Academic study and examination regulations for the further education programme

Master programme

Simulation Based Engineering

at Technische Hochschule Ingolstadt and Landshut University of Applied Sciences From 26 October 2015

In the version of the amended articles of association dated 04/04/2022

Based on Art. 13 para. 1, 58 para. 1 sentence 1 and 61 para. 2 and 3 of the Bavarian Higher Education Act - BayHSchG - of 23 May 2006 (GVBl p. 245, BayRS 2210-1-1-WFK), as amended, Technische Hochschule Ingolstadt issues the following statutes:

Preliminary remark:
For reasons of readability and clarity, all references to persons and functions are made in the masculine form and apply equally to all genders.

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§ 1
Sponsor of the master programme

The part-time master programme Simulation Based Engineering is run jointly by Technische Hochschule Ingolstadt and Landshut University of Applied Sciences.

§ 2
Purpose of the academic study and examination regulations

These academic study and examination regulations serve to complete and supplement the Framework Examination Regulations for Universities of Applied Sciences (RaPO) of 17 October 2001 (GVBl p. 686, Bay RS 2210-4-1-4-1-WFK) and the General Examination Regulations of the Technische Hochschule In- golstadt (APO THI) of 25 July 2011 in their respective versions.

§ 3
Aim of the academic study programme

[1]The aim of the part-time master programme Simulation Based Engineering is to provide qualified and practice-oriented in-service knowledge in the field of computer-oriented simulation techniques based on scientific findings and methods, supplemented by methodological skills and a pronounced process thinking. [2]Graduates are familiar with the physical and mathematical background of numerical solution methods and are able to solve practical problems using professional software tools in modern product development processes. [3]They will be able to understand and design development and production processes in a complex environment and develop innovative products and technologies using modern methods and tools. [4]With the academic study programme, graduates not only achieve greatly increased professional competence, but also increased opportunities for advancement in the company hierarchy. [5]In addition to specialist and methodological knowledge, students are taught interdisciplinary knowledge, leadership skills and social competences that enable them to carry out and manage development projects independently and as part of a team. [6]This enables them to take on particularly qualified tasks as responsible specialists and managers in national and international manufacturing companies and service organisations.

§ 4
Qualification for academic study

(1) [1]Qualification requirements for admission to the continuing education programme are

a) proof of successful completion of a technical, mathematical, physical or chemical academic study programme at a German university with at least 210 ECTS credit points or equivalent or an equivalent successful domestic or foreign degree

b) proof of at least one year of relevantly qualified practical professional experience following completion of the university degree or equivalent qualification referred to in a). Relevantly qualified practical professional experience exists in particular for activities in the field of engineering or natural sciences

c) proof of sufficient knowledge of English (language level B2 of the Common European Framework of Reference for Languages); proof is not required if the university entrance qualification or the university degree was obtained at an English-speaking educational institution.

[2]The Examination Board decides on the equivalence and conversion according to sentence 1 a) as well as the relevant qualified practical professional experience according to b).

(2) [1]In the case of applicants who can prove that they have completed a university degree or an equivalent degree for which fewer than 210 but at least 180 ECTS points have been awarded, the qualified practical professional experience pursuant to para. 1 sentence 1 lit. b) as proof of qualification to compensate for the missing ECTS points as an admission requirement, if this essentially corresponds to an internship of an engineering or technical Bachelor's degree programme described in more detail in Annex 2, e.g. at Technische Hochschule Ingolstadt[2] This must be documented by a qualified work certificate. [3]This must provide evidence of the type, duration, the

the content and scope of the applicant's specific activities. [4]The content requirements for the proof of qualification in accordance with para. 2 sentence 1 are specified in more detail in the Annex, stating the qualification objectives.

(3) The requirements specified in paragraph 1 a) b) must be met cumulatively.

§ 5
admission procedure

(1) Admission to the academic study programme requires

1. The timely submission of the application for admission to the study course. The completed application form must be enclosed:
   a) Degree certificate and diploma for the qualification to be proven in accordance with § 3 para. 1 sentence 1 lit a)
   b) Curriculum vitae in tabular form
   c) Certificates of appointments
2. Fulfilment of the qualification requirements in accordance with § 3.

(2) The Enrolment Articles of Technische Hochschule Ingolstadt apply.

§ 6
Type and duration of the study course

(1) The degree programme for qualified professionals is run as a part-time programme.

(2) [1]The study course comprises a standard period of study of five theoretical semesters with a workload of 90 ECTS. [2]The Master's Thesis should also be completed during this standard period of study. [3]It corresponds to a full-time equivalent of three semesters.

(3) [1]There is no entitlement to the Master's programme being offered if the number of students is insufficient. [2]There is also no entitlement to all compulsory modules being offered in every semester.

§ 7
credit points

[1]Credit points are awarded in accordance with the European Credit Transfer System (ECTS) for examinations passed and degree-related performance assessments per module. [2] As a rule, a maximum of 40 credit points are awarded per academic year. [3]One credit point corresponds to a study load of 25 hours, which is made up of face-to-face lectures and distance learning phases. [4]The number of credit points can be found in Appendix 1 to these academic study and examination regulations.

§ 8
Modules and evidence of academic achievement

(1) The modules, their number of hours, the type of lectures, the examinations, the degree-related performance assessments and further provisions are set out in Annex 1 to these Statutes.

(2) All modules are either compulsory or elective modules:
1. Compulsory modules are the modules of the study course that are mandatory for all students.
2. [1]Elective modules are the modules of the study course that are offered individually or in groups as alternatives. [2]Each student must make a specific selection from among them in accordance with these regulations. [3]The selected modules are treated as compulsory modules.

(3) [1]There is no entitlement to the Master's programme being offered if the number of qualified students is insufficient. [2]Likewise, there is no entitlement to all compulsory modules and elective modules being offered in every semester.

(4) All lectures and examinations are taught and examined in English.

§ 9
Module handbook

(1) [1]In order to ensure the courses offered and to inform students, the programme director responsible draws up a module handbook detailing the course of study. [2]The module handbook is approved by the Faculty Council IAW and must be made public at the university. [3]The publication of new regulations must take place at the latest at the beginning of the lecture period of the semester in which the regulations are to be applied for the first time.

(2) In particular, the module handbook contains regulations and information on

1. the distribution of weekly semester hours per module and study semester,
2. the catalogue of elective modules that can be chosen, with the names of the modules, the number of semester hours per week, the course type, the study objectives and course content of these modules,
3. more detailed provisions on the proof of performance and attendance,
4. the form and organisation of lectures,
5. the course type in the individual modules, insofar as it has not been conclusively defined in Annex 1,
6. the study objectives (learning outcomes) and content of the individual modules,
7. more detailed provisions on the type and scope of the module examinations, insofar as these have not been conclusively defined in Annex 1,
8. more detailed provisions for lectures offered via new media,
9. Further provisions on the final colloquium

(3) In the module handbook, the attendance days or the semester hours per week of the modules can be modified with the approval of the Faculty Board IAW in such a way that some of the course hours are replaced by corresponding units of self-directed learning or are offered via new media.

§ 10
Master's Thesis

(1) In the Master's Thesis, students should demonstrate their ability to apply the knowledge acquired during degree studies to complex practical tasks in an independent scientific work.

(2) [1]The Master's Thesis is issued at the earliest at the end of the lecture period of the third semester and at the latest by the middle of the fourth semester. [2]The prerequisite for submitting the topic is that the student has already achieved 30 ECTS credit points.

(3) The deadline from the issue of the topic until submission is nine months.

(4) [1]The Master's Thesis is followed by a colloquium (oral examination). [2]Students are required to defend their Master's Thesis during the colloquium. [3]The colloquium is held in front of an examiner, who has usually supervised the Master's Thesis, and an assessor. [4]The colloquium lasts 45 minutes and can be repeated once if the student fails.

§ 11
Assessment of performance, overall examination grade

The overall examination grade is calculated by weighting the individual grades in accordance with Annex 1.

§ 12
Master's examination certificate

(1) [1]A certificate of successful completion of the Master's examination is issued in accordance with the specimen contained in the General Examination Regulations of Technische Hochschule Ingolstadt (APO THI) as amended. [2]The sample certificate is specified in accordance with these academic study and examination regulations. [3]It is signed by both universities.

(2) A Diploma Supplement is issued together with the certificate for the passed Master's examination in accordance with the model contained in the APO THI.

§ 13
Academic degree

(1) Upon successful completion of the Master's examination, the academic degree "Master of Engineering", abbreviated to "M.Eng", is awarded jointly by the Ingolstadt University of Applied Sciences and Landshut University of Applied Sciences.

(2) A certificate is issued for the award of the academic degree in accordance with the sample contained in the annex to the APO THI.

§ 14
entry into force

[1]These academic study and examination regulations come into force when they are signed. [2]They apply to all students commencing their academic studies on this study course from the summer semester 2016.

Issued on the basis of the resolution of the Senate of Technische Hochschule Ingolstadt of 29 April 2019, the resolution of the University Council of 16 May 2019 and the approval of the Bavarian State Ministry of Education & Culture, Science and the Arts, StmBW of 28 November 2019, Ref.: H.7-H3444:IN.62/2/11 and approved by the President.

Ingolstadt, 21.01.2020

Prof Dr Walter Schober President

The Articles of Association were deposited at Technische Hochschule Ingolstadt on 21 January 2020. The resignation was announced on 22 January 2020 by means of a notice. The date of announcement is therefore 22 January 2020.