

**Study and Examination Regulations for the bachelor's programme
B.Eng. Autonomous Vehicle Engineering
at Technische Hochschule Ingolstadt of 17.02.2020**

Preamble

Based on Art. 13 Para. 1, Art. 58 Para. 1 Clause 1 and Art. 61 Para. 2 and 3 Bavarian Higher Education Act (BayHSchG) dated 23 May 2006 (Gazette of Laws and Ordinances (GVBl) p. 245, BayRS 2210-1-1-WFK), in the amended version, Technische Hochschule Ingolstadt adopts the following statutes:

Preliminary note on language use

For reasons of readability and clarity, female and male persons are referred to in the masculine form in this text. Such references always include both genders.

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§ 1

Purpose of the Study and Examination Regulations

These Programme and Examination Regulations serve to fulfil and supplement the Framework Examination Regulations for Universities of Applied Science (RaPO) dated 17 October 2001

(Gazette of Laws and Ordinances (GVBl) p. 686, Bay RS 2210-4-1-4-1-WFK) and the General Examination Regulations of Technische Hochschule Ingolstadt (APO THI) dated 25.07.2011 in the amended version.

§ 2 **Programme objective**

- (1) ¹The Autonomous Vehicle Engineering bachelor's degree programme aims to teach interdisciplinary knowledge and methods derived from electrical engineering, information technology and software engineering as well as their application, based on scientific findings and methods in a practice-oriented manner. ²In addition, the programme promotes personal development, cooperation in international teams in which English is the language of communication, the acquisition of management techniques and the ability to work in a multicultural environment. ³Social and methodological skills are taught in addition to technical skills in order to promote personal development and leadership qualities. ⁴The social skills acquired in internships, seminars or the project enable students to work as part of a team or lead a project group. ⁵Taken together this gives the student the skills required to carry out professional activities independently in multinational companies in the field of developing mechatronic systems and their software modules for automated mobility systems.
- (2) ¹After completing their studies, graduates are to be able to use basic knowledge and concepts to design and implement innovative mechatronic components for automated or autonomously moving mobility systems in such a way that the desired requirements are met under realistic conditions such as economic efficiency, environmental compatibility, social, political, ethical, health and safety aspects, manufacturability and sustainability.
- (3) The completed bachelor's programme also provides the basis for further academic qualification in a subsequent master's programme.

§ 3 **Standard duration of studies, programme structure**

¹The standard period of study is seven semesters. ²The programme is broken down into two phases. ³The first study phase comprises two theoretical semesters. ⁴The second study phase comprises four theoretical semesters and one internship semester, which is the fifth semester of study.

§ 4 **Qualifications for the degree programme**

Qualification requirements for the bachelor's programme in Autonomous Vehicle Engineering are

1. proof of the general requirements in accordance with the qualification regulations for studies at universities of the Free State of Bavaria and state-recognised non-

state universities (Qualification Regulations - QualV) of 2 November 2007 (GVBl 2007, p. 767, BayRS 2210-1-1-3-UK/-WFK) as amended

2. the successful participation in a qualification assessment. Further details are defined in the regulations regarding the qualification assessment process for the Autonomous Vehicle Engineering bachelor's programme of Technische Hochschule Ingolstadt of 17.02.2020 in the respective version.

§ 5 Credits

¹Credits are awarded for examinations passed and credit certificates acquired in the course of each module, as well as for internship semesters that have been successfully completed. ²60 credits are awarded on average per academic year under the European Credit Transfer System (ECTS). ³One credit is equivalent to a workload of 25 hours. ⁴In periods of practical work and when preparing the bachelor thesis, one credit point generally corresponds to a study load of 25 hours. ⁵For details of the number of credits, see annex 1 of the Programme and Examination Regulations.

§ 6 Modules and credit certificates

- (1) Details of the modules and the number of hours they involve, course type, examinations, credit certificates acquired during the programme and other provisions are set out in annex 1 of these regulations.
- (2) All modules are either compulsory or elective compulsory modules:
 1. Compulsory modules are programme modules which must be taken by all students.
 2. ¹Elective compulsory modules are programme modules which can be offered individually or in groups. ²Every student must make a specific choice according to these regulations. ³The modules selected are treated as compulsory modules.
- (3) Selected modules including examinations and/or credit certificates may be delivered in German, as determined in more detail in the module handbook.

§ 7 Study plan

- (1) ¹The faculty responsible compiles a study plan to establish the courses offered and for student's information; this sets out the structure of the degree programme in detail. ²The study plan is adopted by the Faculty Council and is to be published within the university. ³New regulations must be published no later than the start of the lecture period of the semester in which the regulations come into force for the first time.
- (2) The study plan specifically contains regulations and details pertaining to the following:

1. Breakdown of semester hours per week for each module and semester
 2. A catalogue of elective compulsory modules available including title and number of semester hours per week
 3. Detailed requirements relating to credit certificates and attendance certificates,
 4. A designation of specialisation areas offered, the relevant compulsory and elective compulsory modules and the number of hours, course type, course objectives and content of these modules
 5. The type and organisation of classes
 6. The course type of the individual modules insofar as these are not conclusively specified in annex 1
 7. The programme objectives (learning outcomes) and content of the individual modules
 8. The educational objectives and content of the basic internship and the practical semester as well as their form and organisation
 9. Detailed provisions regarding the type and scope of module examinations, insofar as these are not conclusively specified in annex 1
 10. Detailed provisions regarding courses offered via new media
 11. The language of instruction and examination used in the various modules insofar as this is not English.
- (3) In the study plan, the semester hours per week of each module can be modified with the approval of the Faculty Council in such a way that some of the course hours are replaced by the corresponding units of self-directed learning.
- (4) ¹There is no entitlement to all planned elective compulsory modules and elective modules being offered in every semester. ²Likewise, there is no entitlement to such courses being offered if there is an insufficient number of participants.

§ 8

Advancement prerequisites

- (1) Only those students who have acquired at least 42 ECTS credits from the modules of the first programme phase are entitled to enter the third semester.
- (2) Only those students who have achieved at least “sufficient” as a grade in all examinations and have acquired all relevant course-related credits of the first study section and have earned at least 20 ECTS credits from the compulsory modules of the second study phase are entitled to enter the internship as part of the practical semester.

§ 9
Internship semester

The internship semester of the second study phase covers a period of 20 weeks and is accompanied by courses.

§ 10
Passing of the bachelor's examination, final examination grade

- (1) The bachelor's examination is passed when,
1. in all final grades based on examinations and other credit certificates as well as in the bachelor's thesis, at least the "sufficient" grade has been achieved and in other credit certificates the "pass" grade has been achieved and
 2. the internship semester has been successfully completed.
- (2) The final grades from the first and second study phases shall be included in the overall grade of the bachelor's examination according to their weighting in annex 1 to these regulations.

§ 11
Certificate

- (1) A bachelor's degree examination certificate is issued according to the model contained in the amended version of the General Examination Regulations of Technische Hochschule Ingolstadt (APO THI).
- (2) Together with the bachelor's degree examination certificate, a diploma supplement is issued according to the model contained in the General Examination Regulations of Technische Hochschule Ingolstadt.

§ 12
Academic degree

- (1) When a student passes the bachelor's examination, they are awarded the academic degree "Bachelor of Engineering", short form: "B.Eng.".
- (2) A degree certificate is issued according to the model contained in the General Examination Regulations of Technische Hochschule Ingolstadt appendix.

§ 13
Entry into force

¹These Study and Examination Regulations become effective as of with signature. ²They apply to all students who commence studies in the first semester of this programme from the Winter semester 2020/ 2021.

Issued on the basis of the resolution adopted by the Senate of Technische Hochschule Ingolstadt dated 17.02.2020, the resolution adopted by the University Council dated 04.03.2020 and the authorisation of the Bavarian State Ministry of Education, Science and the Arts, StmWK dated 05.06.2020, Ref: H.7-H3441.IN/65/7 and approved by the President.

Ingolstadt, 18.06.2020

Prof. Dr. Walter Schober
President

The Study and Examination Regulations were established at Technische Hochschule Ingolstadt on 18.06.2020. This act was published by posting on 18.06.2020. The date of publication is therefore 18.06.2020.