Module code	Module name	Short description	Semester	ECTS
4AM-MATHE-10	Mathematical Foundations	Upon completing the module, students will be able to mathematically formulate technical and economic problems. Moreover, they will be capable of selecting and applying appropriate methods for solving these tasks. Students acquire mathematical skills that are necessary to successfully deal with specific engineering challenges and quantitative business problems. Students attain basic knowledge of finacial mathematics and statistics.	1	6
4AM-TEGRD-10	Technical Foundations	Upon completing the module, students will be familiar with the interdependencies and redundancies of the individual disciplines. Students will be enabled to apply connectable technical basics to develop professional expertise in the area of automotive engineering..	1	6
4AM-WSFTE-10	Foundations of Materials Engineering and Production Engineering	Upon completing the module, students will be able to practically apply chemical basics and scientifically model technical problems that serve as a basis for materials, technologies and material testing techniques used in automobiles. Students are capable of understanding significant dependencies and interdependencies between materials engineering and production engineering.	1	6
4AM-KONS-12	Design Theory and CAD	Upon completing the module, students will be able to recognize the importance of construction within a company as well as during a product's entire life cycle. Furthermore, they are capable of applying learned strategies for the development, use and the disposal of new products. This is based on the formation of visual thinking and basic skills in technical drawing. The students are to be enabled to create simple standardized technical drawings, both manually and using CAD, for the manufacture of products.	1 and 2	6
4AM-FHZKO-20	Physical Foundations, Concepts and Structures of Vehicles	Upon completing the module, students will be familiar with the physical fundamental principles of the development of automobiles. The module provides a basic overview of automotive engineering. The students are enabled to integrate individual components into the overall system. This includes imparting basic knowledge about how a vehicle works, the underlying physical principles as well as the components that interplay to achieve certain driving qualities of a vehicle.	2	6
4AM-ANTRI-30	Drive Engineering and Power Transmission	Upon completing the module, students will have an overview of different automobile drive systems as well as all relevant modules of the powertrain, i.e. the components of power transmission that are installed between a vehicle's engine and its driving wheels. Students are	3	6

		enabled to point up and calculate the main functions of power transmission, i.e. the transmission, distribution and control of torque including resistances and losses.		
4AM-FAHKO-40	Chassis and Vehicle Body Technology	Upon completing the module, students will be familiar with the construction principles of main chassis components and vehicle body types. Moreover, they will be enabled to deduce essential development goals of the automotive industry at a high level of understanding, which ensures the successful knowledge transfer for the service tasks. In particular, students are supposed to acquire the ability to identify constructive advantages from the combination of different materials and/or design principles and derive suitable measures in order to optimize the servicing requirements.	4	6
4AM-ELO-50	Vehicle Electrics and Electronics	Upon completing the module, students will have gained advanced knowledge of electronic systems in automobiles. Students are supposed to be able to recognize the increasing importance of automobile electronics for present and future automotive engineering and actively participate in the adjustment of the offered services. They will also have acquired knowledge about the structure and operation principles of the power supply in motor vehicles. Furthermore, they will be able to use diagnostic systems to identify malfunctions in electric circuits. Examining selected complex components, students develop understanding of the different constructional designs of electric and electronic systems.	4 and 5	7
4AM-INFO-60	Information Technology in Service	Upon completing the module, students will have developed higher understanding of operational database, classification and information systems in the service market of the automobile trade. By practically applying dealer-management systems, students will consolidate gained knowledge about the implementation of business processes in the fields of purchasing, material and stock management, sales and marketing as well as HR and finances. The implementation of intra-corporate and cross-company communication systems is essential for an efficient control of operational processes. This integration of data privacy aspects is of major importance in this regard.	6	8
4AM-ABWL-12	Economic Foundations	Upon completing the module, students will be familiar with economic foundations and their interdependencies. The module focuses on subject matters and tasks within the fields of business administration and macro-economics. On this basis, the business-oriented part of the module familiarizes students with the objectives of companies and the contents of their constitutive decisions-making processes. The macro-economic part aims to impart basic concepts and fundamental facts in relation to business activities.	1 and 2	6

4AM-EXREC-20	External Accounting	Upon completing the module, students will be able to manually and independently carry out a practical, exemplary accounting process from the opening to the closing balance sheet using the technique of double-entry accounting and in due consideration of standard accounting principles. Students are capable of independently drawing up exemplary annual accounts in accordance with principal commercial and tax law requirements.	2	6
4AM-INREC-30	Internal Accounting	Upon completion of the module, students will be able to select and apply fundamental instruments of cost and activity accounting in a targeted and theoretically founded way and in accordance with the respective practical situation. The students can apply static and dynamic procedures of investment calculation as an economic foundation of investment decisions. They are familiarized with options to procure debt capital and equity for the realization of investment projects and the financing of ongoing operational processes in a company.	3	6
4AM-UPO-40	Corporate Management, HR and Organization	Upon completing the module, students will be able to adopt HR management as a sub-concept of corporate management, which determines the practical handling of HR management on the basis of organizational structures in the company and HR principles. Students acquire basic knowledge of conceptions, tasks, structures, instruments and institutions of management accounting. Furthermore, they learn how to apply the organization of management accounting in different operational sections. Management accounting is to be considered as a target-oriented service for corporate management.	4	10
4AM-AVBO-56	Production Planning and Industrial Organization	Upon completing the module, students will have gained comprehensive expertise and methodological knowledge of how to design and optimize operating systems and business processes. This is based on imparted knowledge of the effective and efficient organization of business processes for the human-oriented and thus efficient structuring of work. This knowledge provides the foundation for all fields of work of production planning and control within a process-oriented work organization. Moreover, students are enabled to obtain the REFA (Organization for Work Design, Industrial Organization and Company Development) basic certificate „Industrial organization“.	5 and 6	9
4AM-AHMAN-20	Car Dealership Management	Upon completing the module, students will be familiar with the internal structures of a car dealership and able to link them to achieve corporate success. Apart from these internal management tasks, students are supposed to gain understanding for the objectives, strategies	2	6

		and control instruments of the vertical management in the relationship between manufacturers and dealers. They will also be able to develop, prepare and interpret an integrated view of value chains in the automotive market, information about the size and development of the automotive market (market volume and potential) as well as on competitive conduct and customer behavior.		
4AM-SOFTS-34	Soft Skills	Upon completing the module, students will be familiar with principles of rhetoric and presentation skills. On this basis they are able to design, manage and successfully complete own projects. The command of negotiation and communication techniques fosters ethical conduct and sustainable management. Students are provided with concrete ideas of how to implement ethical and sustainable behavior in the company.	3 and 4	6
4AM-SERV-34	Service Management	Upon completing the module, students will be aware of the importance, restructuring and conception of a market-oriented service management. They will have gained market-oriented service competence, which enables them to develop management conceptions for service practice. Furthermore, the module aims to raise awareness for the importance of customer potential for corporate success and to exploit and secure this success on the basis of success factors of a Customer Relationship Management.	3 and 4	8
4AM-ENGL-34	Business English	Upon completing the module, students will be able to describe themselves and their professional and academic context in English. Furthermore, they can deal with everyday communication situations in the professional environment. They are enabled to handle written and oral communication in English both within a company and between different companies. Students are able to present their company and its basic operations and significant factors in both written and oral form.	3 and 4	6
4AM-RECHT-50	Economic Law	Upon completing the module, students will have gained an overview of the legal system as a whole as well as individual legal fields, thus being able to deal with legal legal matters. The module provides a basic understanding of economically relevant parts of civil law. Students get to know legal foundations they are confronted with in everyday professional life and learn how to integrate them. They are enabled to independently develop a system for solving legal problems in the service business. They deepen detailed application-oriented knowledge of economic and legal systems.	5	7
4AM-QUALI–T-56	Quality Management	Upon completing the module, students will be able to understand the basic concept and structure of a quality management system (QMS). This is based on ISO 9000 about the structure of a QMS. Students will gain knowledge of prerequisites, methods and objectives of Total Quality	5 and 6	7

		Management (TQM). The application of quality and management techniques particularly for the service sector is linked with matters of risk management. Furthermore, students are enabled to attain the certificate as quality management expert.		
4AM-DISEN-56	English for Special Purposes	Students are enabled to engage in professional communication at the international level. Upon completing the module, students will be able to describe a company's work processes and systems in English and explain technical details. They are capable of understanding technical texts in English and developing a wide grasp of vocabulary from their subject area. Furthermore, students apply knowledge of Business English gained in the preceding module and are enabled to attain a European language certificate (e.g. LCCI EFB, Level 2/3). The module focuses on European commercial correspondence. Upon completing the module, students will have expanded their business communication skills by considering real business life examples. Furthermore, they gain an insight into intercultural differences in international business life and develop increased sensitivity towards communicative peculiarities and cultural differences. Thus, students are systematically prepared for a possible work assignment or internship abroad.	5 and 6	7
4AM-DISMF-56	Applied Market Research and SPSS Statistics	Upon completing the module, students will be able to conduct data collection and recording for business-related questions. Furthermore, they will be capable of processing, visualizing and analyzing collected data in a problem-oriented way as well as interpreting corresponding results. For this purpose, students acquire basic knowledge from the area of business statistics. Apart from learning basic statistical concepts, students are familiarized with descriptive and inductive statistical procedures as well as probability theory. Based on this, they gain knowledge of empirical research. Students are thereby enabled to develop a market research project, plan all its stages and use the standard statistics software SPSS to process individual project steps.	5 and 6	7
4AM-DISHY-56	Digitalization in the Medium-sized Sector	The module qualifies students for the challenges of digitalization in the medium-sized sector. This includes changes in business processes induced by digitalization in small and medium-sized companies. Upon completing the module, students will be capable of supporting and moderating the development and implementation of a sustainable digitalization strategy by applying Design Thinking methods. They will also have knowledge of software-based best practices, in particular from the fields of HR, finance and customer relationship management, and their adaptation.	5 und 6	7

		Furthermore, students are qualified for changes in the communication culture induced by digital media. Upon completing the module, they will be able to develop strategies of digital marketing and sustainable conceptions, ensure their successful implementation and prove their importance for a company's value creation by employing verifiable monitoring and controlling measures. Apart from conceptual competence, students acquire knowledge of the operational use of social media platforms as well as an awareness for the continuous optimization of websites and apps on search engines and usability.		
4AM-PRAX1-12	Practice 1	The practical periods aim to support the skills acquired during the preceding theoretical semesters by offering practical topics that are prepared in a scientific manner and match with the course contents. Students are familiarized with business processes and gain more in-depth knowledge by dealing with practical topics that are in consistence with theory. Upon completing the module, students will have attained fundamental knowledge, practices and work techniques of the company. Students get to know the product and service program. On this basis, acquired skills are applied in processes in different business units (starting with the workshop area).	1 and 2	12
4AM-PRAX2-34	Practice 2	Upon completing the module, students will be capable of applying and using professional expertise that combines knowledge and its practical transferability. Furthermore, they are able to collaborate in complex tasks in a methodically structured way and constructively participate in different task forces. For this purpose, students are enabled to evaluate professional solutions and appropriately apply them to the current problem.	3 and 4	12
4AM-PRAX3-50	Practice 3	Upon completing the module, students will be able to integrate business knowledge as well as industry- and company-specific experience into professional activity while simultaneously considering social aspects. Furthermore, they capable of applying scientific and practical knowledge and methods to deal with practical problems in an independent and target-oriented way. Students are enabled to independently participate in practical tasks with increasing complexity in terms of technical, business, informational and organizational structures, coherences and processes.	5	6
4AM-BTHES-60	Bachelor Thesis	In their bachelor theses, students solve an industry-specific problem within the stipulated timeframe and in target- and result-oriented way. They are supposed to apply their acquired theoretical, methodological and practical expertise and present their results in a logically	6	9

		structured and comprehensible scientific work. In doing so, previously attained knowledge is deepened and expanded dependent on the chosen topic of the bachelor thesis. In a colloquium, students are to present an exposé that includes a description of the problem, the objective of the thesis as well as the student's approach to dealing with the topic. The results of the bachelor thesis are to be presented and defended in a scientific talk before an examination board.		
4AM-WISAR-10	Introduction to Academic Work	Upon completing the module, students will be able to prepare subject-specific written presentations and project papers in due time and in consideration of basic values as well as contentual and structural requirements of a conceptual scientific approach. In this regard, students are to attain competences in self- and time management, which enables them for a qualified planning, coordination and critical analysis of their working style and their dealing with time.	2	-