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Technische Universität Dresden "Friedrich List" Faculty of Transport and Traffic Sciences

Study Regulations for the consecutive Master's degree program Air Transport and Logistics

as of March 10, 2023

On the basis of § 36 para.1 of the Act on the Autonomy of Institutions of Higher Education in the Free State of Saxony (*Sächsisches Hochschulfreiheitsgesetz*) in the version published on January 15, 2013 (SächsGVBI. p. 3), Technische Universität Dresden issues the following Study Regulations as statutes.

Table of contents

- § 1 Scope of application
- § 2 Objectives of the degree program
- § 3 Admission requirements
- § 4 Start and duration of the degree program
- § 5 Teaching and learning methods
- § 6 Structure and organization of the degree program
- § 7 Content of the degree program
- § 8 Credit points
- § 9 Academic advisory and counseling service
- § 10 Amendments to module descriptions
- § 11 Entry into force, publication and interim arrangements
- Annex 1: Module descriptions
- Annex 2: Study schedule

§ 1 Scope of application

On the basis of the Act on the Autonomy of Institutions of Higher Education in the Free State of Saxony (SächsHSFG) and the examination regulations, these study regulations stipulate the objectives, content, structure and organization of the consecutive Master's program Air Transport and Logistics at Technische Universität Dresden.

§ 2 Objectives of the degree program

(1) Students will possess the ability to understand and analyze air transportation and logistics systems and to identify and formulate specific engineering problems of air transportation and logistics systems. They will be able to work out potential solutions independently, using adequate scientific methods. Due to the interdisciplinary and integrative design of the degree program, students will be able to recognize and depict the systemic interrelationships at work and to take them into account in their own proposals for solutions, if necessary across disciplines. Their conceptual and methodological knowledge enables them to quickly respond to changes and requirements in the professional world. The program promotes the students' personal development, especially the ability for critical self-reflection and societal commitment.

(2) Graduates of the Air Transport and Logistics degree program will possess specific qualifications due to the focus on content and methodology as well as due to the elective options of the degree program, which, in professional practice, will particularly enable them to take on managerial roles in aviation and logistics companies, engineering companies and relevant associations active in the aviation and logistics sector, public administrations as well as research and teaching institutions. Moreover, graduates will be able to work on strategically significant complex and interdisciplinary engineering tasks in aviation and logistics and to solve related problems.

§ 3

Admission requirements

(1) To be admitted to the degree program, applicants must have completed a first degree in engineering in particular civil engineering, economics and engineering, transport engineering, mechanical engineering, electrical engineering or computer science, in the natural sciences, in particular physics, mathematics, geography or geodesy, in transport economics, or another degree guaranteeing comparable prior knowledge at a university or vocational academy that is officially recognized in Germany and qualifies the degree holder for a profession.

(2) In addition, a special aptitude is required. Proof of this particular aptitude is provided by an aptitude assessment in accordance with the aptitude assessment regulations.

(3) Another prerequisite is proficiency in English at B2 level of the Common European Framework of Reference for Languages. Proof thereof is provided by an aptitude assessment according to the Aptitude Assessment Regulations. This may include in particular a certificate of general or subject-specific university entrance qualification that serves as evidence of having studied English as a foreign language from grades 5-12, a certificate of a university degree completed entirely in English, or a language certificate at level B2 of the Common European Framework of Reference for Languages.

§ 4 Start and duration of the degree program

(1) The program can be started each winter semester.

(2) The standard period of study is four semesters and includes on-site attendance, independent study and the final examination.

§ 5 Teaching and learning methods

(1) The syllabus is structured in modules. In the individual modules, the course content is taught, consolidated and deepened through lectures, practicals, seminars, internships and independent study. In modules that are subject to more than one study regulation, synonyms are permitted for teaching and learning methods with the same content.

(2) The individual teaching and learning forms according to para. 1 sentence 2 are defined as follows:

1. Lectures introduce the subject matter of the modules.

2. Practicals allow to apply the subject matter in exemplary sub-areas.

3. Seminars enable students to familiarize themselves under supervision in a selected subject area on the basis of specialist literature or other material, to report on the results of their work, to discuss them within the group and to present them in writing.

4. Internships serve to apply the subject matter taught and to acquire practical skills in potential areas of employment.

5. Independent study enables students to independently acquire both fundamental and in-depth subject knowledge using various media, such as teaching resources, literature, internet, in individual work or small groups.

§ 6

Structure and organization of the degree program

(1) The program is organized in modules and features a curriculum organized over four semesters. The fourth semester is dedicated to the preparation of the final thesis including the colloquium and is particularly suitable for a temporary stay at another university (mobility window). Part-time study is possible in accordance with the regulations on part-time study.

(2) The degree program comprises eight compulsory modules and five or seven elective compulsory modules, which allow students to choose their concentration. To this end, there is a choice of modules covering safety and management in air traffic, helicopter technologies, aircraft design, in-depth methodological skills in logistics, and modules covering general traffic planning, telematics, optimization and quality assurance. The selection is binding. A concentration can be re-selected once; the student must submit a written request to the Examination Office stating the module to be replaced and the newly selected module.

(3) Learning goals, content, teaching and learning methods, requirements, applicability including potential combination restrictions, frequency, workload, and duration of the individual modules are all listed in the module descriptions (Annex 1).

(4) The courses are held in English or, if indicated by the respective module descriptions, in German.

(5) The appropriate allocation of the modules to the individual semester, the observance of which makes it possible to complete the program within the standard period of study, as well as the type and scope of the respective courses included, and the number and standard time of the

required study achievements and examined assessments are defined in the study schedule attached (Annex 2), or in an individual study schedule for part-time studies approved by the faculty.

(6) Upon proposal of the Academic Affairs Committee, the Faculty Board may change the range of elective compulsory modules as well as the study schedule. The current selection of elective compulsory modules available will be announced in the usual manner at the beginning of the semester. The amended study schedule shall apply to all students who have been informed about this in the usual manner at the beginning of their studies. The Examination Committee shall decide, upon application by the student, on any exceptions to sentence 3.

(7) If participation in an elective course of an elective compulsory module or in a non-elective course of an elective compulsory module is limited by the number of available places as specified in the module description, the participants will be selected by drawing lots. To this end, students must register for the appropriate courses. The form and deadline for registering will be announced to the students in the usual manner. Through the enrollment, the choice according to para. 2 sentence 3 is made, if applicable. At the end of the enrollment period, the students will be notified in the usual manner whether they have been selected for the respective course.

§ 7

Content of the degree program

(1) Air Transport and Logistics is a research-oriented Master's degree program.

(2) The course includes general engineering methods, methods of aviation and logistics, and management of projects and transport companies. The general engineering methods include in particular methods and models for solving optimization problems, statistics as well as data analysis. Methods of aviation and logistics are in particular: material flow accounting and corporate logistics, aerodynamics and aircraft characteristics, operational logistic structures of air traffic, flight planning and operations, aircraft technology, communication, navigation and safety in air traffic as well as general traffic planning and traffic demand modeling.

§ 8 Credit points

(1) ECTS credit points document the average workload of the students and their individual study progress. One credit point corresponds to a 30-hour workload. Normally, 60 credit points are awarded per academic year, i.e. 30 credit points per semester. The total workload for the program corresponds to 120 credit points and comprises the teaching and learning methods according to type and scope stipulated in the module descriptions, the study achievements and examined assessments, the final thesis and the colloquium.

(2) The module descriptions indicate the number of credits that can be earned by each module. Credits are awarded upon passing the module examination. § 34 of the examination regulations shall remain unaffected.

§ 9

Academic advisory and counseling service

(1) General advice will be provided by the Central Student Information and Counseling Service at TU Dresden. It covers questions regarding study options, enrollment modalities and general student affairs. Subject-specific advice during studies will be provided by the "Friedrich List" Faculty of Transport and Traffic Sciences. This subject-specific advisory service assists students with regard to the design of their studies.

(2) At the beginning of the third semester, each student who has not yet provided proof of academic performance shall make use of the subject-specific advisory services.

Amendments to module descriptions

(1) In order to amend to changed conditions, module descriptions may be changed in a simplified procedure to optimize study organization, with the exemption of the fields "Module name", "Learning goals", "Content", "Teaching and learning methods", "Requirements for earning credit points", "Credit points and grades" and "Module duration".

(2) In a simplified procedure, the Faculty Board adopts the amendments to the module descriptions upon proposal of the Academic Affairs Committee. The amendments must be published in the usual manner.

§ 11 Entry into force, publication and interim arrangements

(1) These Study Regulations enter into force on April 1, 2023 and are published in the official announcements of Technische Universität Dresden.

(2) They apply to all newly enrolled students in the Master's program in Air Transport and Logistics in the 2023/2024 winter semester or later.

(3) For students who enrolled earlier than in the 2023/2024 winter semester, the version of the Study Regulations for the consecutive Master's degree program in Air Transport and Logistics that has been valid for them up until the amendment continues to apply unless they declare their acceptance of the amendment in writing. The form and deadline of this declaration are specified by the Examination Committee and announced as is customary at the faculty. Switching to the new regulations is possible at the earliest on October 1, 2024.

(4) If students switch to the new regulations, primarily the module examinations already taken including the grades, and subordinately also individual examination achievements will be transferred ex officio on the basis of equivalence tables which have been determined by the Examination Committee and announced in the usual manner. With the exception of § 21 para. 5 of the Examination Regulations, module examinations and examined assessments not graded with at least "pass" (4.0) or "passed" will not be transferred. The module grade is generally not recalculated based on exclusively transferred examined assessments; exceptions are listed in the equivalence tables.

Issued based on the resolution of the Faculty Board of the "Friedrich List" Faculty of Transport and Traffic Sciences as of November 14, 2022, and the approval of the University Executive Board as of January 10, 2023.

Dresden, as of March 10, 2023

The Rector of Technische Universität Dresden

Prof. Dr. Ursula M. Staudinger