of starting a business and innovation management. These include, for example, new business models, market and competition analyses, market entry strategies, marketing strategies, personnel, financing and intellectual property rights aspects. These are considered scientifically and/or practically.	
Teaching and learning methods	Project: 3 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner. The project is limited to 16 participants, selection based on the orde	
Prerequisites for participation	The start-up-related knowledge and skills acquired in the modules In-novation and Product Management and Entrepreneurial Action are re-quired.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Term paper, 90 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-PRLG WW-D-PRLG	Produktion und Logistik	Prof. Dr. Udo Buscher udo.buscher@tu-dresden.de
Qualification objectives	The students are familiar with essential tasks in the areas of production and logistics. You will understand the theoretical¬¬basis for the anal-ysis of production processes and cost changes. They are able to carry out production program planning as well as to design production pro-cesses effectively and efficiently, taking into account the selected manufacturing organization. The students are familiar with analysis and design principles for the logistics system and for the subsystems as well as rules for the coordination of logistics processes. They are able to apply quantitative methods in logistics, model practical logistics problems and solve them using suitable mathematical methods.	
Contents	Contents of the module are production and cost theory, program planning, supply planning, implementation planning, building blocks of corporate logistics, basics of optimization in networks, special use cases of distribution logistics and basics of procurement logistics.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation	The competencies to be acquired in the modules Introduction to Business Administration and Organization, Fundamentals of Accounting and Analysis in an Economic Context and Linear Algebra in an Econom-ic Context are required.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The module creates the prerequisites for the elective modules listed under “Prerequisites for participation.”	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-102-SCPL WW-D-102-SCPL	Scenario Planning	Prof. Dr. Remmer Sassen Lehre_bu@mailbox.tu-dresden.de
Qualification objectives	After completing the module, students will be able to analyze and stra-tegically prepare future developments that cannot be planned. You will know the methodological basics of scenario planning and apply them successively to real situations.	
Contents	The content of the module is the application of the management tool scenario planning, the identification of trends based on current social issues, the development of future scenarios and the development of solution strategies for organizations.	
Teaching and learning methods	Seminar: 2 hours per week Independent study The language of the module is English. The seminar is limited to 20 participants, selection based on the order of enrollment.	
Prerequisites for participation	The skills to be acquired in the modules Introduction to Business Administration and Organization, Basics of Accounting, Marketing and Sustainable Corporate Management, Annual Financial Statements, Investment and Financing, and Production and Logistics are required. Furthermore, English language skills at level B2+ of the Common Euro-pean Framework of Reference for Languages are required.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Term paper, 90 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-102-STHM WW-D-102-STHM	Stakeholdermanagement	Prof. Dr. Remmer Sassen Lehre_bu@mailbox.tu-dresden.de
Qualification objectives	Upon completion, students will be able to analyze the macro and micro environment of a company. To this end, they will be able to analyze political, economic, social, technological, ecological, and legal influences as well as the stakeholders of organizations or companies and integrate them using the example of company-specific decisions . In addition, students are able to solve problems appropriately and present their proposed solutions in written form. They can identify, classify, and analyze stakeholders. Students understand scientific texts and can apply theory to current topics. Students are able to transfer theoretical approaches to practical examples in interactive group work. Students are able to analyze the macro- and micro-environment of a company.	
Contents	The module covers the basics of stakeholder management, including stakeholder theory, stakeholder identification, and stakeholder management, with a particular focus on environmental and social issues and a focus on corporate interaction and communication as well as learning and change processes, in particular the influence of framework conditions and stakeholder groups on decision-making in companies, the decision-making process in companies, and concepts for stakeholder participation and their implementation in practice. The module is taught in English.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the modules Fundamentals of Accounting, Introduction to Business Administration and Organization, Marketing and Sustainable Corporate Management, Annual Financial Statements, Investment and Financing, and Production and Logistics are required. Furthermore, English language skills at level B2 of the Common European Framework of Reference for Languages are required.	

Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.
Examination	Written exam, 60 minutes
Workload and Credit points	150 hours, 5 credit points
Frequency	Offered each winter semester
Duration	One semester

Module number	Module name	Responsible lecturer
WW-BA-103-STPM WW-D-103-STPM	Strategisches Produktionsmanagement	Prof. Dr. Udo Buscher bwlim@tu-dresden.de
Qualification objectives	The students know the strategic tasks that have to be fulfilled in the context of production management. They are able to propose solutions to the planning problems in question on the basis of quantitative deci-sion models and to analyse them. They can assess the benefits, but also the weaknesses and limitations of the problem-solving approaches in strategic planning.	
Contents	The contents of the module are basic instruments of strategic man-agement, strategic development planning, site selection and layout planning.	
Teaching and learning methods	Lecture: 2 hours per week Practical 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation	The skills to be acquired in the modules Introduction to Business Ad-ministration and Organization, Basics of Accounting, Marketing and Sustainable Corporate Management, Annual Financial Statements, In-vestment and Financing, and Production and Logistics are required.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	More than three registered students: written exam, 90 minutes Up to three registered students: non-public oral examination, 20 minutes duration as an individual examination	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-121-SUES WW-D-121-SUES	Sustainable Entrepreneurship	Jun.-Prof. Dr. Samanthi Dijkstra-Silva Sustainability@tu-dresden.de
Qualification objectives	Students are familiar with the fundamentals of sustainable entrepreneurship and can understand this in the context of sustainability management. They understand the various dimensions that a sustainable company takes into account and can apply them.	
Contents	The module covers current findings in sustainability research and specific case studies from corporate practice with a focus on sustainable entrepreneurship.	
Teaching and learning methods	Seminar: 2 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner. The module is limited to 20 participants, selection based on the order	
Prerequisites for participation	The skills acquired in the modules Introduction to Business Administration and Organization as well as Marketing and Sustainable Business Management are required. Furthermore, English language skills at level B2+ of the Common European Framework of Reference for Languages are required.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations.	
Examination	Complex assessment, 90 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-113-UNHA WW-D-113-UNHA	Unternehmerisches Handeln	Prof. Dr. Michael Schefczyk mandy.windisch@tu-dresden.de
Qualification objectives	After completing the module, students will be able to independently analyze complex issues from the field of entrepreneurship in groups and apply them to practice-related issues in a situation-appropriate manner in order to develop targeted solutions. They understand the requirements and contents of a business plan and are able to evaluate business models from the business idea to market launch.	
Contents	The contents of the module include the basics of entrepreneurial ac-tion. These include the entrepreneur as a person, the process of entre-preneurship and the planning and development of start-up projects.	
Teaching and learning methods	Lecture: 2 hours per week Project: 3 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner. The module is limited to 130 participants,	
Prerequisites for participation	The competencies to be acquired in the modules Introduction to Business Administration and Organization and Marketing and Sustainable Corporate Management are required.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics The selection must be made in accordance with the examination regulations. It creates the prerequisites for the module “Practical Aspects of Start-up and Innovation Management.”	
Examination	Term paper, 100 hours Written exam, 90 minutes	
Workload and Credit points	300 hours, 10 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-205-APEC WW-D-205-APEC	Applied Econometrics	Prof. Dr. Kamila Cygan-Rehm wiwi-econometrics@tu-dresden.de
Qualification objectives	Students are able to apply common methods of empirical economic research and propose solutions to typical challenges of data analysis in an economic policy and business context. They are able to analyze specific questions, propose suitable analysis methods, deal critically with the central assumptions and assess the quality of empirical analyses. Students will be able to work with statistical software.	
Contents	Basic methods of applied econometrics, such as multiple linear regression models, linear probability models, hypothesis tests, as well as an intuitive introduction to causal analysis (difference-in-differences, regression discontinuity, etc.).	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module is English. Participation is limited to 40 participants; selection based by lottery.	
Prerequisites for participation	Basic knowledge of statistics and econometrics as taught, for example, in the modules Deductive Statistics, Inductive Statistics and Econometrics - Fundamentals; knowledge of English at level B2.	
Usability	BA Wiwi, D WiInf, D WiIng: Fields Business Administration and Economics, Methods and Procedures, Supplementary Qualifications BA WiPäd: Fields Business Administration and Economics, Supplementary Qualifications Students must choose according to the respective examination regulations. The choice is only permitted for one of the fields mentioned.	
Examination	Written exam, 90 minutes	
Workload and Credit points	5 credit points, 150 hours	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-EMAK WW-D-EMAK	Einführung in die Makroökonomie	Prof. Dr. Stefan Eichler stefan.eichler@tu-dresden.de
Qualification objectives	After completing the module, students will be able to analyze macroeconomic relationships within the framework of models and interpret and graphically present the results. They will be able to derive the economic consequences of changes in economic policy or exogenous framework conditions in the context of models and explain them in practice.	
Contents	The module covers the basics of macroeconomic analysis. This includes national accounts, the interaction of supply and demand on goods and money markets in open and closed economies, the mechanisms of interaction between monetary and fiscal policy measures and economic growth processes.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	Students of the Bachelor's degree programs in Economics, Business Education and International Relations as well as the Diploma degree programs in Business Informatics and Industrial Engineering are required to have the skills acquired in the Introduction to Economics module. Students on the Bachelor's degree course in Transport Economics are required to have the skills acquired in the module Fundamentals of Economics and Transport Economics.	
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics It creates the prerequisites for the elective modules listed under “Prerequisites for participation.”	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-EVWL WW-D-EVWL	Einführung in die Volkswirtschaftslehre	Prof. Dr. Marcel Thum marcel.thum@tu-dresden.de
Qualification objectives	Students are familiar with economic concepts and procedures. They recognize economic problems and are able to present them appropriately.	
Contents	The module covers central economic concepts as well as basic microeconomic and macroeconomic problems and methods.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation		
Usability	BA WiWi, BA WiPäd, D WiInf, D WiIng: Field Business Administration and Economics It creates the prerequisites for the modules in the compulsory and elective fields, which are listed under “Prerequisites for participation.”	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-205-EMWF WW-D-205-EMWF	Empirische Wirtschaftsforschung	Prof. Dr. Kamila Cygan-Rehm wiwi-econometrics@tu-dresden.de
Qualification objectives	The students are familiar with the methodological foundations of empirical economic research and its possible applications to current issues from the economic policy and business context. They improve their communicative, intercultural and social skills. In addition, they can assess the quality of empirical studies with regard to the methods used and the database.	
Contents	The content of the module is common quantitative methods of empiri-cal economic research, esp. randomized studies, multiple linear regres-sion, so-called natural experiments, as well as their applications to practical operational and economic policy issues, e.g. from the fields of personnel economics, education policy, family economics.	
Teaching and learning methods	Seminar: 2 hours per week Independent study The language of the module is English. The project is limited to 16 participants, selection based on the order of enrollment.	
Prerequisites for participation	Basic knowledge of statistics is required, as taught in modules such as Inductive Statistics, Introduction to Economics, Econometrics - Fundamentals, and Applied Econometrics. Furthermore, English language skills at level B2 of the Common European Framework of Reference for Languages are required.	
Usability	BA Wiwi, D WiInf, D WiIng: Fields Business Administration and Economics, Methods and Procedures, Presenting and Discussing, Supplementary Qualifications BA WiPäd: Fields Business Administration and Economics, Supplementary Qualifications Students must choose according to the respective examination regulations. The choice is only permitted for one of the fields mentioned.	
Examination	Combined term paper, 100 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-208-ÖKOG WW-D-208-ÖKOG	Ökonometrie – Grundlagen	Prof. Dr. Bernhard Schipp econometrics@tu-dresden.de
Qualification objectives	After completing the module, students will be able to interpret basic econometric models. They are able to apply these models to economic issues and interpret the results.	
Contents	Contents of the module are interval estimators and hypothesis tests, linear multiple regression models, hypothesis testing in the multiple linear regression model, structural breaks and indicator variables as well as forecast models.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	The competencies to be acquired in the modules Introduction to Economics, Analysis in an Economic Context, Linear Algebra in an Econom-ic Context, Descriptive Statistics and Inductive Statistics are required.	
Usability	BA WiWi, D WiIng, D WiInf: Field Methods and Procedures BA WiPäd: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Business Education and Management Training

Module number	Module name	Responsible lecturer
WPW-BA-EKBW WW-BA-115-EKBW WW-D-115-EKBW	Einführung in das kaufmännische Bildungswesen	Prof. Dr. Bärbel Fürstenau sekretariat.wipaed@mailbox.tu-dresden.de
Qualification objectives	Students are familiar with and understand the vocational education system in Germany and in selected other countries. They are familiar with current educational policy and organizational issues and can explain them. They have mastered techniques of information research and scientific work and are able to apply these when working on a business education issue and to present and discuss its contents.	
Contents	The module covers the organization of vocational education and training in Germany, in particular its legal and institutional structures, its integration into the overall national education system, selected international vocational education and training systems, and current education policy issues. Reference is always made to the specific concerns of commercial education and training. Furthermore, the module covers the fundamentals of scientific work.	
Teaching and learning methods	Lecture: 1 hour per week Seminar: 1 hour per week Tutorial: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation		
Usability	BA WiPäd: Field Business Education and Management Training BA Wiwi, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations. The module creates the prerequisites for the school internship module.	
Examination	Complex assessment, 90 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-115-GRPM WW-D-115-GRPM	Grundlagen des Personalmanagements	Prof. Dr. Bärbel Fürstenau sekretariat.wipaed@mailbox.tu-dresden.de
Qualification objectives	Students understand the functions of human resource management. explain theories and models in the context of human resource management and apply them to concrete case studies.	
Contents	The contents of the module are fundamental questions, concepts and theories of personnel management, especially in the context of personnel planning and controlling, personnel recruitment, personnel selection, personnel deployment and development as well as staff reduc-tion and redundancy.	
Teaching and learning methods	Lecture: 2 hours per week Tutorial: 1 hour per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The module requires knowledge and skills as taught in the module Introduction to Business Administration and Organization.	
Usability	BA WiPäd: Fields Business Administration and Economics, Business Education and Management Training BA WiWi, D WiIng, D WiInf: Fields Business Administration and Economics, Supplementary Qualifications Students must choose according to the respective examination regulations. The choice is only permitted for one of the fields mentioned.	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-115-MESF WW-D-115-MESF	Methoden empirischer Sozialforschung in der kaufmännischen Aus- und Weiterbildung	Prof. Dr. Bärbel Fürstenau sekretariat.wipaed@mailbox.tu-dresden.de
Qualification objectives	Students are able to describe the fundamentals of scientific theory. They understand the process of empirical research, such as planning, data collection, and data analysis, and can apply this to various issues, such as commercial education and training. They can describe various methods of data collection and distinguish between them, taking into account their advantages, disadvantages, and areas of application. They can select and apply data analysis methods for the respective objective and are able to analyze data using statistical software.	
Contents	The module covers the fundamentals of scientific theory, the process of empirical research, including planning, data collection, data analysis, data collection methods, and procedures and statistical software for data analysis that can be used in the teaching and learning context of commercial education and training.	
Teaching and learning methods	Lecture: 2 hours per week Seminar: 1 hour per week Tutorial: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	The knowledge acquired in the modules Deductive Statistics and Inductive Statistics is required.	
Usability	BA WiPäd: Fields Business Administration and Economics, Business Education and Management Training BA WiWi, D WiIng, D WiInf: Fields Business Administration and Economics, Supplementary Qualifications Students must choose according to the respective examination regulations. The choice is only permitted for one of the fields mentioned.	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-612-AVTE	Aufbau- und Verbindungstechnik der Elektronik	Prof. Dr.-Ing. Karlheinz Bock karlheinz.bock@tu-dresden.de
Qualification objectives	Students acquire specialized knowledge, skills, and practical abilities for assembling packaged and unpackaged electronic components and for manufacturing wiring carriers. They can apply the theoretical principles of material bonding techniques such as bonding, soldering, and gluing, as well as subtractive and additive structuring techniques for wiring carriers. They are familiar with the technologies and equipment used to apply these processes.	
Contents	The module covers trends in electronics assembly and interconnection technology, assembly and interconnection techniques for semiconductor devices, assembly technologies for semiconductor devices, thin-film wiring carrier technologies, thick-film wiring carrier technologies, printed circuit board technologies, surface techniques for electronic components, and optical connection techniques for printed circuit boards.	
Teaching and learning methods	Lecture: 2 hours per week Tutorial: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	The skills acquired in the modules Fundamentals of Electrical Engineering and Physics and Chemistry are required.	
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations.	
Examination	Complex assesment, 20 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-681-CNSV	Communication, Navigation, Surveillance (CNS)	Prof. Dr.-Ing. Hartmut Fricke hartmut.fricke@tu-dresden.de
Qualification objectives	Students master the methods of radio, inertial, and satellite navigation and are familiar with technical navigation equipment and its functions, structure, and mode of operation. They understand how air traffic control works and are familiar with the operational and technical systems required for communication and monitoring air traffic.	
Contents	The module covers geodetic and cartographic fundamentals, radio navigation/positioning technology, inertial navigation, satellite navigation, and onboard and ground-based communication and surveillance systems and technologies.	
Teaching and learning methods	Lecture: 4 hours per week Practical: 1 hour per week Internship: 0,5 hours per week Independent study The language of the module is English.	
Prerequisites for participation	The skills acquired in the module Operational and Logistical Structures of Air Transport are required. In addition, English language skills at the UNICert B2 level are required.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 180 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-ETDN	Dynamische Netzwerke	Dr. Andreas Mögel andreas.moegel@tu-dresden.de
Qualification objectives	After completing the module, students will have mastered methods for analyzing linear dynamic circuits when excited with periodic signals or in the transient behavior of steady states. They will be able to describe, model, and calculate linear two-port networks. They will be able to determine the transfer function, analyze behavior in the frequency domain, and represent it graphically, as well as calculate simple filters. They will have mastered phasor representations and locus curves. They can determine the transfer function, analyze and graphically represent the behavior in the frequency domain, and calculate simple filters. They will master phasor representations and place curves.	
Contents	The module covers the calculation of linear dynamic networks.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation	Knowledge of electrical engineering and mathematics is required, as taught in the modules Fundamentals of Electrical Engineering, Electrical and Magnetic Fields, Analysis in an Economic Context, and Mathematics in an Engineering Context.	
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations. It creates the prerequisites for the modules in the compulsory and elective areas, which are listed under “Prerequisites for participation.”	
Examination	Written exam, 150 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	

Duration	One semester

Module number	Module name	Responsible lecturer
WW-D-666-FZKO	Fahrzeugkommunikation und Ortung	Prof. Dr.-Ing. Oliver Michler oliver.michler@tu-dresden.de
Qualification objectives	Students master the methodological fundamentals of information technology concepts and systems as well as the fundamentals and procedures of positioning and navigation and their transport-specific applications. They are able to classify, specify, and design information systems. They can apply systems for They can apply systems for traffic data acquisition, transmission, and processing in intelligent transportation systems, integrate positioning and communication systems, and assess and evaluate selected transport-specific applications.	
Contents	The module covers the basics of traffic telematics information systems for networking and localizing road users, as well as the practical application of such systems, taking into account the specific requirements of each mode of transport. Other topics include basic location and navigation methods, Other content includes basic location and navigation procedures, especially satellite navigation systems and vehicle-mounted sensors, as well as the fundamentals of communication systems and their applications in intelligent transport systems.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the modules Communications Engineering and Information Theory and Communication, Navigation, and Surveillance (CNS) are required.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	More than 15 registered students: written exam, 90 minutes Up to 15 registered students: non-public oral examination, 30 minutes duration as an individual examination	
Workload and Credit points	150 hours, 5 credit points	

Frequency	Offered each winter semester
Duration	One semester

Module number	Module name	Responsible lecturer
WW-D-761-FTPD	Fertigungstechnik und Produktion	Prof. Dr.-Ing. Hans Christian Schmale hans_christian.schmale@tu-dresden.de
Qualification objectives	Students have essential basic knowledge of the manufacture and production of mechanical engineering products and understand the fundamental engineering approach. They are able to provide an overview of existing manufacturing processes and have basic knowledge of the operating principles, technical equipment, and technological parameters to be defined for these processes. Students are familiar with the basic principles of the processes and technologies involved in the production and distribution of goods, as well as the tasks of system planning for production and material flow systems. They have basic knowledge of production and distribution logistics.	
Contents	The module covers the areas of the company involved in the manufacture of products, the product requirements that determine manufacturing options, the derivation of manufacturing decisions, the most important manufacturing processes for primary forming, forming, machining, removal, joining, and surface technology and their operating principles, the basic concepts of production and distribution logistics, and selected technical and organizational solutions for internal logistics.	
Teaching and learning methods	Lecture: 3 hours per week Independent study The language of the module is German.	
Prerequisites for participation	The skills acquired in the modules Analysis in an economic context, Mathematics in an engineering context, Statics and Strength of Materials, Fundamentals of Electrical Engineering, and Physics and Chemistry are required.	
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations.	
Examination	Complex assesment, 2,5 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-702-FTFM	Fügetechnik flexibler Materialien	Prof. Dr. Yordan Kyosev yordan.kyosev@tu-dresden.de
Qualification objectives	Students are familiar with the joining mechanisms of flexible materials. They can select the continuous and discontinuous joining processes and machines applicable in specific cases and assess their use. In addition, they have knowledge of the possibilities for generating seam properties in line with stress requirements, their testing, and measures for quality assurance. Students can apply prevention strategies to avoid contamination of seams in packaging and medical technology. Based on the knowledge imparted, Students can apply prevention strategies to avoid contamination of seams in packaging and medical technology. Based on the knowledge they have acquired about interactions between materials and processes, students are able to tailor joining processes to innovative material development and creatively refine them.	
Contents	Based on the fundamentals of joining mechanisms for textile and polymer materials, the module covers process selection, such as bonding, welding, and sealing processes such as heat contact, ultrasound, laser, and high frequency, process specifics for laser and high frequency, the process specifics for different applications and seam designs, as well as the process parameters, monitoring of seam properties with the possibilities of non-destructive seam testing, and methods for specifically avoiding seam contamination.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Tutorial: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation		
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-GLEL	Grundlagen der Elektrotechnik	Dr. Jens Müller jens.mueller1@tu-dresden.de
Qualification objectives	Upon completion of the module, students will have acquired basic knowledge of electrical engineering and electronics and will have mastered methods for solving electrical engineering problems as a basis for advanced modules. The focus is on resistive circuits. They are able to describe linear and nonlinear two-pole circuits and take into account the temperature dependence of their parameters, systematically analyze electrical circuits with direct current, and apply special simplified analysis methods (two-pole theory, superposition theorem). You will be able to calculate the power conversion in circuits and analyze and dimension thermal arrangements.	
Contents	The module covers electrical networks with direct current, current strengths, voltages, and resistances of circuits.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation	Knowledge of mathematics and physics at high school graduation level is required.	
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations. It creates the prerequisites for the modules in the compulsory and elective areas, which are listed under “Prerequisites for participation.”	
Examination	Written exam, 150 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-728-GLKW	Grundlagen der Kältetechnik und Wärmepumpen / Principles of Refrige-ration and Heat Pumps	Prof. Dr.-Ing. Christiane Thomas Christiane.Thomas@tu-dresden.de
Qualification objectives	Students will master the fundamentals of refrigeration and heat pump technology with regard to system engineering and key components, as well as the natural and synthetic refrigerants used. They will learn about the special features and areas of application They are familiar with the special features and areas of application of cold vapor compression, sorption, and cold gas machines, as well as alternative refrigeration and heat generation and the procedure for energy balancing of the systems.	
Contents	The module covers the calculation of cooling requirements, the calculation of stationary system behavior, the special features of significant system components, the characterization and special features of using different refrigerants, the energy balance of the overall system, sorption systems, cold gas machines, and alternative methods of cooling and heat generation.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the Technical Thermodynamics module are required.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-651-GLSV	Grundlagen der Straßenverkehrstechnik	Prof. Dr.-Ing. Regine Gerike regine.gerike@tu-dresden.de
Qualification objectives	Students have knowledge of the functional structure of the road network, the necessary skills for safe road design, and the quantitative description of the laws governing traffic flow on roads. They can apply these laws in the procedures for measurement, design, and dimensioning. Students have knowledge of the representation of Students have knowledge of the representation of operational specifications in road traffic on site plans. They are familiar with methods of traffic safety work, in particular accident statistics	
Contents	The module covers procedures for planning urban road traffic systems, methods for describing and evaluating traffic flows, methods for evaluating police accident reports and corresponding statistics, and road safety management tools.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the modules Analysis in an economic context and Mathematics in an engineering context are required.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	Portfolio, 35 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-711-GVMB	Grundlagen des Verarbeitungsmaschinenbaus	Prof. Dr.-Ing. Jens-Peter Majschak verarbeitungsmaschinen@tu-dresden.de
Qualification objectives	Students are familiar with the general structure and function of processing machines and processing plants. They are able to develop creative solutions for tasks in processing machine construction by learning the methodology. They are also capable of dealing with current tasks in an integrative manner and of dealing with complex processes and design tasks and their interaction. Furthermore, students are familiar with the specific requirements for machines for mass commodity production in the food and pharmaceutical industries, but also in other industries where health and consumer protection are of paramount importance. They are familiar with the requirements of the European Machinery They are familiar with the requirements of the European Machinery Directive and the supporting requirements for ensuring the safety of work and products on these machines, and can apply these to specific examples of development and design and implement solutions methodically. They are familiar with the requirements of the European Machinery.	
Contents	he module covers the classification of processing machines in production processes for fabric processing, the presentation of the relationship between processing machines and systems with human and environmental resources, an explanation of how the subsystems work, interactions between the subsystems and higher-level control systems, as well as the systematic determination of solutions, fault analysis and optimization of processing machines, an overview of national and international legal and normative requirements for the design and operation of processing machines, aspects of occupational safety, and special considerations for protecting consumers from harmful effects caused by products from unsafe manufacturing processes. Other content includes design criteria that manufacturing processes. Other topics include design criteria that must be observed in the manufacture of hygienically and aseptically sound machines and apparatus for food and pharmaceutical production.	
Teaching and learning methods	Lecture: 3 hours per week Practical: 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation		

Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations.
Examination	Written exam, 180 minutes
Workload and Credit points	150 hours, 5 credit points
Frequency	Offered each winter semester
Duration	One semester

Module number	Module name	Responsible lecturer
WW-D-691-GZLB	Grundzüge des Leichtbaus	Prof. Dr.-Ing. Maik Gude maik.gude@tu-dresden.de
Qualification objectives	Students will master the combination of lightweight construction principles for system-optimized component structures. They will be able to exploit the potential offered by lightweight construction by applying material-specific design principles.	
Contents	The module covers the fundamentals of developing modern lightweight products from isotropic and anisotropic materials with or without reinforcing materials, as well as the use of solutions combining lightweight design (stiffness), material lightweight construction (density, strength), and conditional lightweight construction (functionality, operational stability, connection technology) in the design of lightweight constructions.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	The skills acquired in the modules Analysis in an economic context, Mathematics in an engineering context, Statics and Strength of Materials, and Physics and Chemistry are required.	
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations.	
Examination	Complex assesment, 31,5 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-611-KOSK	Konstruktion	Prof. Dr.-Ing. Jens Lienig jens.lienig@tu-dresden.de
Qualification objectives	Students can design components and assemblies, calculate design elements, lay them out, and apply them correctly. They are able to create standard-compliant design documentation using modern CAD systems.	
Contents	The module covers the fundamentals of design, with a focus on design engineering basics, standard numbers and dimensions, tolerances, fits, dimension and tolerance chains, strength calculations, material load-bearing capacity, mechanical fasteners such as material, form, and force connections, mechanical functional elements such as springs, springs, bearings, guides, and shafts, mechanical functional groups and gearboxes, as well as CAD design with a focus on the methodology of creating CAD models, modeling assembly dependencies, parametric and adaptive design, and motion and tolerance simulation.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 4 hours per week Independent study The language of the module is German.	
Prerequisites for participation		
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations.	
Examination	Complex assesment, 52 hours	
Workload and Credit points	300 hours, 10 credit points	
Frequency	Offered each winter semester	
Duration	Two semester	

Module number	Module name	Responsible lecturer
WW-D-781-KOLE	Konstruktionslehre	Prof. Dr.-Ing. Kristin Paetzold-Byhain kristin.paetzold@tu-dresden.de
Qualification objectives	Students master basic knowledge and skills for creating constructive designs and documenting them. They have basic knowledge of construction technology and design skills. They are able to understand basic geometric and technical elements and, building on this, to produce and read technical documentation. In addition, they have the ability to think holistically in terms of design and to design mechanical engineering components in a way that is functional and suitable for production.	
Contents	The module covers fundamental relationships between geometric objects, the basics of producing and understanding technical documentation (such as drawings and parts lists), interchangeability, production-oriented design of machine parts, and function- and stress-oriented design of machine parts.	
Teaching and learning methods	Lecture: 4 hours per week Practical: 4 hours per week Independent study The language of the module is German.	
Prerequisites for participation	Knowledge of mathematics at high school level (basic course) is required.	
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 150 minutes	
Workload and Credit points	300 hours, 10 credit points	
Frequency	Offered each winter semester	
Duration	Two semester	

Module number	Module name	Responsible lecturer
WW-D-747-LFAU	Luftfahrzeugauslegung	Prof. Dr. Johannes Markmiller studiendokumente.mw@tu-dresden.de
Qualification objectives	Students are familiar with the structure of aircraft and the regulations that are important for development. They understand the interdisciplinary interaction of various fields such as aerodynamics, flight mechanics, structural mechanics, and propulsion technology, and can use analytical calculation methods to perform preliminary designs for simple aircraft configurations.	
Contents	The module covers the fundamentals of aircraft design in the concept phase, in particular certification regulations, design methodology, configurations, methods for mass estimation, cabin design, aerodynamic design aspects, flight performance, tail design, propulsion concepts, and economic evaluation criteria.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hour per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the modules Analysis in an economic context, Mathematics in an engineering context, Statics and Strength of Materials, Fundamentals of Electrical Engineering, and Physics and Chemistry are required. Furthermore, knowledge of English (basic course) is required.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-681-FPAD	Luftfahrzeugeigenschaften (Flight Performance and Aerodynamics)	Prof. Dr.-Ing. Hartmut Fricke hartmut.fricke@tu-dresden.de
Qualification objectives	Students are familiar with the methods and applications that describe the movement of aircraft with six degrees of freedom with the associated forces and moments, power and energy expenditure. They understand the origin and influence of air forces/moments on the aircraft. Students are able to Students are able to mathematically model important factors influencing flight performance and flight characteristics. They can assess the operational behavior of the aircraft in terms of safety, economy, and environmental compatibility depending on the flight condition. Students understand the main engine assembly in terms of its structure, mode of operation, and operating behavior and are able to competently evaluate various aircraft propulsion systems.	
Contents	The module covers the operational behavior of an aircraft in various flight conditions, target functions and variants of cruise flight execution, ETOPS regulations and flight performance calculations, the basics of thrust diagrams and speed polars, the properties of air, lift and its formation, as well as associated air forces and aerodynamic moments, objects in the fields of aerodynamics, air force moments, topics in the field of aerodynamics, flight mechanics, and aerodynamic characteristics (polars), wing and profile geometry, the creation of moment equilibrium, loadability, trimability, and necessary aircraft control, basics of thermodynamics and gas dynamics, in particular p-v and T-s diagrams of OTTO and JOULE processes, flow through diffusers and nozzles, the design and operation as well as the operating behavior of gas turbine assemblies, and material and runtime problems in gas turbine engines.	
Teaching and learning methods	Lecture: 7 hours per week Practical: 1 hour per week Internship: 0,5 hours per week Independent study The language of the module is English.	

Prerequisites for participation	The skills to be acquired in the modules Analysis in an economic context, Mathematics in an engineering context, Physics and Chemistry, and Operational and Logistical Structures of Air Traffic are required.
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.
Examination	Written exam, 240 minutes
Workload and Credit points	300 hours, 10 credit points
Frequency	Offered each winter semester
Duration	One semester

Module number	Module name	Responsible lecturer
WW-D-744-LFIH	Luftfahrzeuginstandhaltung	Dr.-Ing. Falk Hähnel studiendokumente.mw@tu-dresden.de
Qualification objectives	Students understand the basic methods and procedures of aircraft maintenance in the areas of maintenance, inspection, and repair. They master the technical terminology and relevant legal principles of aircraft maintenance, the usual maintenance methods of today's commercial aircraft, and the procedures for developing future maintenance programs. Based on component-specific types of damage and material-specific damage mechanisms, they can derive maintenance requirements and measures, including both inspection methods and measures for repairing aircraft structures. They master the mechanisms of action of basic repair solutions for aircraft structures.	
Contents	The module covers the structural, damage, and repair classifications relevant to aircraft maintenance , the types of structural damage typically occurring on aircraft with the associated damage mechanisms, the relevant legal basis for aircraft maintenance, the methodology for developing new maintenance programs, and procedures and methods for detecting and repairing structural damage.	
Teaching and learning methods	Lecture: 4 hours per week Practical: 1 hour per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the modules Analysis in an economic context, Mathematics in an engineering context, Statics and Strength of Materials, Fundamentals of Electrical Engineering, and Physics and Chemistry are required. Furthermore, English skills at the high school graduation level (basic course) are required.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	

Frequency	Offered each winter semester
Duration	One semester

Module number	Module name	Responsible lecturer
WW-D-747-LFSY	Luftfahrzeugsysteme	Prof. Dr. Johannes Markmiller studiendokumente.mw@tu-dresden.de
Qualification objectives	Students are familiar with the most important systems in an aircraft, understand how they work, and can assess the impact of new technologies on future aircraft development.	
Contents	The module covers the structure, function, and mode of operation of onboard systems required for the operation of modern aircraft, e.g., electrical, pneumatic, and hydraulic systems, electronic flight control, and safety systems, as well as their components and design methods.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the modules Analysis in an economic context, Mathematics in an engineering context, Statics and Strength of Materials, Fundamentals of Electrical Engineering, and Physics and Chemistry are required. Furthermore, knowledge of English (basic course) is required.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-762-PDAT	Produktionsautomatisierung	Prof. Dr. Alexander Brosius alexander.brosius@tu-dresden.de
Qualification objectives	Students acquire basic knowledge of production automation and develop skills in automating processes and systems in the process chain, from product development and production preparation to production implementation. Production automation is a key area of industry, and the field of automation technology is constantly evolving. The course aims to provide students with a solid foundation in automation technology and to prepare them for a career in automation engineering.	
Contents	The module covers the areas of influence of production automation, focusing on information provision and application systems in production (rapid product development, NC technology, NC programming, CAx systems and data interfaces, workshop control and control systems) as well as basic automation concepts (actuator and sensor technology, control and communication technology).	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	Basic scientific and technical skills at undergraduate level are required.	
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-631-SODE	Sound Design	Prof. Dr.-Ing. Ercan Altinsoy ercan.altinsoy@tu-dresden.de
Qualification objectives	Students know and understand the technological fundamentals, basic principles, and technical terminology of sound design. They can design acoustic signals, make environmental phenomena and events audible, convey messages, and provoke or reinforce affective, cognitive, and/or psychomotor responses through acoustic signals.They are capable of product development, e.g., in the They are qualified for product development, e.g., in the automotive, hearing aid, or machine industry, telecommunications and medical technology. They are able to comprehend problems in acoustics and sound design and know how to develop solutions. They are also particularly qualified for working and providing guidance in interdisciplinary projects and teams.	
Contents	The module covers methods of sound design, particularly the relationship between acoustic signals as carriers of information and the associated auditory perceptions, and in this context, the consideration of perceptual aspects of sounds.	
Teaching and learning methods	Lecture: 2 hours per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the modules Analysis in an economic context and Mathematics in an engineering context are required.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	Complex assesment, 1,5 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-TMSF	Statik und Festigkeitslehre	Dr. Peter Hantschke peter.hantschke@tu-dresden.de
Qualification objectives	The module enables students to perform static design and assessment of the functional safety of simple components and structures. Students master the basic knowledge required to formulate and solve problems in statics and strength of materials. Based on the concept of rigid bodies and independently applied loads, forces, and moments, students learn about the conditions of force and moment equilibrium together with the principle of section as the basic laws of statics. These basic laws are used to calculate the bearings and section reactions of simple and composite flat structures. First- and second-order area moments supplement these fundamentals. Simple stresses of tension, compression, and shear prepare students to understand general stress and strain conditions. Furthermore, students can calculate stress and strain fields for elastic material behavior in rods, beam bending, and pure torsion of prismatic rods and evaluate the results on the basis of various strength hypotheses.	
Contents	The module covers force and moment balances, the principle of section, friction, centers of area and line, bar structures, stress states, area moments, bending, and torsion.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation		
Usability	D WiIng: Field Engineering It creates the prerequisites for the modules in the compulsory and elective areas, which are listed under “Prerequisites for participation.”	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	

Frequency	Offered each winter semester
Duration	One semester

Module number	Module name	Responsible lecturer
WW-D-TMVT	Technische Mechanik Vertiefung	Dr. Sven Werdin Sven.Werdin@tu-dresden.de
Qualification objectives	In addition to calculating stresses and deformations of statically determinate and indeterminate structures, students are familiar with the concept of stability and its application to the simple case of buckling of bars. Furthermore, they have advanced knowledge of additions to the general bending of straight beams and the calculation of simple rotationally symmetric stress states based on membrane theory. Students master the application of Lagrange's equations of the second kind to describe plane motions. The module enables students to evaluate the strength of structures and provides the prerequisites for the application of modern computer programs.	
Contents	The module covers second-order Lagrange equations, energy methods, skew bending of prismatic beams, simple rotationally symmetric stress states, and buckling of bars.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	Knowledge of technical mechanics and mathematics is required, as taught in the modules Statics and Strength of Materials, Kinematics and Kinetics – Fundamentals, Analysis in an Economic Context, and Mathematics in an Engineering Context.	
Usability	D WiIng: Field Engineering The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-666-TTIS	Theorie und Technik der Informationssysteme	Prof. Dr.-Ing. Oliver Michler oliver.michler@tu-dresden.de
Qualification objectives	Students are familiar with the sequence of events in an information transmission chain, its specific structure, and the influence of interference. They are able to independently evaluate and compare electrical engineering, information technology, and communication technology structures in traffic telematics, both in relation to specific modes of transport and across modes of transport, analyze their function, and develop individual components. Students are familiar with the basic principles of the transmission of information components.	
Contents	The module covers the theoretical and technical fundamentals of information technology systems and their characteristics in practical application and implementation. Transport-specific requirements are given special consideration.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills acquired in the modules Communications Engineering and Information Theory and Communication, Navigation, and Surveillance (CNS) are required.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-D-666-VETN	Verkehrstelematiknetze	Prof. Dr.-Ing. Oliver Michler oliver.michler@tu-dresden.de
Qualification objectives	Students will master the theoretical fundamentals of the structure, classification, design, and mode of operation of traffic telematics networks. They are familiar with the principles of layer-based modeling of the functionality of telematics networks and know traffic-specific applications of these networks. Students are able to design, dimension, evaluate, and operate telematics networks.	
Contents	The module covers the theoretical and methodological fundamentals of network design, the fundamentals of mediated communication networks and open communication systems, including reference models for network platforms and market participants, monomedia and multimedia service platforms, and the specifics of transport telematics applications, as well as standards and regulatory frameworks.	
Teaching and learning methods	Lecture: 3 hours per week Practical: 1 hour per week Independent study The language of the module can be German or English and is determined at the beginning of each semester and announced in the usual manner.	
Prerequisites for participation	The skills to be acquired in the modules Communications Engineering and Information Theory and Communication, Navigation, and Surveillance (CNS) are required. The course is designed to provide students with the necessary skills to work in the fields of communications engineering, information theory, and CNS.	
Usability	D WiIng: Field Engineering Sciences The selection must be made in accordance with the examination regulations.	
Examination	More than five registered students: written exam, 90 minutes Up to five registered students: non-public oral examination, 30 minutes duration as an individual examination	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	

Duration	One semester

Foreign Languages

Module number	Module name	Responsible lecturer
WW-BA-901-ABWC WW-D-901-ABWC	Aufbau Berufs- und Wissenschaftssprache C1	Ute Meyer ute.meyer@tu-dresden.de
Qualification objectives	Students have the ability to communicate independently in a foreign language of their choice in writing and orally for study and work purposes at level C1 of the Common European Framework of Reference for Languages. Students can understand complex scientific and work-related written or oral texts, express themselves in detail and using complex linguistic structures and an extensive general and specialized vocabulary on topics in their field of study. They can follow and participate in complex discussions, even on abstract and complex topics, use language flexibly and effectively to express irony, allusion, and metaphor, and deal effectively with communication and cultural problems.	
Contents	The contents of the module in a foreign language chosen by the student are the basics of scientific language, reading and listening strategies, reception and production of subject- and science-related texts, basics of business correspondence, profession-specific communication constellations such as team meetings, presentations, lectures and discussions, application documents, and independent work on and with texts and audio texts. The languages German as a foreign language, English, French, Russian and Spanish are available. The German language course is offered as a compulsory subject.	
Teaching and learning methods	Language course: 4 hours per week Independent study	
Prerequisites for participation	Language skills in the chosen language at level B2 of the Common European Framework of Reference for Languages are required.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Language test, 105 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-901-A002 WW-D-901-A002	Fremdsprache A2	Ute Meyer ute.meyer@tu-dresden.de
Qualification objectives	Students have basic communication skills in a foreign language of their choice at level A2 of the Common European Framework of Reference for Languages. Students Students can understand slow and clearly articulated concrete information on topics from everyday life, and can read and understand simple and short texts with reference to everyday and professional experiences that are simple in terms of syntax, semantics, vocabulary, and morphology. If the vocabulary is limited to frequently used and internationally understandable words, students can largely follow short, simple conversations and very simple presentations and respond appropriately. If they are familiar with the topic, they can describe their environment orally and in writing using simple phrases and sentences. Students have a basic communicative competence in a foreign language of their choice at level A2 of the Common European Framework of Reference for Languages. Students can understand slowly and clearly articulated concrete information on topics from everyday life and read and understand simple and short texts related to everyday and professional experiences.	
Contents	The module content in a foreign language chosen by the student includes simple texts on everyday situations and specific topics, particularly in a university environment, simple presentations and original documents such as announcements, interviews, short audio and video sequences, reading and listening strategies, simple grammatical structures and an appropriate vocabulary, as well as various forms of work with different media. The languages available are Arabic, Chinese, French, Italian, Japanese, Polish, Portuguese, Russian, Swedish, Spanish and Czech.	
Teaching and learning methods	Language course: 4 hours per week Independent study	
Prerequisites for participation	Language skills in the chosen language at level A1 of the Common European Framework of Reference for Languages are required.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Language test, 105 minutes	

Workload and Credit points	150 hours, 5 credit points
Frequency	Offered each semester
Duration	One semester

Module number	Module name	Responsible lecturer
WW-BA-901-EA2+ WW-D-901-EA2+	Fremdsprache A2+ – Europa und Mittelmeerraum	Ute Meyer ute.meyer@tu-dresden.de
Qualification objectives	Students have advanced communicative language skills in a foreign language of their choice at level A2 of the Common European Framework of Reference for Languages. Students can understand clearly articulated concrete information on topics related to everyday life, understand simple texts in terms of syntax, semantics, lexicon, and morphology with reference to everyday and professional experiences, recognize different text types, and read and understand relatively easily in simple, routine texts. Reading comprehension, if the vocabulary is limited to frequently used and internationally understandable words, recognize different types of texts, communicate relatively easily in simple, routine situations and use connectors appropriately, describe their environment orally and in writing using simple phrases and sentences, and respond to a limited number of simple questions.	
Contents	The module content in a foreign language chosen by the student includes simple texts and audio texts on everyday situations, particularly in a university environment, basic oral and written text production and interaction on this topic, relevant reading and listening strategies, grammatical structures and an expanded vocabulary, as well as various forms of work with different media. The languages available are Arabic, French, Italian, Polish, Portuguese, Swedish, Spanish, and Czech.	
Teaching and learning methods	Language course: 4 hours per week Independent study	
Prerequisites for participation	Language skills in the chosen language at level A2 of the Common European Framework of Reference for Languages are required, as can be acquired in the Foreign Language A2 module.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Language test, 105 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-901-OA2+ WW-D-901-OA2+	Fremdsprache A2+ – Ostasiatische Sprache	Ute Meyer ute.meyer@tu-dresden.de
Qualification objectives	Students have advanced communicative language skills in Chinese or Japanese, depending on their choice, at level A2 of the Common European Framework of Reference for Languages. Students can understand clearly articulated concrete information on topics from everyday life, read and understand simple texts with reference to everyday and professional experiences, provided that the vocabulary is limited to frequently used and internationally understandable words, and, if the vocabulary is limited to frequently used and internationally understandable words, recognize different types of texts, communicate relatively easily in simple, routine situations and use connectors appropriately, describe their environment orally and in writing using simple phrases and sentences, and respond to a limited number of simple questions. They can a	
Contents	The content of the module in the foreign language Chinese or Japanese, depending on the student's choice, includes simple texts and audio texts on everyday situations, especially in a university environment, basic oral and written text production and interaction on this topic, relevant reading and listening strategies, grammatical structures and an expanded vocabulary, as well as various forms of work with different media.	
Teaching and learning methods	Language course: 4 hours per week Independent study	
Prerequisites for participation	Language skills in the chosen language at level A2 of the Common European Framework of Reference for Languages are required.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Language test, 105 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-901-EB01 WW-D-901-EB01	Fremdsprache B1 – Europa und Mittelmeerraum	Ute Meyer ute.meyer@tu-dresden.de
Qualification objectives	Students have advanced basic communication skills in a foreign language of their choice at level B1 of the Common European Framework of Reference for Languages. Students can understand the main points of audio texts on topics from everyday life and the university environment when spoken in clearly articulated standard language or a familiar variety. They can understand factual texts on topics related to their own interests and areas of expertise to a large extent, express themselves in detail and coherently on topics related to their own areas of interest. They can largely understand factual texts on topics related to their own interests and fields of study, express themselves in detail and coherently on topics of their own interest both orally and in writing, and compose simple official documents. They have mastered communication techniques such as summarizing, arguing, and evaluating, and can take the initiative in conversations. They can express their opinions and feelings in a clear and coherent manner. They can describe their own and others' thoughts and feelings in a clear and coherent manner.	
Contents	The module content in a foreign language chosen by the student includes texts and audio recordings relating to everyday situations, particularly in a university environment, oral and written text production and interaction on this topic, relevant reading and listening strategies, grammatical structures, and expanded vocabulary. The languages available are Arabic, French, Italian, Russian, Swedish, and Spanish.	
Teaching and learning methods	Language course: 4 hours per week Independent study	
Prerequisites for participation	Language skills in the chosen language at level A2 of the Common European Framework of Reference for Languages are required.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Language test, 105 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-901-OB01 WW-D-901-OB01	Fremdsprache B1 – Ostasiatische Sprache	Ute Meyer ute.meyer@tu-dresden.de
Qualification objectives	Students have advanced basic communication skills in Chinese or Japanese at level B1 of the Common European Framework of Reference for Languages. Students Students can understand the main points of audio texts on topics from everyday life and the university environment when spoken in clearly articulated standard language or a familiar variety. They can understand factual texts on topics related to their own interests and fields of study, express themselves in detail and coherently on topics of their own interest both orally and in writing, and compose simple official documents. They have mastered communication techniques such as summarizing, arguing, and evaluating, and can take the initiative in conversations. They can express their opinions and feelings on topics of their own interest.	
Contents	The content of the module in the foreign language Chinese or Japanese, depending on the student's choice, includes texts and audio recordings on everyday situations, particularly in a university environment, oral and written text production and interaction on this topic, relevant reading and listening strategies, grammatical structures, and an expanded vocabulary. The module is taught in Chinese or Japanese, depending on the student's choice.	
Teaching and learning methods	Language course: 4 hours per week Independent study	
Prerequisites for participation	Language skills in the chosen language at level A2 of the Common European Framework of Reference for Languages are required.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Language test, 105 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-901-EB1+ WW-D-901-EB1+	Fremdsprache B1+ – Europa und Mittelmeerraum	Ute Meyer ute.meyer@tu-dresden.de
Qualification objectives	Students have productive and receptive skills in a foreign language of their choice at level B1 of the Common European Framework of Reference for Languages. Students have sufficient language skills to complete an internship abroad or attend courses at a foreign university in the local language. Students have sufficient language skills to complete an internship abroad or attend courses at a foreign university in the local language. They can understand the main points of audio texts on topics from everyday life and the university environment when spoken in standard language or a familiar variety, understand factual texts on abstract and concrete topics familiar variety, understand factual texts on abstract and concrete content related to their own interests and fields of study, express themselves in detail and coherently on past, present, and future topics of their own interest, both orally and in writing, and compose official documents. The course also covers the use of specialized terminology in the field of communication and information technology.	
Contents	The module content in a foreign language chosen by the student includes texts and audio recordings relating to everyday situations, particularly in a university environment, oral text production and interaction on this topic, writing longer texts on topics related to the student's own university environment, grammatical structures, and expanded vocabulary. The languages available are Arabic, French, Italian, Swedish, and Spanish.	
Teaching and learning methods	Language course: 4 hours per week Independent study	
Prerequisites for participation		
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Language test, 105 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-901-OB1+ WW-D-901-OB1+	Fremdsprache B1+ – Ostasiatische Sprache	Ute Meyer ute.meyer@tu-dresden.de
Qualification objectives	Students have productive and receptive skills in Chinese or Japanese at level B1 of the Common European Framework of Reference for Languages. Students have sufficient language skills Students have sufficient language skills to complete an internship abroad or attend courses at a foreign university in the local language. They can understand the main points of audio texts on topics from everyday life and the university environment when spoken in standard language or a familiar variety, understand factual texts on abstract and concrete content related to their own interests and fields of study, express themselves in detail and coherently on past, present, and future topics of their own interest areas, both orally and in writing, and compose official documents.	
Contents	The content of the module in the foreign language Chinese or Japanese, depending on the student's choice, includes texts and audio texts on everyday situations, especially in a university environment, oral text production and interaction on this topic, writing longer texts on topics related to the student's own university environment, as well as grammatical structures and an expanded vocabulary.	
Teaching and learning methods	Language course: 4 hours per week Independent study	
Prerequisites for participation		
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Language test, 105 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-901-GBWB WW-D-901-GBWB	Grundlagen Berufs- und Wissenschaftssprache B2+	Ute Meyer ute.meyer@tu-dresden.de
Qualification objectives	Students have the ability to communicate independently in a foreign language of their choice in writing and orally for study and work purposes at level B2 of the Common European Framework of Reference for Languages. Students can understand complex scientific and work-related written or orally presented texts to a large extent. They can express themselves clearly and fluently on selected topics in their field of study in detail and using complex linguistic structures, and can use a variety of strategies to ensure understanding. Students have intercultural competence.	
Contents	The contents of the module in a foreign language chosen by the student are the basics of scientific language, listening and listening strategies, reception and production of subject- and science-related texts, basics of business correspondence, profession-specific communication constellations such as team meetings, presentations, lectures and discussions, application documents, and independent work on and with texts and audio texts. The languages German as a foreign language, English, French, Russian and Spanish are available.	
Teaching and learning methods	Language course: 4 hours per week Independent study	
Prerequisites for participation	Language skills in the chosen language at level B2 of the Common European Framework of Reference for Languages are required.	
Usability	BA Wiwi, BA WiPäd, D WiInf, D WiIng: Field Supplementary Qualifications The selection must be made in accordance with the examination regulations.	
Examination	Language test, 105 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each semester	
Duration	One semester	

Supplementary Qualifications

Module number	Module name	Responsible lecturer
WW-BA-MWAN WW-D-MWAN	Analysis im wirtschaftswissenschaftlichen Kontext	Direktorin bzw. Direktor des Instituts für Mathematische Stochastik i.stochastik@tu-dresden.de
Qualification objectives	Students will know and master the fundamentals of analysis, for example, differentiation and integration, as well as linear differential equations, and their application to optimization problems. They will be able to use these methods for mathematical modeling and solving economic problems.	
Contents	The module covers the fundamentals of analysis, particularly differentiation and integration as well as linear differential equations.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation	The skills acquired in the Linear Algebra in an Economics Context module are required.	
Usability	BA Verkehrswirtschaft	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-INST WW-D-INST	Induktive Statistik	Prof. Ostap Okhrin ostap.okhrin@tu-dresden.de
Qualification objectives	Students are able to use probabilistic considerations to make statements about the population based on samples. They are able to formulate, test, and appropriately present mathematical models.	
Contents	The module covers inductive statistics, particularly two-dimensional distribution functions, limit theorems, parameter estimations, confidence intervals, significance tests, measures of association, and linear regression.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation	The skills acquired in the modules Linear Algebra in an Economic Context, Fundamentals of Economics and Transport Economics, and Descriptive Statistics are assumed. The following literature is suitable for preparation: Jeske: Fun with Statistics, Exercises, Solutions, and Formulas, Oldenbourg Verlag; Neubauer; Bellgardt; Behr: Statistical Methods, Vahlen Verlag; Bohley: Statistics, Introductory Book for Economists and Social Scientists, Oldenbourg Verlag.	
Usability	BA Verkehrswirtschaft	
Examination	Written exam, 120 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-401-IPRG WW-D-401-IPRG	Infrastrukturpolitik und Regulierung	Prof. Georg Hirte georg.hirte@tu-dresden.de
Qualification objectives	Students are able to analyze key issues regarding the impact of transport infrastructure using appropriate economic methods. They can develop concepts to assess economic instruments such as road pricing and regulatory measures for financing and using infrastructure based on appropriate economic approaches and develop options for further developing transport infrastructure.	
Contents	The module covers the economic importance of transport infrastructure, economic approaches to its evaluation, key approaches to assessing the relationship between government and market in the provision of transport infrastructure, and issues of regulation and financing of transport infrastructure.	
Teaching and learning methods	Lecture: 2 hours per week Practical: 1 hour per week Independent study The language of the module is German.	
Prerequisites for participation	The skills to be acquired in the modules Linear Algebra in an Economic Context, Analysis in an Economic Context, Programming in Transportation, Fundamentals of Economics and Transportation, Introduction to Microeconomics, Strategy and Competition, Introduction to Macroeconomics, and Fundamentals of Transportation Policy are assumed.	
Usability	BA Verkehrswirtschaft: both in the Qualified and General Focus Fields of Transport Policy	
Examination	Portfoloio, 30 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
WW-BA-PRWI WW-D-PRWI	Privatrecht im wirtschaftswissenschaftlichen Kontext	Prof. Dr. Anne Lauber-Rönsberg office.lauber-roensberg@tu-dresden.de
Qualification objectives	Students will have a fundamental understanding of general civil law, particularly with regard to the legal requirements and consequences of commercial activity, and will be able to legally classify various situations and problems and evaluate simple legal issues.	
Contents	The module covers the fundamentals of the general part of the German Civil Code, particularly the theory of legal transactions; the fundamentals of the law of obligations, including contract law, consumer protection law, unjust enrichment law, and tort law; the fundamentals of property law, commercial law, and corporate law, as well as excursions into civil procedure law and other areas of private commercial law.	
Teaching and learning methods	Lecture: 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation		
Usability	BA Verkehrswirtschaft	
Examination	Written exam, 90 minutes	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	

Module number	Module name	Responsible lecturer
VWW-BA-401-RSTÖ WW-D-401-RSTÖ	Regional- und Stadtökonomie	Prof. Georg Hirte georg.hirte@tu-dresden.de
Qualification objectives	After completing the module, students will be able to incorporate the factor of space into economic theory. They will have mastered the fundamentals of classical location theory, agglomeration theories, and urban economics. They can apply these approaches to current and relevant spatial economic issues, particularly in connection with mobility. They understand fundamental empirical aspects of economic literature.	
Contents	The module covers theories of price and location competition in space, regional and location policy, the distribution of economic activities in space, agglomeration effects, spatial structures in a city, and the role of mobility within the framework of these approaches.	
Teaching and learning methods	Lecture: 1 hour per week Practical: 2 hours per week Independent study The language of the module is German.	
Prerequisites for participation	The skills acquired in the modules Linear Algebra in an Economic Context, Analysis in an Economic Context, Fundamentals of Economics and Transport Economics, Descriptive Statistics, Inductive Statistics, Programming in Transportation, Introduction to Macroeconomics, Strategy and Competition, and Environmental Economics are required.	
Usability	BA Verkehrswirtschaft: both in the specialized and general focus Fields of environmental and regional economics	
Examination	Portfoloio, 50 hours	
Workload and Credit points	150 hours, 5 credit points	
Frequency	Offered each winter semester	
Duration	One semester	