Study and Examination Regulations
for the Master's Degree
Software Engineering for Industrial Applications
at Hof University of Applied Sciences

From 9th January 2017*

Only the German version of this document is legally binding.
This English translation is for your convenience only.

Based on the Article 13 Section 1 (2) and Article 43 Section 5 (2) of the Bavarian Higher Education Act (Bayerisches Hochschulgesetz BayHschG, BayRS 2210-1-1-WFK), Hof University of Applied Sciences hereby enacts the following study and examination regulations:

Preliminary Note

To ensure legibility and clarity of the study and examination regulations, these regulations waive to use both gender forms and separate notations for female and male persons. All references to one gender shall be deemed and construed to include the other gender as well.

§ 1
Purpose of the Study and Examination Regulations

[1]These regulations govern the admission criteria for the Master's Degree in Software Engineering for Industrial Applications, as well as its content and structure. [2] Furthermore, these regulations complement the guidelines for the examination for the Universities of Applied Sciences (Rahmenprüfungsordnung für die Fachhochschulen, RaPO, BayRS 2210-4-1-4-1-WFK) and the General Examination Regulations of Hof University of Applied Sciences (APO) by defining the specific examination regulations for this degree program.

§ 2
Admission Requirements for the Master's Degree Program

(1) [1]Admission requirements for the master's degree program in Software Engineering for Industrial Applications are

1. a successfully completed bachelor's degree or an equivalent degree with a minimum of 180 credits (according to the European Credit Transfer System – ECTS) from a German or foreign university in the field of Information technology or equivalent,

2. work experience in accordance with Article 2.

[2]The Examination Board determines whether these requirements have been fulfilled or not.

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*as per the edition of the fourth amendment record

(2) [1]After having obtained the professional qualification in accordance with Article 1 Section 1 (1) the applicants must have worked in a specialized professional or management position, in which they must have acquired experience in the area of industrial software development. [2]The work experience according to Section 1, must have lasted at least one year and have included at least 1500 hours.

§ 3

Degree Program Objectives

[1]The degree program prepares the students for challenging management and development functions in the area of industrial software development. [2]The software development in this sense is characterized to a great extent by the horizontal integration of systems of equal levels as well as the vertical connection of systems from strategic right up to operative levels. [3]The program therefore focuses on teaching corresponding methods and technologies. [4]For this purpose, in addition to teaching theoretical principles, the students will also be trained in the application of these technologies in challenging problems of industrial practice. [5]During this practical phase, students also take on their first leadership tasks.

§ 4

Standard Duration of the Study, Program Structure

(1) [1] The standard duration of the Master's program is four semesters. [2]The program is structured as a full-time course.

(2) [1] The program generally comprises three compulsory internships, namely the module "Project and Software Specification and Design" with a duration of 420 hours (14 credits), the module "Project Software Validation" with a duration of 420 hours (14 credits) and the module "Master's Thesis" with 900 hours (30 credits). [2]The module "Master's Thesis" can in exceptional cases be completed in another form under the prerequisites of § 7 Article 3. [3]Lecturers of Hof University of Applied Sciences will supervise and provide technical guidance to the students during the tenure of mandatory internship.

§ 5

Modules

(1) [1]The modules required for passing the master's examination, the types and scope of the courses, types of examination and the evaluation according to the European Credit Transfer System (ECTS) are defined in the Appendix. [2]Teaching and examination language is English; for the modules "German …" the teaching and examination language is German.

(2) Studying and taking exam in the module group "Training Assignments" have a pre-requisite of 50 credits in the Master's degree.

(3) [1]For students who have neither acquired their university entrance qualification nor a university degree or equivalent qualification in German, the modules "German A1" and "German A2" are compulsory, unless they can provide the examination board with evidence that they have at least German language skills at level A1 of the CEFR. [2]In the case of German language skills on this level they must complete the module "German A2" and one compulsory elective module of their choice; if they demonstrate knowledge of German at least at level A2 of the CEFR, they must complete two compulsory elective modules of their choice, whereby access to the modules "German B2.1" and "German B2.2" requires proof of knowledge of German at least at level B1 of the CEFR. [3]In all other cases, two elective modules must be selected. [4]Students who have obtained their university entrance qualification or a university degree or equivalent degree in German cannot select the modules "German ...".

(4) [1]There is no guarantee that all elective modules that can be selected will be offered. [2]The offer in this respect is determined in the study plan by the academic advisory board of ifw, considering the demand and the

capacities as well as the requirements of an efficient use of the available resources in agreement with the examination board.

§ 6

Module Handbook, Study Plan

(1) [1]The Institute for Continuing Education of the University of Applied Sciences Hof shall prepare a module handbook. [2]The module handbook defines the teaching content and learning objectives of the modules in detail. [3]In addition, it in particular contains details of the examinations listed in the Appendix. [4]Furthermore, the module handbook shall describe the workload of the students, the recommended prerequisites for participation and the usability of the modules. It shall give indications for the preparation and post-processing of the teaching and examination material given in the courses and determine the duration and frequency of the modules. [5]If the same module is offered several times in a semester, the module handbook determines the criteria, according to which the students are distributed in courses with similar contents.

(2) [1]In addition, the Institute for Continuing Education of the Hof University of Applied Sciences prepares a study plan. [2]The study plan provides detailed information about the courses offered by the institute and the recommended course of study.

(3) [1]The module handbook and study plan are approved by the Scientific Advisory Board of the Institute for Continuing Education of the University of Applied Sciences Hof in agreement with the Examination Board and are to be published by the University. [2]The announcement of new regulations must take place latest by the beginning of the semester, in which the regulations are to be applied for the first time.

§ 7

Master’s Thesis

(1) In the master's thesis, students shall demonstrate their ability to apply the knowledge acquired during their studies in an independent application-oriented scientific work to solve a holistic technical problem.

(2) [1]In principle, the master’s thesis serves to deal with a concrete operational problem and is therefore prepared within the framework of a special related internship. [2]This consists of 900 hours (30 credits).

(3) Upon request, the examination board may permit the master's thesis to be written independent of a concrete operational problem and therefore outside an internship, notwithstanding with Article 2, provided that the practical relevance of the thesis is nevertheless ensured and the topic is suitable for a particular theoretical specialization.

(4) The duration from the proposal of the topic of the master’s thesis to the submission is six months.

§ 8

Academic Degree

Based on the passing of the master’s examination Hof University of Applied Sciences awards students a Master of Engineering (M. Eng) degree.

§ 9

Examination Board

[1]The Institute for Continuing Education of Hof University of Applied Sciences establishes an examination board for the master's degree program in Software Engineering for Industrial Applications. [2]The examination board consists of a chairperson and two further members. [3]The members of the examination board are elected by the Scientific Advisory Board of the Institute for Continuing Education of Hof University of Applied Sciences.

§ 10

Coming into Force

The original rules have not been reproduced as they are no longer of significance for the applicability of the present version. The present version came into force on 1st October 2019.

Appendix (for § 5 Article 1)

1	2	3	4	5	6
Module groups and numbers	**Module**	**Credits**	**Course type**	**Examination**	**ZV**
Basic Modules					
1	Project Management	5	SU, Ü	P[1]	
2	Software Engineering	5	SU, Ü	P[1]	
3	Communication and Negotiation Skills	5	SU, Ü	Kl90	
4	Internet of Things	5	SU, Ü	Kl90	Testat[2]
5	Master Thesis	30	Pr	AA	
Core Modules					
6	Component Oriented Software Development	5	SU, Ü	P[1]	
7	Advanced Programming	5	SU, Ü	P[1]	Testat[2]
8	Concepts and Tools for Application Development	5	SU, Ü	StA with Präs20	
9	Practical Studies – Industry 4.0	5	SU, Ü	StA with Präs20	
10	Non-Relational Databases	5	SU, Ü	P[1]	
11	Applied Cloud Computing	5	SU, Ü	P[1]	
Compulsary elective Modules					
12	German A1	5	SU, Ü	Kl90	TN[3]
13	German A2	5	SU, Ü	Kl90 und mdlP15	TN[3]
14	German B1	5	SU, Ü	Kl90 und mdlP15	TN[3]
15	German B2.1	5	SU, Ü	Kl90 und mdlP15	TN[3]
16	German B2.2	5	SU, Ü	Kl90 und mdlP15	TN[3]
17	German C1.1	5	SU, Ü	Kl90 und mdlP15	TN[3]
18	German C1.2	5	SU, Ü	Kl90 und mdlP15	TN[3]
19	Analytical Information Systems	5	SU, Ü	P[1]	
20	Mobile Computing	5	SU, Ü	P[1]	
21	Recent Trends in Software Engineering	5	SU, Ü	P[4]	
Training Assignment					
22	Project and Software Specification and Design	14	Pr	StA	
23	Seminar Software Specification and Design	1	S	Ref30	
24	Project Software Validation	14	Pr	StA	
25	Seminar Software Validation	1	S	Ref30	

Annotation:

[1] Kl90 or StA with Präs20. Further details are regulated in the module handbook.

[2] The Testat must be passed.

[3] Admission to the examinations requires participation in 75% of the course.

[4] Kl90, CP90, StA (also with Präs20) or Ref30. The module handbook regulates the details.

Translation of Abbreviations:

AA	Final Thesis
CP	Computer aided Exam*
Kl	Written Exam*
P	Examination
Pr	Internship
Präs	Presentation* (PPT)
Ref	Presentation*
S	Seminar
StA	Study paper+
SU	Lecture or seminar
SWS	Semester hours per week
TN	Attendance record
Ü	Tutorial
ZV	Admission requirement

* With indication to duration of the examination in minutes.
+ Regular processing time is 50 hours.