

| Module code  | Module title   | Module description  | Semester | ECTS |
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| 4AM-MATHE-10 | Mathematics  | Upon completion of the module, students possess fundamental mathematical knowledge of linear algebra, linear optimization and differential calculus as a basis for optimization. This enables them to mathematically formulate, process and solve problems of a quantitative nature in the areas of economics and business management. In addition, students acquire fundamental knowledge and skills in the field of financial mathematics.  | 1        | 5    |
| 4AM-ABWL-12  | Fundamental of Economic Science                                  | The module aims to convey fundamental knowledge of business management and economics as well as their interrelationships. Students understand elementary microeconomic relationships between demand, supply, benefits, costs, prices, revenues and profits. Focus is laid on price formation as a function of demand and supply.<br>On this basis, the business management part of the module familiarizes students with the objectives of mobility-oriented companies and the contents of their constitutive decision-making processes.  | 1        | 7    |
| 4AM-EXREC-23 | External Accounting  | Upon completion of the module, students are able to independently perform a practical, exemplary accounting process from the opening to the closing balance sheet applying the method of double-entry bookkeeping and in compliance with the generally accepted accounting principles. Students are qualified to independently prepare an exemplary annual financial statement in accordance with relevant commercial and tax law requirements.   | 2        | 7    |
| 4AM-INREC-40 | Internal Accounting  | Upon completion of the module, students are able to select and apply essential instruments of cost accounting in a targeted and theoretically founded manner that is suited to the respective practical situation.<br>Students are capable of applying static and dynamic methods of capital budgeting as an economic foundation for investment decisions. They acquire knowledge of options for raising debt and equity capital for the realization of investment projects as well as for the funding of current operational processes in the organization.  | 4        | 6    |
| 4AM-UPO-56   | Corporate Management, Human Resources Management and Controlling | Upon completion of the module, students are able to apply human resource management as a partial concept of corporate management, which determines the practical handling of leadership and HR management and in accordance with the principles of human resource policy. Students possess fundamental knowledge of the conceptual perspectives, functions, support systems and techniques of corporate management. They understand them as a systematic process of analysis, planning and decision-making, which is to be adapted to the specific features of mobility-oriented businesses.<br>Furthermore, students acquire fundamental knowledge of concepts, responsibilities, structures, instruments and institutions of controlling as well as the organization of controlling in different operational units. Controlling is perceived as a targeted service for the management of a corporation. | 5        | 7    |

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| 4AM-RECHT-50 | Business Law   | Upon completion of the module, students have gained an overview of the legal system as a whole and the individual areas of law, which enables them to deal with legal issues. Focus is placed on acquiring a basic understanding of the economically relevant parts of civil law.<br>Students learn to understand and classify the legal principles they will encounter in their daily professional work. They are enabled to independently develop a system for solving legal problems in the service business. Furthermore, students deepen their practical knowledge of the economic and legal system. | 5 | 5 |
| 4AM-INMOB-56 | Innovative Mobility Concepts and Business Models                 | Upon completion of the module, students have acquired methodological knowledge for the description, development and evaluation of business models. They are able to apply this knowledge in the context of new mobility concepts. This enables them to systematically design or advance new mobility concepts.<br>After completing the module, students are in a position to process evolving social and technological trends in the form of new mobility business models and to implement them in practice.  | 5 | 6 |
| 4AM-ITGRD-10 | Fundamentals of Business Information Technology                  | Upon completion of the module, students have acquired a fundamental understanding of the importance of information systems and their architecture for an application in businesses. This knowledge constitutes the basis for future digital linkages of the involved actors of the businesses. Furthermore, the module explores the functionality of essential hardware and software components in businesses.  | 1 | 5 |
| 4AM-KONS-12  | Design Theory and CAD  | Upon completion of the module, students are able to understand the importance of design within a business. For this purpose, students have to develop spatial imagination and the fundamental skills required to produce technical drawings. They are enabled to develop simple technical drawings both manually and using CAD in compliance with standards for the manufacture and production of goods.  | 1 | 6 |
| 4AM-DATBA-20 | Data Management  | Upon completion of the module, students have acquired the knowledge and skills required for the modeling, application, and administration of relational database systems. This enables them to classify database management systems and select them for a specific application. Students have the ability to design and implement database schemas.   | 2 | 6 |
| 4AM-INKOM-30 | Fundamentals of Information and Communication Systems            | Upon completion of the module, students are able to analyze the computer-based organization, i.e. the acquisition, storage and processing as well as the exchange of information based on user-specific hardware and software systems. This enables them to build practical communication systems. Students are capable of describing the structure of the relationships between system elements through linked digital resources.  | 3 | 6 |
| 4AM-FHZKO-30 | Fundamentals of Driving Physics, Vehicle Concepts and Structures | Upon completion of the module, students are familiar with the fundamental physical principles used in the design of automobiles. They are provided with a comprehensive overview of automotive engineering. This enables students to classify individual components within the overall system. Focus is placed on developing fundamental knowledge of how a vehicle functions, the underlying driving physics, and the components that interact in a vehicle to achieve certain driving characteristics. The module provides an   | 3 | 5 |

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|              |  | introduction to alternative fuels and alternative drive systems, with particular emphasis on electromobility.  |   |   |
| 4AM-ITMAN-40 | Organization and IT Management               | Upon completion of the module, students are able to optimize the business processes of a company through IT organization and operate the IT required for this purpose. This requires an understanding of the methods of business process analysis and optimization as well as the measures and methods of IT service management.   | 4 | 5 |
| 4AM-FAHKO-45 | Vehicle Components                           | Upon completion of the module, students have obtained an overview of the drive systems of a motor vehicle as well as all relevant drivetrain modules and thus the power transmission components that are located between the engine and the drive wheels of a motor vehicle.<br>Students are able to derive the main development goals of the automotive industry, which ensures the successful transfer of knowledge for service tasks. In particular, students possess the skills to describe the design features of vehicle concepts and apply them to the optimization of services offered or the development of new services.                   | 4 | 5 |
| 4AM-ELO-45   | Vehicle Electrics and Electronics            | Upon completion of the module, students have attained knowledge of electronic systems in the motor vehicle. Students are to be able to understand the growing importance of automotive electronics for current and future automotive technology and actively participate in the adaptation of services. They acquire knowledge of the set-up and functioning of the power supply of motor vehicles and are able to identify faults in electrical circuits through the use of diagnostic systems. Selected components are examined to develop the students' understanding of the different constructive designs of electrical and electronic systems. | 4 | 5 |
| 4AM-INFO-60  | Information Technology in the Service Sector | Upon completion of the module, students have obtained knowledge of the information and data processing technologies of a mobility services provider. Students are able to apply, shape and modify the systems and are familiar with the key interfaces between the organizational units and their systems. Selected technologies are examined to enable students to understand the growing importance of digital services and identify new potential business areas for mobility businesses.   | 6 | 4 |
| 4AM-WISAR-10 | Fundamentals of Academic Work                | Upon completion of the elective module, students are able to prepare written presentations or project reports in their field of study on schedule and in accordance with the formal requirements for a conceptual academic approach. Competence in self and time management as well as the confident use of text and spreadsheet programs will enable students to produce qualified, scientifically structured solutions to problems.  | 1 | 5 |

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| 4AM-PROMA-12 | Project Management                           | Upon completion of the module, students are able to independently plan, manage and successfully complete business and interdisciplinary projects according to time, budget and quality constraints. Students develop their analytical and critical-constructive thinking by looking at complex operational contexts and by bringing together business and engineering disciplines in an interdisciplinary project management context.<br>Students are able to develop new ideas using design thinking as a customer-centered and iterative method for solving complex problems.   | 1 | 5 |
| 4AM-MARKT-23 | Market Characteristics and Customer Behavior | Upon completion of the module, students are able to acquire, process and interpret knowledge of the characteristics, peculiarities and structure of the automotive market. The analysis of customer behavior in sales and service is to be employed for proactive customer relationship management to retain customers and acquire new ones. To this end, the module imparts the fundamentals of marketing research thus enabling students to obtain and process market and customer information in order to derive measures for a company's range of services and customer relationship management.  | 2 | 7 |
| 4AM-AHMAN-30 | Management of Car Dealerships                | Upon completion of the module, students are familiar with the internal structures of a car dealership and are able to interlink them for the success of the company. They acquire knowledge of the objectives, strategies and key figures for the management of the car dealership. Students develop a holistic view of the value creation processes in the core business areas of new car management including fleet business, used car management, service management and management of valued added services. They gain an understanding of the strategies and control instruments of vertical management of the manufacturer-dealer relationship and their use for current and future corporate success. In a practical part, the students are familiarized with the essential tasks, objectives and activities of a manager in the service department of a car dealership. | 3 | 6 |
| 4AM-ENGL-34  | Business English                             | Upon completion of the module, students are able to describe themselves and their professional and academic context in the foreign language. Moreover, they can master everyday communicative situations in the professional environment. Students are enabled to communicate in English in written and oral form within the company and between different companies. They are able to present their company and its main processes and essential facts in written and oral form.   | 3 | 6 |
| 4AM-SOFTS-45 | Soft Skills                                  | The module imparts fundamental principles of rhetoric and presentation skills. Upon completion of the module, students are able to organize, manage, and successfully complete their own projects. Knowledge of negotiation skills and conversation techniques promotes ethical business behavior and sustainable corporate management. The module also includes specific recommendations on how to implement ethical and sustainable behavior in the company.  | 4 | 6 |
| 4AM-MOMA-56  | Mobility Management                          | Upon completion of the module, students are familiar with the different forms of mobility. They are able to identify and assess them from an ecological point of view. Students are enabled to analyze and optimize the mobility needs of different demand groups and thus contribute to a sustainable mobility development.  | 5 | 6 |

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| 4AM-QUALI-60 | Quality Management  | Upon completion of the elective module, students are familiar with the fundamental concept and structure of a quality management system (QMS). ISO 9000 forms the basis for structuring a QMS. The module imparts knowledge of the requirements, methods and objectives of total quality management (TQM). The application of quality and management techniques, specifically for the service sector, are linked to the issue of risk management. In addition, students are enabled to take the "Quality Management Representative" (QMB) certificate.   | 6 | 5 |
| 4AM-DISEN-56 | Professional English  | Students are enabled to communicate on an international professional level. Upon completion of the elective module, they are able to describe work processes and systems in the company in English and explain technical details. Students understand technical texts in English and build up a broader range of vocabulary in their field of study.<br>Furthermore, students apply Business English skills acquired in the previous module (Business English) and are enabled to take a European language certificate (e.g. LCCI EFB, Level 2/3). Focus is placed on European business correspondence. Upon completion of the module, students have enhanced their business communication skills through the use of real-life business tasks.<br>Furthermore, students gain an insight into intercultural differences in international business life and have developed an increased sensitivity with regard to communicative peculiarities and cultural differences. Thus, they are prepared for a possible professional stay or internship/work placement abroad. | 5 | 5 |
| 4AM-DISMF-56 | Mobility of the Future – Market Research and Applied Statistics | Upon completion of the elective module, students are able to carry out suitable data collection and capture for business management issues in mobility-oriented companies. They are also prepared to present and analyze the obtained data in a problem-oriented manner and interpret the results. To this end, they acquire fundamental knowledge in the field of business statistics. In addition to statistical key terms, students are provided with an overview of the procedures of descriptive and inductive statistics as well as probability calculation. These skills form the basis for the knowledge they acquire in the field of empirical research. Students are enabled to develop a market research project for the mobility of the future, to plan all stages of the project and to execute the individual project steps by using standard statistical software.  | 5 | 5 |
| 4AM-DISTM-56 | Digital Transformation and Mobility                             | The elective module enables students to master the challenges of digitalization in automotive and mobility management businesses. To this end, they are qualified for the changes brought about by digitalization to business processes in mobility-oriented companies. Upon completion of the module, students are able to assist and moderate the development and implementation of a sustainable digitization strategy by applying Design Thinking methods and adapting software-based best practices, especially in the areas of human resources, finance, and customer relationship management.<br>Furthermore, students are qualified for the changes in the communication culture through digital media. Upon completion of the module, they are able to develop digital marketing strategies and sustainable concepts, ensure their successful implementation and prove their importance for the company's value creation through verifiable monitoring and controlling measures.  | 5 | 5 |

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| 4AM-DISAB-56 | Operations Scheduling and Operational Organization                                  | Upon completion of the module, students have acquired comprehensive technical and methodological knowledge of the organization and optimization of operational work systems and business processes. This is based on the knowledge imparted on the effective and efficient organization of operational processes, the human-oriented and thus efficient organization of work. This knowledge provides the foundation for all areas of work planning and control within a process-oriented work organization. In addition, students will be able to take the REFA basic certificate "Work Design".  | 5 | 6  |
| 4AM-PRAX1-12 | Corporate Responsibilities and Processes, Sales and Service                         | During the practical phases, students apply the knowledge gained in the previous theory phases to practical topics that have been scientifically prepared and aligned with the course content. Students become familiar with corporate processes and deepen their knowledge of practical topics in consensus with theory. Upon completion of the module, students have acquired fundamental knowledge, behaviors and working techniques of the company. They get to know the product and service program. On this basis, students begin to deepen their knowledge of the company's sub-processes.  | 1 | 12 |
| 4AM-PRAX2-34 | Sales, Disposition, Warehouse, IT Department and Customer Service                   | Upon completion of the module, students are able to apply and utilize their holistic and implementable professional competence. Furthermore, they have the ability to work on complex tasks in a methodical and structured manner and participate constructively in different working groups. To this end, students are enabled to assess alternative professional solutions and apply them in a suitable form to the current problem.   | 3 | 12 |
| 4AM-PRAX3-50 | Mobility Concepts, Quality Management, Human Resource Management and Administration | Upon completion of the module, students are able to integrate business, industry and company-specific experience into their professional activities, taking into account social aspects. They can work on practical problems in an independent and targeted manner using scientific and practical knowledge and methods. Students are enabled to work independently on practical tasks of increasing complexity that involve technical, operational, informational and organizational structures, interrelationships and processes.  | 5 | 6  |
| 4AM-THESI-60 | Bachelor's Thesis   | In their bachelor's thesis, students solve an industry-specific problem within a specified period of time, applying the acquired theoretical, methodological and practical knowledge in a targeted and result-oriented manner, and present it in a logically structured and comprehensible manner in the form of a scientific paper (bachelor's thesis). The knowledge gained in the previous modules is applied, deepened and extended in dependence on the chosen topic of the thesis. In an academic colloquium, students present an exposé containing the definition of the problem, the objectives and the approach of the thesis. The results of the bachelor's thesis are to be presented and defended in an academic presentation before an examination board. | 6 | 9  |

