



**Examination Regulations  
for the  
Master's Degree Course in  
Mechatronics**

**at  
Zittau/Görlitz University of  
Applied Sciences  
issued on  
06/04/2011**

**as amended on  
29/05/2019**

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for the Master's Degree Course in Mechatronics  
**at Zittau/Görlitz University of Applied Sciences**

According to Section 13(4) in conjunction with Section 34 of the act on the autonomy of higher education institutions in Saxony (Saxon Higher Education Autonomy Act, Sächsisches Hochschulfreiheitsgesetz – SächsHSFG), in the version published on 05 January 2013 (SächsGVBl, p 3), last amended by Article 2(27) of the act of 05 April 2019 (SächsGVBl, p 782), the Zittau/Görlitz University of Applied Sciences (hereinafter referred to as “the University”) has adopted the following Examination Regulations (as amended on 29/05/2019) for the Master's degree course in Mechatronics as statutes.

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## Division 1: General provisions

### Section 1 Purpose of the final examination

The Master's examination (final examination) constitutes the degree of the Master's programme Mechatronics, qualifying for a profession. The final examination determines whether the students have a grasp of the contexts in their subject area, have the ability to apply academic methods and findings and have acquired the thorough specialist knowledge necessary for the transition into professional practice.

### Section 2 Academic degree

When the student has successfully passed the final examination, the University awards the academic degree of "Master of Engineering" (abbreviated: M.Eng.).

### Section 3 Standard time to degree, structure and scope of the degree course

(1) The standard time to degree is three (3) semesters. For students who have participated in committees of the University as defined by the SächsHSFG or in such of the student body during at least one electoral term, one semester will not be counted towards the standard time to degree. In case of a multi-year contribution, three semesters will not be counted to the standard time to degree. This applies correspondingly to representatives of the student body on the Student Services organisations' (*Studentenwerke*) administrative board. For students with children, up to four semesters are not counted towards the standard time to degree, provided they have been applied for as semesters of leave of absence (*Urlaubssemester*) in due time.

(2) The degree course comprises the compulsory modules according to Section 23, and the graduate/final thesis and its defence.

(3) The degree programme amounts to 90 credit points (hereinafter referred to as "ECTS credits"). Generally, each semester thus corresponds to 30 ECTS credits.

### Section 4 Structure and deadlines of the final examination

(1) The final examination is composed of several modules, each being completed by module examinations. The final examination has been passed with the successful completion of the final module (graduation module).

(2) A module examination encompasses one or more forms of examinations. Among the modules, a distinction is to be made between the compulsory modules and the final module.

(3) The examination procedure and the courses on offer ensure that the final examination can be completed within the standard time to degree. A final examination which is not completed within four course semesters after the standard time to degree has expired, is assessed as a fail. Furthermore, the final examination is to be marked with "*nicht bestanden*" ("failed"), if no compulsory coursework or no examination was completed according to the curriculum during the first four course semesters.

(4) A final examination with a failing grade can be repeated once within a year. After this deadline has expired, the final examination is assessed as a fail. Admission to a second resit examination is only possible upon application and at the next possible examination date. Another resit examination is not permitted.

### Section 5 Evaluation of taken examinations, grade calculation for modules and the final examination

(1) The examiner responsible sets the marks for the individual exams. The following marks or grades respectively must be given for the evaluation of exams:

1	sehr gut (very good)	an outstanding performance;
2	gut (good)	a performance considerably above the average requirements;
3	befriedigend (satisfactory)	a performance corresponding to the average requirements;
4	ausreichend (sufficient)	a performance still meeting the requirements in spite of its shortcomings;
5	nicht ausreichend (not sufficient / failed)	a performance failing to meet the requirements due to considerable shortcomings.

For a differentiated assessment of exams, individual marks can be raised or lowered by 0.3. The following marks cannot be awarded: 0.7, 4.3, 3.7, 5.3.

(2) If a module examination only consists of one individual examination, the mark given for the examination is also the grade of the module. If a module examination is composed of different examinations, the module grade is calculated through the weighted arithmetic mean of the marks of all individual examinations. The weightings of exams shall be in line with Annex 2). In calculating the grade of a module, only the first decimal (after the decimal point) is taken into account. All further digits are deleted without any substitution and without rounding.

(3) An overall grade is calculated for the final examination. The weighting factors set out in Annex 2) must be observed when aggregating the overall grade of the final examination. Subsection (2) applies correspondingly for the aggregation of the final examination's overall grade. The corresponding overall grade is:

with an average up to and including 1.5	sehr gut (very good)
with an average of 1.6 up to and including 2.5	gut (good)
with an average of 2.6 up to and including 3.5	befriedigend (satisfactory)
with an average of 3.6 up to and including 4.0	ausreichend (sufficient)
with an average of 4.1 and more	nicht ausreichend (not sufficient / failed)

(4) If an average mark of 1.2 or better has been achieved in the final examination, the attribute "sehr gut" (very good) shall be replaced by "*mit Auszeichnung bestanden*" (passed with distinction), which shall be awarded in addition to the overall grade of the final examination.

(5) With regard to the overall grade in accordance with subsection (3), all final grades shall, in addition to the absolute grading system, be presented in a transcript according to the current version of the ECTS Users Guide.

## **Section 6 Absence, withdrawal, cheating, breach of rules or regulations**

(1) An examination shall be marked with "nicht ausreichend" (Note 5), (not sufficient /failed (5)) if the student misses an appointment for examination that is binding for them without a substantive reason or if they withdraw without a substantive reason from an examination which was begun. The same applies if a written examination was not completed in within the specified examination time or is not handed in for assessment on time.

(2) The reason given for the withdrawal or absence must be reported immediately to the Examinations Office and must be credible. Upon absence due to sickness, pregnancy or maternity leave, the Examinations Office must be provided with a doctor's note. In cases of doubt, a submission of a doctor's note by a public health officer can be demanded. With regard to the meeting of deadlines for the first registration for examination, for resit examinations, giving reasons for absence from examinations, and compliance with deadlines and times for examinations, the sickness of the child in the student's primary care is considered equal to their own sickness. If the reason is accepted, the examination can be completed at the next possible date.

(3) If the student attempts to influence the result of an examination by cheating or the use of non-approved aids, it will be marked with "nicht ausreichend" (Note 5), (not sufficient / failed (5)). A student who interferes with the proper proceedings of an examination can be excluded from the further sitting of the examination by the examiner or invigilator. In this case, the examination will be marked with "nicht ausreichend" (Note 5), (not sufficient / failed (5)). In serious cases, the faculty's examination committee can exclude the student from completing further examinations. The same applies for compulsory coursework.

(4) The student can within two weeks apply for a re-evaluation of a decision according to subsection (3). The faculty's examination committee must inform students of decisions that are to their disadvantage, immediately and in writing. Such decisions must be substantiated and include information on the student's right to appeal.

## **Section 7 Passing and failing**

(1) The final examination is passed when all module examinations have been passed. It is assessed as a fail when the final module's exam has not been passed or the requirements of Section 4(3) or (4) apply.

(2) A module examination is passed when all examinations of the module have been marked with at least "ausreichend" (Note 4), (sufficient (4)).

(3) Students must be informed about their failed module examinations in the manner that is usually applied in the respective faculty. Students with a failing grade must be informed whether and, if applicable, to what extent and within what deadline the module examination can be retaken.

(4) A module examination is assessed as a fail in the final attempt when the second resit examination was not marked with at least "ausreichend" (Note 4), (sufficient (4)).

(5) If the student fails a module examination in the final attempt, they may continue to sit other examinations until the definite fail of the final examination has become definitive.

(6) Students must be informed in writing of their definite fail and the impossibility of a successful completion of the Master's degree course, including information on their right to appeal.

(7) A student who has failed the final examination in a final attempt shall receive an academic transcript that lists the courses taken and the ECTS credits accrued, including the statement that the final examination was failed, and that due to the definite fail they have lost their right to take examinations in the relevant Master's degree course.

(8) Upon application, the University will provide students who do not complete their degree course with an academic transcript listing the courses taken and the ECTS credits accrued.

## **Section 8 Recognition of modules, periods of study, learning and academic achievements, transfer of ECTS credits**

(1) Modules, examinations and compulsory coursework that have been completed in a degree course at the University will be officially recognized.

(2) Modules which were taken at another German or foreign university as well as in state-approved distance learning courses may be recognized upon request, provided there are no significant differences with regard to the skills acquired. In the recognition of learning and academic achievements, which were performed outside the Federal Republic of Germany, the equivalence agreements approved by the Standing Conference of Ministers for Education (*Kultusministerkonferenz*) and the German Rectors' Conference (*Hochschulrektorenkonferenz*), the Convention on the Recognition of Qualifications in Higher Education in the European Region ("Lisbon Recognition Convention") and agreements within the framework of higher education partnerships must be observed.

(3) Academic achievements attained prior to enrolment in the degree course regulated in these Regulations may be recognized upon request at the beginning of the course. Such achievements may be:

- Documented modules / academic achievements;
- Documented equivalent competence and skills acquired outside the higher education system up to a maximum of 50 per cent of the credits earmarked for the degree course.

(4) Students must submit their respective request for recognition / transfer during the first course semester by 30 November for winter semester admissions or by 30 April for summer semester admissions to the faculty's examination committee. In exceptional and duly justified cases, a request for the recognition of exam achievements may be submitted to the faculty's examination committee no later than four weeks prior to the examination period in which the student would take the corresponding examination on their first attempt. The decision on the recognition and the choice of equivalence assessment will be made by the faculty's examination committee.

(5) When learning achievements are recognized, and the grading systems are comparable, the marks must be transferred and included in the calculation of the overall grade. In the case of non-comparable grading systems, decisions are to be made on a case-by-case basis. It is permissible to mark the credit transfer in the transcript.

(6) The principle of recognition is the rule. If it has been established that the achievements attained cannot not be recognized / transferred, the faculty's examination committee must notify the applicant in writing, including a substantiation and information on their right to appeal. Substantive reasons for a denial of credit transfer can be:

1. The academic achievements vary considerably from those of the university accepting the student.
2. The structure of the class or degree course shows significant differences.
3. There are considerable and evident differences in quality.
4. There are significant and evident differences in the learning objective of the degree course.

(7) Upon resuming studies after one or more semesters of leave of absence, the hitherto acquired academic achievements remain to be valid and unchanged. The same applies in the event of continuation or overall recommencement of studies at the University in the same degree course.

## **Section 9 Faculty examination committee and central examination committee**

(1) An examination committee must be established in the faculty for the tasks assigned by these Examination Regulations. The examination committee comprises:

1. a chair;
2. their deputy;



3. two further professors;
4. a member of the faculty's academic staff;
5. two students.

The members are appointed by the Faculty Council of the Faculty of Electrical Engineering and Computer Science. Authorized representatives shall be appointed for the examination committee's members listed under sentence 2 nos. 3-5. The term of office of members of the examination committee, who are full-time employees at the University is three years; that of the student board members and their representatives is one year. Members may be reappointed. Dismissal is only permitted for cause. If the appointment of a member or their representative/deputy has expired, their term of office will be extended until a successor has been appointed.

(2) The examination committee ensures that the Examination Regulations are being observed. It is responsible for the orderly conduct of examinations and takes decisions in the examination procedure. If it is not able to remedy an objection, it forwards it to the central examination committee to give a ruling thereon.

(3) The examination committee shall inform the faculty regularly on the development of examinations and courses, including the factual writing-up periods of graduate theses. The report shall be made publicly available by the University in a suitable manner. The examination committee provides the academic planning committee with suggestions for reforming degree course regulations/academic calendars and examination regulations.

(4) The examination committee may delegate the performance of its duties to the chair or to one or more members, excluding the student members. This does not apply to the decision on appeals and the report to the faculty.

(5) The examination committee constitutes a quorum if, in addition to the chair or their deputy and two professors, at least another member entitled to vote is present. The examination committee takes its decisions by simple majority. In the event of a tie, the chair's vote is decisive. The student members of the examination committee do not take part in the decision-making on the evaluation and recognition of course and examination credits.

(6) The members of the examination committee are entitled to be present during examinations.

(7) The meetings of the examination committee are not public. The members of the examination committee and their deputies are sworn to secrecy. If they are not public service employees they must be sworn to secrecy by the chair.

(8) The University has established a Central Examination Committee. It comprises the Vice-Rector or Vice-Rector for Academic Affairs & International Relations respectively as chair, the chairs of the faculty's examination committees, and the head of Student Services & International Relations.

(9) The committees' responsibilities are set forth in Section 30.

## **Section 10 Examinations Office**

(1) The University has established an Examinations Office. It is responsible for enforcing examination regulations in addition to the resolutions and decisions of the examination committee. The Examinations Office supports the work of the individual examination committees. The members of the Examinations Office and all employees of the University dealing with examination matters are sworn to secrecy.

(2) The responsibilities are set forth in Section 30.

## **Section 11 Examiners and observers**

(1) Examiners are permitted to evaluate examination performance; observers are entitled to give advice. The chair of the faculty's examination committee appoints examiners and observers.

(2) Eligible to examine are persons who themselves have completed the relevant final or an equivalent examination, or who have gained a comparable qualification and, unless there are compelling reasons that require an exception to be made, who have also engaged in independent, self-reliant teaching activities at a higher education institution in respect of the examined module. In accordance with the peculiarity of the university examination, lecturers with a specified function as well as persons experienced in professional practice and training may be appointed as examiners. If there are several examiners, at least one of the examiners shall have taught in the subject matter at hand.

(3) Eligible to observe examinations are persons who themselves have completed the relevant final or an equivalent examination, or who have gained a comparable qualification.

(4) The names of the examiners shall be made known to the students taking the exam in due time.

(5) For the examiners and observers Section 9(7) applies.

## **Division 2: Modules, module examinations, compulsory coursework and examinations**

### **Section 12 Modules**

Modules according to Section 4(1) and (2) shall be completed by passed module examinations in accordance with Section 7(2). A module examination consists of one or more examinations. The corresponding examinations are assigned to the modules in Annex no 1).

### **Section 13 General admission criteria for module examinations**

(1) Module examinations can only be taken by those who

1. have been admitted to the relevant degree course at the University on the basis of a general higher education entrance qualification, a subject-linked university entrance qualification, a university of applied sciences entrance qualification, a master craftsman's certificate (*Meisterprüfung*) related to the degree subject, a qualification for access deemed equivalent by the University or by a government agency, or on the basis of the presentation of a first degree awarded by a university; and
2. have completed the compulsory coursework required (according to Sections 17 et seq) within the relevant module.

(2) Admission to module examinations may only be denied if

1. the requirements listed in subsection (1) and Section 2 of the Degree Course Regulations have not been met.
2. the required documents have not been fully submitted.
3. one or more of the reasons of rejection listed in Section 18(2) and (3) SächsHSFG apply; or
4. the student, pursuant to Saxon State Law, has lost their right to take examinations by exceeding the deadlines according to Section 4(3) and (4).

### **Section 14 Registration and de-registration for module examinations**

(1) By virtue of enrolment or re-enrolment, the student is by the Examination Office's own motion automatically registered for the module examinations designated in the academic and examination calendars for the current semester, the appropriate compulsory coursework and the examinations. Students shall undertake to register for elective core modules, optional modules and for free attempts in examinations. Registration for elective core modules and optional modules shall be made to the faculty; registration for free attempts shall be made to the University's Examinations Office.

(2) Students may de-register from a module examination. De-registration shall be made in writing to the University's Examinations Office at the latest two weeks before the beginning of the respective examination period. In this case, the student shall be automatically registered for the next examination or resit examination.

(3) Students can take examinations during a semester of leave of absence. This provision shall apply both to resit and other examinations. In this case, the student shall register in writing for the examination. The sitting of examinations according to Section 15 is not permitted during semesters of leave of absence.

## **Section 15 Free attempt**

(1) Upon registration by the student and if the admission criteria are met, module examinations may be taken before the recommended deadline in accordance with Section 14(1). In this case, a failed module examination is deemed not taken (free attempt). A single examination that has been marked with at least "ausreichend" (Note 4), ("sufficient" (4)) as part a module examination will be recognized during a retake module examination.

(2) In order to improve the grade, a passed module examination may be retaken once at the next regular examination date at the request of the student. If the module examination includes several examinations, all examinations shall be retaken. The better module grade shall be considered.

(3) When determining the times with regard to the observance of the point when the free attempt is taken, the following shall not be taken into account:

1. semesters of leave of absence;
2. semesters of study abroad unless they have been recognized equal to a course semester at the University; and
3. Semesters at the Zittau/Görlitz University of Applied Sciences spent in other degree courses if no credit transfer to the Master's degree course has been carried out.

## **Section 16 Retaking module examinations**

(1) A failed module examination can be retaken once within a year after the first unsuccessful attempt. After expiry of this deadline it shall be assessed as a fail. If a module examination comprises several examinations, an examination that has been marked at least with "ausreichend" (Note 4), ("sufficient" (4)), shall be credited as such and be excluded from the resit examination of the failed module exam. A resit of a passed module examination is not permitted except for the case regulated in Section 15(2). Failed attempts at other German universities shall be recognized against resit examinations.

(2) If a module examination has not been passed, the student shall, upon notice of their fail, be automatically registered for resit. Sentence 1 shall also apply to examinations which have not yet been completed but are part of a commenced module examination for which no module grade according to Section 5(2) could hitherto be calculated. Students are entitled to de-register in writing from examinations at the Examinations Office. The faculty responsible shall facilitate the taking of resit examinations usually within the period for retake examinations (Section 17(5)).

(3) A second resit examination of a module examination or an individual examination within a module examination is permissible upon application. The application for taking a second resit examination must be submitted in writing to the Examinations Office within a month after the student had been informed on the result of their first resit examination. Late applications or non-submitted applications, which are critical for the passing or definite failing of a module examination shall result in disenrolment (exmatriculation) from the University. The second resit examination applied for in due time shall be carried out at the next possible examination date according to Section 17(5).

(4) If a second resit examination is marked by the examiner with "nicht bestanden" (Note 5), i.e. ("not sufficient / failed" (5)), a second evaluation by another examiner must be carried out. The exam grade shall be calculated by the arithmetic mean of all individual appraisals. Another resit examination is not permitted.

## **Section 17 Types of examinations, compulsory coursework and organization of examinations**

(1) The following are types of examinations:

1. Oral examinations (Section 18)

2. Written examinations (Sections 19-21) and

3. Alternative types of assessment (Section 22)

(2) Requirements for examinations ('compulsory coursework') are pieces of work which were completed in the form of the individual piece of assessment according to Sections 18 et seq and in the form of a confirmation of attendance (Testat, VT). Within the scope of compulsory coursework as a confirmation of attendance (Testat, VT), students must provide proof according to the conditions and guidelines of the subject that they have at least a sufficient level of knowledge and skills in a particular field or subject area. Compulsory coursework does not require a differentiated assessment and does not count towards the overall grade. All types of compulsory coursework are listed in Annex 1) and are not subject to constraints with regard to their possibility to retake. Compulsory coursework is deemed completed if, according to subject guidelines, it has been evaluated "successful", or when marked, if it has been marked with at least "ausreichend" (Note 4), ("sufficient" (4)).

(3) If a student furnishes credible evidence that due to a lengthy or continuous physical impairment, chronic illness, pregnancy, or maternal leave or parental leave, they are not able to complete compulsory coursework or examinations as a whole or in part, the affected student shall be permitted to complete these within a deferred deadline, within an extended examination time or in a different form. For this, a doctor's note may be required.

(4) Between individual examinations there should generally be an interim day.

(5) Periods for examinations and resit examinations shall be published on the University's website.

### **Section 18 Oral examinations**

(1) The oral form of assessment is an oral examination (PM). During the oral examination the student should prove that they are capable of recognizing the contexts in the examined field and understand particular questions in this context. Furthermore, it should be ascertained whether the student has a broad knowledge of the fundamentals.

(2) The oral examination is generally held before at least one examiner and one co-examiner, or one examiner and one observer, who is an expert in the subject matter at hand, as a group or individual examination.

(3) The duration of the oral examination is between 20 and 50 minutes per student. Shorter or longer examination times may be arranged within the scope of foreign language modules. The duration of group examinations is either a multiple of the duration per student, or it is designated as the total duration of the group examination.

(4) As part of the oral examination, written questions may be set to a reasonable extent, provided this does not override the oral character of the examination.

(5) The essential topics and results of the oral examination shall be recorded in the minutes by the observer or co-examiner. The student shall be immediately informed about the result of each examination. The examination minutes shall be included in the student's examination file.

(6) Students who are registered for the same examination at a later date shall be admitted as audience if the room allows for it, provided none of the examined students object. For oral examinations in the form of a thesis defence, the public may be admitted if the candidate agrees. The admittance of the public does not apply to the deliberations on and the disclosure of the examination result. If members of the audience try to influence or interfere with the examination, the public or the person interfering shall be excluded.

### **Section 19 Written examinations**

(1) Written examinations are:

1) the invigilated written examination (Klausur, Section 20) and

2) the Master thesis (Section 21)

(2) The result of a written examination shall be published no later than four weeks after grading in the way that is common practice at the University. The anonymity of the examined students must be preserved.

## **Section 20 Invigilated written examination**

(1) Invigilated written examinations (Klausur, PK) are intended to prove that the student is capable of solving problems and/or working on a topic within a given time and with limited resources using the common methods of the respective examination area. Furthermore, it should be ascertained whether the student has a broad knowledge of the fundamentals. Students may be given a choice of topics.

(2) Invigilated written examinations have a duration of 90 to 180 minutes, are to be proctored and minuted, and are non-public. In foreign language modules and modules concluded with more than one type of examination, the duration of an invigilated written examination may fall below 90 minutes.

## **Section 21 Graduate thesis**

(1) Graduate theses (PA) are intended to prove that the candidate is, within the scope of the final module, capable of applying academic methods when working on a topic on their own and within a given time.

(2) The writing-up of the graduate thesis shall be supervised by an examiner according to Section 11(1) and (2). This thesis adviser is usually an academic staff member of the University. If the thesis adviser is not a member of the University, then at least the second reader evaluation must be carried out by a member of the University. The candidate may propose topics for their graduate thesis. This does not justify a claim to a particular topic. If the candidate has not proposed a topic within three months after admission to the final module, they shall be assigned a topic by motion of the Examinations Office.

(3) The graduate thesis may be written-up in cooperation with a company, a professional organization or an academic institution.

(4) The Dean of the Faculty of Electrical Engineering and Computer Science shall set the topic of the Master's thesis. The following is required:

1) application for assigning a topic for the graduate thesis and

2) submission of the proof of admission to the final module according to Section 24(1)

Topic, assignment date, submission deadline and examiners shall be recorded on the proof of admission at the point of issuing. The topic may be returned for exchange only once and within the period of one month after its assignment.

(5) The permitted writing-up period for the Master's thesis is four months. In the event of an experimental or empirical topic this deadline can be set to up to six months after assignment. The deadline begins with the date of issue. The graduate thesis shall be submitted to the faculty within the deadline in hardback duplicate and on a CD or DVD. If sent by post, the date of the postmark is decisive for adherence to the deadline. If the deadline cannot be met for unforeseeable reasons for which the candidate is not responsible, the deadline may be extended by up to two months upon written application in due time. When submitting the graduate thesis, the candidate must confirm in writing that they have written their thesis on their own and did not use any other sources and aids than those listed. When the graduate thesis is submitted the date of receipt shall be recorded. If the candidate does not adhere to the deadline according to sentence 1, 2 and 6 respectively, the graduate thesis shall be marked with "nicht ausreichend" (Note 5), ("not sufficient / failed" (5)).

(6) The graduate thesis shall generally be written-up in German. Upon explicit and written permission of the thesis adviser, it may be written in English. In this case, an extensive summary of the main points shall be appended in German.

(7) The graduate thesis may also be admitted in the form of a collaborative thesis. A maximum of three candidates are permitted in this group. Within the collaborative thesis, the contribution of every single candidate must be evaluable. This is the case if the contributions of all individual candidates can be clearly distinguished from one another according to objective criteria. Subsection (5) sentence 7 applies to the collaborative thesis, providing that the written confirmation of each candidate does not refer to the entire thesis but to their contribution, which must be indicated accordingly.

(8) In general, the graduate thesis must be evaluated by the thesis adviser (first marker) and a second marker. The evaluation should be made within four weeks after submission of the thesis. The exam grade shall be calculated by the arithmetic mean of all individual appraisals. Section 5(1) applies for the calculation of individual marks.

(9) In the event of a mark that is lower than "ausreichend" (Note 4), ("sufficient" (4)), the graduate thesis can be repeated pursuant to the provisions of Section 16 hereof. A return of the topic according to subsection (4) sentence 4 is only permissible once and, when the graduate thesis is being repeated, if the candidate did not exercise their return option during their previous attempt.

(10) Students must submit a poster in A1 size for visual presentation before the day of their thesis defence. This poster shall then remain the property of the University.

## **Section 22 Alternative types of assessment**

(1) The following alternative types of assessment (examinations) are permissible:

1. Short academic paper (Belegarbeit) (subsection (2))
2. Seminar paper (Referat) (subsection (3))
3. Lab work (Laborleistung) (subsection (4))

(2) A short academic paper (Belegarbeit, PB) is an examination in which the student systematically deals with a given topic during the course of the semester, and which is accompanied by topic-related and methodical consultations. It shall be submitted to the examiner no later than on the first day of the examination period in the given semester.

(3) A seminar paper (Referat, PR) is an examination in the form of an independently written work on a topic and its subsequent presentation. The paper can also be submitted promptly during the semester's teaching weeks.

(4) Lab work (Laborleistung, PL) is an examination in the form of active and independent work in a laboratory combined with a subsequently written report on the topic. It is generally carried out during the semester's teaching weeks.

(5) The alternative types of assessment may also be admitted as group projects. A maximum of five candidates are permitted in this group. Within the collaborative thesis, the contribution of every single candidate must be evaluable. This is the case if the contributions of all individual candidates can be clearly distinguished from one another according to objective criteria.

### **Section 23 Compulsory modules (core modules and elective core modules)**

(1) The compulsory modules of the degree Master- course in Mechatronics are listed in Annex 1 of the Examination Regulations.

(2) The module AW1 Business Management / Languages pursuant to Annex 1 line 1 includes 4 contact hours per week of foreign language training.

(3) The following modules include the completion of the PL type of assessment as a requirement for PK examinations:

1) Advanced Control Theory

(4) To avoid double crediting, students who have completed modules in a previous degree course which were equivalent in content shall complete a project work instead of the specified relevant module. The officer responsible for the assessment of equivalence and the topic for the project work/report including its assessment shall be the module convenor.

### **Section 24 Special admission requirement, subject, nature and scope of the final module**

(1) Students are admitted to the final module if they have completed all compulsory modules according to Section 23 – with the exception of the modules of the last semester. If these requirements are met, the Examinations Office shall issue a proof of admission to the student.

(2) The module examination of the final module includes the following two examinations:

1) Graduate thesis (PA) (Section 21) and

2) Defence of the graduate thesis (PM) (subsection (3))

(3) The defence of the graduate thesis is an oral assessment according to Sections 17(1) sentence 1 nos. 1, 18 during the course of an oral examination (PM). The oral examination in the form of defending the graduate thesis is usually held in the language of the thesis. The oral examination begins with an introductory presentation by the candidate. Candidates are admitted if their thesis has been marked with at least "ausreichend" (Note 4), ("sufficient" (4)), and when they have completed all compulsory modules. In addition to Section 18(1), the defence of graduate thesis serves in particular to ascertain whether the candidate is able to (i) present, (ii) explain orally, (iii) substantiate individually, and (iv) assess the practical significance of the results of the thesis, its academic basis, its interdisciplinary connections and its practical relevance. As a rule, the thesis adviser and a second marker shall evaluate the defence. The exam grade shall be calculated by the arithmetic mean of all individual appraisals. Section 5(1) applies for the calculation of individual marks.

(4) The presentation materials of the introductory presentation of the defence according to subsection (3) must also be submitted digitally on a CD or DVD.



### **Division 3: Master's degree certificate, transcript, diploma supplement, supplemental modules**

#### **Section 25 Master's degree certificate, transcript and diploma supplement**

After the candidate has successfully completed the Masters examination, a transcript, a certificate confirming the award of the degree "Master of Engineering" and a diploma supplement in English and German will be issued in accordance with annexes 3) to 7).

#### **Section 26 Supplemental modules (optional modules)**

Subject to the relevant module's admission criteria, students may sit examinations in modules additional to those stipulated in Section 23. The result of these modules shall be included in the transcript upon request, but shall not be taken into account when aggregating the overall grade.

## **Division 4: Final provisions**

### **Section 27 Invalidity of examinations**

- (1) If a student has cheated during an examination, and if this fact only becomes known after the transcript referred to in Section 25 has been issued, or after the certificate referred to Section 7(8) has been issued, the examination committee can mark the examination according to Section 6(3) sentence 1 again with "nicht ausreichend" (Note 5) ("not sufficient" (5)). If appropriate, the module examination can be declared "nicht ausreichend" (Note 5), ("not sufficient / failed" (5)) or the final examination can be declared "failed". The same shall apply to the graduate thesis.
- (2) If the prerequisites for conducting the module examination were not fulfilled without the student intending to hide this fact, and if this fact becomes known only after the transcript has been issued in accordance with Section 25, or after the certificate has been issued in accordance with Section 7(8), this defect shall be remedied by passing the corresponding exam. If the student has willingly unjustly obtained the admission to an examination, the examination may be declared "nicht ausreichend" (Note 5), ("not sufficient / failed" (5)), and the final examination may be declared "failed". The same shall apply to the graduate thesis.
- (3) The student shall be given the opportunity to make a statement before a decision is taken.
- (4) The incorrect transcript or the incorrect certificate shall be recovered and, if applicable, reissued. Together with the incorrect transcript, the degree certificate and the diploma supplement according to Section 25 shall be recovered if the final examination was declared "failed" due to cheating.
- (5) The decision referred to in subsections (1) or (2) shall be excluded after a period of five years. The date of the transcript marks the beginning of this period.

### **Section 28 Storage and access to examination documents**

- (1) The examination documents shall be kept at the University according to subsections (2) and (3).
- (2) The faculty conducting the examination shall keep the following:
  1. The documents concerning written forms of examinations and of alternative types of assessment for two years from the date of disclosure of the assessment.
  2. The minutes of all oral and written forms of assessment and all documents relating to examinations and compulsory coursework for two years from the date of disclosure of the assessment; and
  3. Graduate theses, evaluation reports referring to them as well as the minutes of the defence for five years from the end of the semester in which the examination was conducted.
- (3) At the Examinations Office or in the University archives the following shall be kept, subject to the legal provisions:
  1. Records of the examination results from the faculties.
  2. Decisions and notifications from the examination committees of the faculties and the Central Examination Committee.
  3. Evidence of examinations of the students and the minutes of the final examination.
  4. Duplicates of the transcripts, certificates, transcripts of records and the diploma supplements.
- (4) Within one year after completing the examination procedure of the relevant module examination, the student shall be permitted to inspect their written examinations, the evaluation reports referring to these and the examination minutes.

## **Section 29 Appeal proceedings**

(1) If an appeal is permitted against an examination decision, the conditions according to Sections 68 et seq VwGO apply.

(2) If the student appeals, the examination committee of the faculty solely verifies whether

- 1) the examination procedure was conducted in a proper manner;
- 2) false assumptions were made;
- 3) generally valid policies of assessment were not adhered to; and/or
- 4) the examiner has been misled by considerations irrelevant to the case.

The same applies if the appeal is directed against decisions of several examiners.

(3) If the examination committee of the faculty does not resolve the appeal, the Central Examination Committee takes the decision.

## **Section 30 Responsibilities**

(1) The examination committee of the faculty is responsible for checking compliance with the examination regulations.

(2) It decides on:

- 1) fundamental questions with regard to examinations;
- 2) the consequences of violations of examination regulations (Section 6);
- 3) the non-recognition of reasons for withdrawing from or absence in an examination (Section 6(2));
- 4) passing and failing an examination (Section 7);
- 5) the recognition of periods of study, compulsory coursework, examinations, modules and transfer of ECTS credits in individual cases (Section 8);
- 6) the appointment of examiners, observers and co-examiners (Section 11);
- 7) taking exams within a deferred deadline, within an extended examination time or in a different form (Section 17(3));
- 8) the extension of the deadline for the graduate thesis (Section 21(5));
- 9) the invalidity of examinations (Section 27);
- 10) the resolution of appeals (Section 29);

(3) The Examinations Office is responsible for the administrative tasks necessary within the scope of these Regulations and for supporting the examination committees. In particular, this involves:

- 1) implementing and executing the decisions of the individual examination committees;
- 2) ascertaining the admission for module examinations (Sections 13, 24(1) and (3));
- 3) de-registration from a module examination (Section 14(2));
- 4) registration for a free attempt (Section 14(1));
- 5) keeping the examination file;
- 6) the chronological and spatial organization and the coordination of the examinations in conjunction with the faculties;
- 7) informing about events relevant to examinations;
- 8) issuing certificates;

- 9) issuing transcripts, certificates and diploma supplements (Section 25);
- 10) issuing academic transcripts (Section 7(8));
- 11) receipt of applications for a final resit examination (Section 16(3));
- 12) receipt of notifications of withdrawal and absence (Section 6 (2)).

(4) The Central Examination Committee is responsible for examination matters that concern several faculties and for decisions on appeals, insofar as the faculty's examination committee does not resolve them.

### **Section 31 Entry into force**

These examination regulations shall enter into force on the day following the day of publication at the University and apply for all students enrolled in 2019 and later.

Issued based on the decision of the Faculty Council for Electrical Engineering and Computer Science of 08/05/2019 and the approval by the Rector's Office on 29/05/2019.

Zittau/Görlitz, 29/05/2019

The Rector



Prof. Dr. phil. Friedrich Albrecht

**Annex no. 1 (to Sections 12; 13): Examination schedule**

No.	Module	Semester			ECTS Credits
		SuSe	WiSe	SuSe/WiSe	
AW1	103900 Business Management/Languages	PR PK60 PM15 VB			5
EI3	138100 Fuzzy-Control	PB			5
I2	102770 Machine-Oriented Programming / Circuit Design	PB			5
MK1	199000 Structural Dynamics	PK120 VL			5
MK2	103230 Machine Dynamics	PK120			5
MS1	152850 Model-Based Measurement Procedures / Non-Linear Dynamic Systems	PB			5
EI1	214200 Advanced Control Theory		PK180 PL		5
EI2	250750 Digital Signal Processing		PK120		5
EI4	250800 Digital Communication Technology		PK120		5
I1	102810 Image Processing		PK150		5
MS2	214350 Artificial Neuronal Networks		PB		5
WP1	250250 Mechatronics Project Work/International Project		PB		5
WP2	138300 Final Module (Master's Thesis and Defence)			PM30 PA	30
<b>Total ECTS</b>		<b>30</b>	<b>30</b>	<b>30</b>	<b>90</b>

**Legend:**

- PM = Oral examination according to Section 18  
 PK = Written form of examination as invigilated written examination according to Sections 19(1) no. 1; 20  
 PP = Alternative type of assessment as placement report (Praxisbeleg) according to Section 22(1) no. 1, (2)  
 PP = Alternative type of assessment as seminar paper (Referat) according to Section 22(1) no. 2, (3)  
 PL = Alternative type of assessment as lab work according to Section 22(1) no. 3, (4)  
 P = Examination according to the chosen teaching units  
 PA = Examination as a Master's thesis according to § 21  
 VM = Compulsory coursework as oral examination according to Section 17(2) in conjunction with Section 18  
 VK = Compulsory coursework as invigilated written examination according to Section 17(2) in conjunction with Sections 19(1) no 1; 20  
 VB = Compulsory coursework as short academic paper (Belegarbeit) according to Section 17(2) in conjunction with Section 22(1) no 1, (2)  
 VR = Compulsory coursework as a seminar paper (Referat) according to Section 17(2) in conjunction with Section 22(1) no 2, (3)  
 VL = Compulsory coursework as laboratory work according to Section 17(2) in conjunction with Section 22(1) no 3, (4)  
 SuSe = summer semester  
 WiSe = winter semester

(Numerical data after the type of examination states the duration of the type of examination in minutes.)

**Annex no. 2): Components and rules for composing the overall grade (weighting)**

The final examination is an interdisciplinary examination. The grades for the individual modules will contribute towards the overall grade with the following weighting factors:

No.	Module	Type of assessment	Weighting of exam results	Weighting factor
AW1	103900 Business Management/Languages	PR PK60 PM15	40 30 30	1
EI3	138100 Fuzzy-Control	PB	100	1
I2	102770 Machine-Oriented Programming / Circuit Design	PB	100	1
MK1	199000 Structural Dynamics	PK120	100	1
MK2	103230 Machine Dynamics	PK120	100	1
MS1	152850 Model-Based Measurement Procedures / Non-Linear Dynamic Systems	PB	100	1.5
EI1	214200 Advanced Control Theory	PK180 PL	80 20	1
EI2	250750 Digital Signal Processing	PK120	100	1
EI4	250800 Digital Communication Technology	PK120	100	1
I1	102810 Image Processing	PK150	100	1
MS2	214350 Artificial Neuronal Networks	PB	100	1.5
WP1	250250 Mechatronics Project Work/International Project	PB	100	1.5
WP2	138300 Final Module (Master's Thesis and Defence)	PM30 PA	40 60	6

Composition of the overall assessment  $N_P$  of the Master's examination:

$$N_P = \frac{\sum_{j=1}^{xx} (w_j * N_j)}{\sum_{j=1}^{xx} w_j}$$

$N_j$ : grade of the module examination in module j

$w_j$ : weighting factor for module j

xx: number of modules

j: Modules of the Master's examination according to Annex 1

**Annex no. 3): Transcript of the Masters examination (German template) - sheet 1**



Hochschule  
Zittau/Görlitz  
UNIVERSITY OF APPLIED SCIENCES



Freistaat  
SACHSEN

# ZEUGNIS

## ÜBER DIE MASTERPRÜFUNG

**Herr/Frau [Name]**

geboren am [...] in [...]

hat im Studiengang

**Mechatronics**

an der Fakultät Elektrotechnik und Informatik  
studiert und die Masterprüfung bestanden  
und erhält die Gesamtnote:

**[Prädikat]**

(Durchschnittsnote: [Note])

Ergebnisse der Masterprüfung:

**1. Abschlussmodul**

(Masterarbeit und Abschlusskolloquium)

Thema der Masterarbeit:

Gesamtnote der Masterarbeit:

**Annex no. 3): Transcript of the Masters examination (German template) - sheet 2**

**2) Modulprüfungen**

Business Management/Languages  
Fuzzy-Control  
Machine-Oriented Programming / Circuit Design  
Structural Dynamics  
Machine Dynamics  
Model-Based Measurement Procedures / Non-Linear Dynamic Systems  
Advanced Control Theory  
Digital Signal Processing  
Digital Communication Technology  
Image Processing  
Artificial Neuronal Networks  
Mechatronics Project Work/International Project  
Final Module (Master's Thesis and Defence)

**3) Leistungen, deren Bewertung nicht in das Gesamturteil eingegangen ist**

*Auflistung der möglichen Module*

Zittau/Görlitz, [Datum]

Siegel

[Name]  
Dekan der Fakultät  
Elektrotechnik und Informatik

[Name]  
Vorsitzender des Prüfungsausschusses  
Elektrotechnik und Informatik



**Annex no. 4): Master's degree certificate (German template)**



Hochschule  
Zittau/Görlitz  
UNIVERSITY OF APPLIED SCIENCES



Freistaat  
SACHSEN

MASTER

**Herr/Frau [Name]**

geboren am [...] in [...]  
hat die Masterprüfung im Studiengang

**Mechatronics**

erfolgreich abgelegt.

Die Hochschule Zittau/Görlitz - University of Applied Sciences -  
verleiht durch diese Urkunde den Hochschulgrad

**Master of Engineering- M.Eng.**

Zittau/Görlitz, [Datum]

Siegel

[Name]  
Rektor

[Name]  
Dekan der Fakultät  
Elektrotechnik und Informatik

**Annex no. 5): Master's degree certificate (English template)**



Hochschule  
Zittau/Görlitz  
UNIVERSITY OF APPLIED SCIENCES



Freistaat  
**SACHSEN**

It is herewith certified that

**Mr/Mrs/Ms**

born on [...] in [...]

having successfully completed the relevant Master course  
has been admitted to the degree of Master  
following a course of study in the field of

**Mechatronics**

and that the Zittau/Görlitz University of Applied Sciences  
hereby awards the degree of  
**Master of Engineering- M.Eng.**

Zittau/Görlitz, [Datum]

Seal

[Name]  
Rector

[Name]  
Dean  
Faculty of Electrical Engineering  
and Computer Science

## Annex no. 6): Diploma Supplement (German template)



Hochschule  
Zittau/Görlitz  
UNIVERSITY OF APPLIED SCIENCES

Diese Diploma Supplement-Vorlage wurde von der Europäischen Kommission, dem Europarat und UNESCO/CEPES entwickelt. Das Diploma Supplement soll hinreichende Daten zur Verfügung stellen, die die internationale Transparenz und angemessene akademische und berufliche Anerkennung von Qualifikationen (Urkunden, Zeugnisse, Abschlüsse, Zertifikate, etc.) verbessern. Das Diploma Supplement beschreibt Eigenschaften, Stufe, Zusammenhang, Inhalte sowie Art des Abschlusses des Studiums, das von der in der Originalurkunde bezeichneten Person erfolgreich abgeschlossen wurde. Die Originalurkunde muss diesem Diploma Supplement beigelegt werden. Das Diploma Supplement sollte frei sein von jeglichen Werturteilen, Äquivalenzaussagen oder Empfehlungen zur Anerkennung. Es sollte Angaben in allen acht Abschnitten enthalten. Wenn keine Angaben gemacht werden, sollte dies durch eine Begründung erläutert werden.

# Diploma Supplement

## 1 ANGABEN ZUM INHABER/ZUR INHABERIN DER QUALIFIKATION

- 1.1 **Familiennamen / 1.2 Vorname** *«name», «vorname»*  
1.3 **Geburtsdatum, Geburtsort** *«gebdatum», «gebort»*  
1.4 **Matrikelnummer/Code des Studierenden** *«Matrikelnr»*

## 2 ANGABEN ZUR QUALIFIKATION

- 2.1 **Bezeichnung der Qualifikation** (ausgeschrieben, abgekürzt)  
*«Master of Engineering» – «M.Eng.»*
- 2.2 **Hauptstudienfach oder -fächer**  
Mechatronik
- 2.3 **Name der Einrichtung, die die Qualifikation verliehen hat**  
Hochschule Zittau/Görlitz, University of Applied Sciences  
Fakultät Elektrotechnik und Informatik  
**Status (Typ / Trägerschaft)**  
Fachhochschule in staatlicher Trägerschaft
- 2.4 **Name der Einrichtung, die den Studiengang durchgeführt hat**  
siehe 2.3  
**Status (Typ / Trägerschaft)**  
siehe 2.3
- 2.5 **Im Unterricht / in der Prüfung verwendete Sprache(n)**  
Deutsch, Englisch

### **3 ANGABEN ZUR EBENE DER QUALIFIKATION**

#### **3.1 Ebene der Qualifikation**

Zweiter berufsqualifizierender Hochschulabschluss

#### **3.2 Dauer des Studiums (Regelstudienzeit)**

eineinhalb (1,5) Jahre (90 ECTS-Punkte) einschließlich Abschlussarbeit

#### **3.3 Zugangsvoraussetzung(en)**

Erster Abschluss (Bachelor oder Diplom-Ingenieur) in einem Studiengang Elektrotechnik, Mechatronik oder Maschinenbau mit einem Notenpunkt Durchschnitt in Abschlussprüfungen über 2.5.

### **4 ANGABEN ZUM INHALT UND ZU DEN ERZIELTEN ERGEBNISSEN**

#### **4.1 Studienform**

Vollzeit

#### **4.2 Lernergebnisse des Studienganges**

Der Studiengang "Mechatronik-Master" ist ein interdisziplinäres Programm und basiert auf den klassischen akademischen Ingenieurdisziplinen Maschinenbau, Elektrotechnik und Informatik. Ein "Master of Engineering" -Titel in der Mechatronik qualifiziert Postgraduierte, um komplexe und umfassende technische Systeme, Technologien, Geräte und Verfahren mit hoher Automatisierungsebene im Zusammenhang mit technischen, betrieblichen und ökologischen Fragen zu entwickeln.

Die Absolventen werden durch ihr Studium dazu befähigt, Forschungsthemen selbstständig wissenschaftlich zu bearbeiten und durch eine mögliche folgende Promotion weitere fachliche und berufliche Perspektiven zu erschließen.

Gleichzeitig sollen sie in die Lage versetzt werden, leitende Funktionen im Beruf zu übernehmen, welches durch erweiterte Sprachkenntnisse zusätzlich gestützt wird.

Eine wichtige Basis für die Befähigung zu wissenschaftlicher Arbeit und dem anwendungsorientierten Wissenseinsatz ist der Aufbau von erweiterten (konsekutiven) Fachkompetenzen im Bereich Maschinendynamik, Regelungstechnik, Numerische Analyse, Künstlicher Intelligenz und Kommunikationstechnik.

Die Absolventen werden besonders auf dem Gebiet der maschinennahen Programmierung zur Lösung von Entwicklungsaufgaben (Design) befähigt.

Mit der Masterarbeit weisen die Studierenden die Fähigkeit nach, innerhalb eines Semesters eine komplexere Aufgabenstellung mit wissenschaftlichen Inhalt und bevorzugt praktischem Bezug aus dem Gebiet der Mechatronik in einem Unternehmen oder an der Hochschule selbstständig nach wissenschaftlichen Methoden zu bearbeiten.

#### **4.3 Einzelheiten zum Studiengang**

Zur Information über die absolvierten Prüfungsleistungen (schriftlich und mündlich) sowie Thema der Abschlussarbeit siehe „Zeugnis über die Master-Prüfung“ sowie *Transcript of Records*

#### **4.4 Notensystem und Hinweise zur Vergabe von Noten**

Benotungsskala siehe 8.6

#### **4.5 Gesamtnote**

„«notentext»“ (erzielt auf der Grundlage der Prüfungsergebnisse (siehe 4.3))

Diploma Supplement - «vorname» «name»

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## **5 ANGABEN ZUM STATUS DER QUALIFIKATION**

### **5.1 Zugang zu weiterführenden Studien**

Der Master-Grad eröffnet den Zugang zu einem Doktorstudium, wobei von Institution zu Institution unterschiedliche zusätzliche Zugangsvoraussetzungen zu erfüllen sein können.

### **5.2 Zugang zu reglementierten Berufen (sofern zutreffend)**

Der Master-Grad in einer Wissenschaftsdisziplin berechtigt den Inhaber, den akademischen Grad „Master of Engineering“ zu tragen und im entsprechenden Fachgebiet beruflich tätig zu werden.

## **6 WEITERE ANGABEN**

### **6.1 Weitere Angaben**

Dieser Masterstudiengang wurde am 25.07.2016 nach den Vorgaben der Stiftung zur Akkreditierung von Studiengängen in Deutschland akkreditiert.

Der Erwerb des Abschlussgrades eröffnet den Zugang zum höheren Dienst.

### **6.2 Informationsquellen für ergänzende Angaben**

Zur Hochschule: <http://www.hszg.de/>

Zur Fakultät: <https://www.hszg.de/hochschule/struktur-und-organisation/fakultaeten/elektrotechnik-und-informatik.html>

Informationen zum deutschen Bildungssystem siehe unter Punkt 8.

## **7 ZERTIFIZIERUNG**

Dieses Diploma Supplement nimmt Bezug auf folgende Original-Dokumente:

Master-Urkunde (Deutsch und Englisch) «pdatum»

Zeugnis über die Master-Prüfung (Deutsch) «pdatum»

*Transcript of Records* (Englisch) «pdatum»

## **8 ANGABEN ZUM NATIONALEN HOCHSCHULSYSTEM**

Die Informationen über das nationale Hochschulsystem auf den folgenden Seiten geben Auskunft über den Grad der Qualifikation und den Typ der Institution, die sie vergeben hat.

Diploma Supplement - «vorname» «name»

8 Informationen zum Hochschulsystem in Deutschland<sup>1</sup>

8.1 Die unterschiedlichen Hochschulen und ihr institutioneller Status

Die Hochschulausbildung wird in Deutschland von drei Arten von Hochschulen angeboten.<sup>2</sup>

- **Universitäten**, einschließlich verschiedener spezialisierter Institutionen, bieten das gesamte Spektrum akademischer Disziplinen an. Traditionell liegt der Schwerpunkt an deutschen Universitäten besonders auf der Grundlagenforschung, so dass das fortgeschrittene Studium vor allem theoretisch ausgerichtet und forschungsorientiert ist.

- **Fachhochschulen** konzentrieren ihre Studienangebote auf ingenieurwissenschaftliche technische Fächer und wirtschaftswissenschaftliche Fächer, Sozialarbeit und Design. Der Auftrag von angewandter Forschung und Entwicklung impliziert einen praxisorientierten Ansatz und eine ebensolche Ausrichtung des Studiums, was häufig integrierte und begleitete Praktika in Industrie, Unternehmen oder anderen einschlägigen Einrichtungen einschließt.

- **Kunst- und Musikhochschulen** bieten Studiengänge für künstlerische Tätigkeiten an, in Bildender Kunst, Schauspiel und Musik, in den Bereichen Regie, Produktion und Drehbuch für Theater, Film und andere Medien sowie in den Bereichen Design, Architektur, Medien und Kommunikation.

Hochschulen sind entweder staatliche oder staatlich anerkannte Institutionen. Sowohl in ihrem Handeln einschließlich der Planung von Studiengängen als auch in der Festsetzung und Zuerkennung von Studienabschlüssen unterliegen sie der Hochschulgesetzgebung.

8.2 Studiengänge und -abschlüsse

In allen drei Hochschultypen wurden die Studiengänge traditionell als integrierte „lange“ (einstufige) Studiengänge angeboten, die entweder zum Diplom oder zum Magister Artium führten oder mit einer Staatsprüfung abschlossen.

Im Rahmen des Bologna-Prozesses wird das einstufige Studiensystem sukzessive durch ein zweistufiges ersetzt. Seit 1998 wurden in fast allen Studiengängen gestufte Abschlüsse (Bachelor und Master) eingeführt. Dies soll den Studierenden mehr Wahlmöglichkeiten und Flexibilität beim Planen und Verfolgen ihrer Lernziele bieten sowie Studiengänge international kompatibel machen.

Die Abschlüsse des deutschen Hochschulsystems einschließlich ihrer Zuordnung zu den Qualifikationsstufen sowie die damit einhergehenden

Qualifikationsziele und Kompetenzen der Absolventen sind im Qualifikationsrahmen für deutsche Hochschulabschlüsse<sup>3</sup>, im Deutschen Qualifikationsrahmen für lebenslanges Lernen (DQR)<sup>4</sup> sowie im Europäischen Qualifikationsrahmen für lebenslanges Lernen (EQR)<sup>5</sup> beschrieben. Einzelheiten s. Abschnitte 8.4.1, 8.4.2 bzw. 8.4.3. Tab. 1 gibt eine zusammenfassende Übersicht.

8.3 Anerkennung/Akkreditierung von Studiengängen und Abschlüssen

Um die Qualität und die Vergleichbarkeit von Qualifikationen sicherzustellen, müssen sich sowohl die Organisation und Struktur von Studiengängen als auch die grundsätzlichen Anforderungen an Studienabschlüsse an den Prinzipien und Regelungen der Ständigen Konferenz der Kultusminister der Länder (KMK) orientieren.<sup>6</sup> Seit 1999 existiert ein bundesweites Akkreditierungssystem für Bachelor- und Masterstudiengänge, nach dem alle neu eingeführten Studiengänge akkreditiert werden. Akkreditierte Studiengänge sind berechtigt, das Qualitätssiegel des Akkreditierungsrates zu führen.<sup>7</sup>

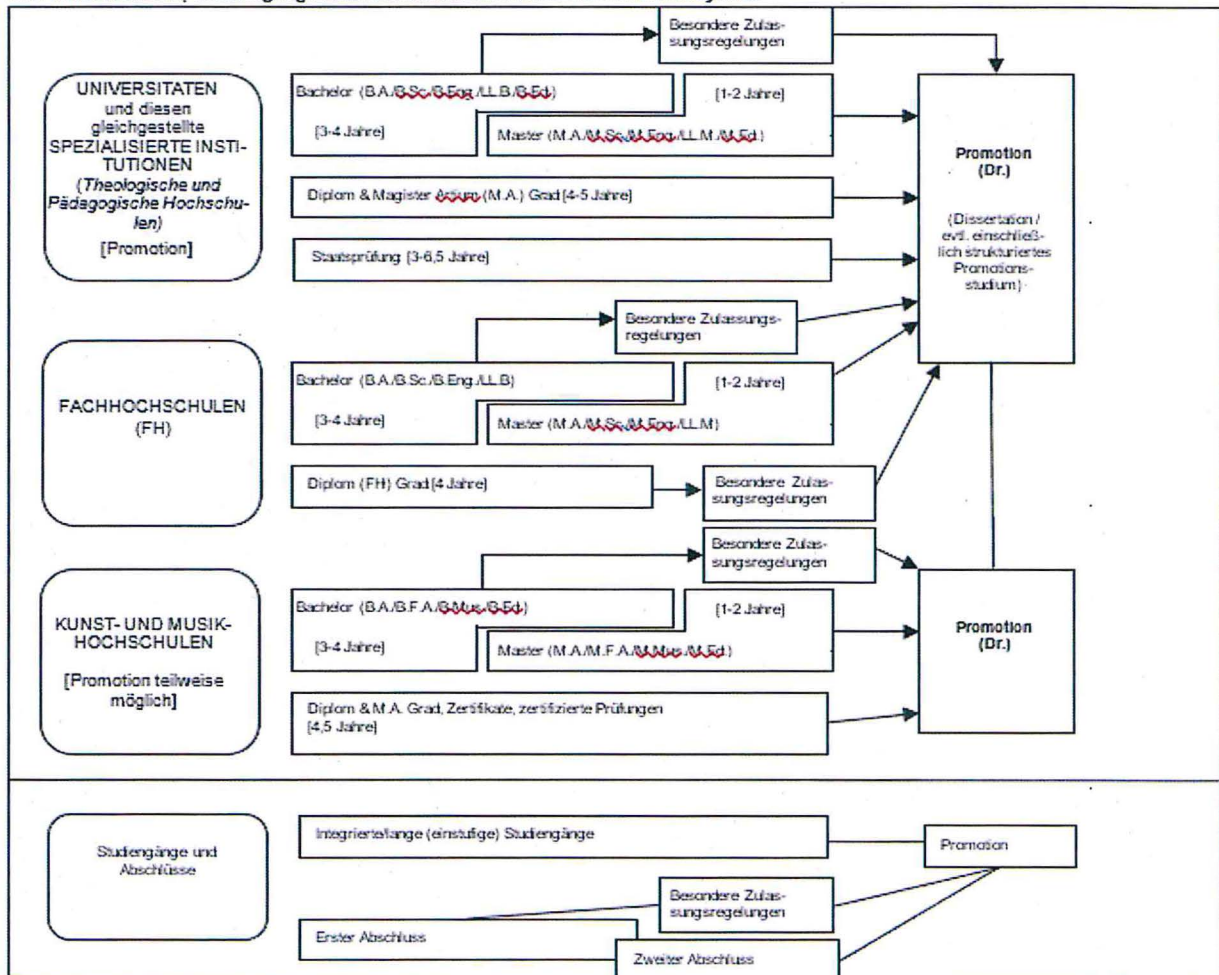
8.4 Organisation und Struktur der Studiengänge

Die folgenden Studiengänge können von allen drei Hochschultypen angeboten werden. Bachelor- und Masterstudiengänge können nacheinander, an unterschiedlichen Hochschulen, an unterschiedlichen Hochschultypen und mit Phasen der Erwerbstätigkeit zwischen der ersten und der zweiten Qualifikationsstufe studiert werden. Bei der Planung werden Module und das Europäische System zur Übertragung und Akkumulierung von Studienleistungen (ECTS) verwendet, wobei einem Semester 30 Kreditpunkte entsprechen.

8.4.1 Bachelor

In Bachelorstudiengängen werden wissenschaftliche Grundlagen, Methodenkompetenz und berufsfieldbezogene Qualifikationen vermittelt. Der Bachelorabschluss wird nach 3 bis 4 Jahren vergeben. Zum Bachelorstudiengang gehört eine schriftliche Abschlussarbeit. Studiengänge, die mit dem Bachelor abgeschlossen werden, müssen gemäß dem Gesetz zur Errichtung einer Stiftung zur Akkreditierung von Studiengängen in Deutschland akkreditiert werden.<sup>8</sup>

Tab. 1: Institutionen, Studiengänge und Abschlüsse im Deutschen Hochschulsystem



Studiengänge der ersten Qualifikationsstufe (Bachelor) schließen mit den Graden Bachelor of Arts (B.A.), Bachelor of Science (B.Sc.), Bachelor of Engineering (B.Eng.), Bachelor of Laws (LL.B.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.Mus.) oder Bachelor of Education (B.Ed.) ab.

Der Bachelorgrad entspricht der Qualifikationsstufe 6 des DQR/EQR.

#### 8.4.2 Master

Der Master ist der zweite Studienabschluss nach weiteren 1 bis 2 Jahren. Masterstudiengänge können nach den Profiltypen „anwendungsorientiert“ und „forschungsorientiert“ differenziert werden. Die Hochschulen legen das Profil fest.

Zum Masterstudiengang gehört eine schriftliche Abschlussarbeit. Studiengänge, die mit dem Master abgeschlossen werden, müssen gemäß dem Gesetz zur Errichtung einer Stiftung zur Akkreditierung von Studiengängen in Deutschland akkreditiert werden.<sup>1</sup>

Studiengänge der zweiten Qualifikationsstufe (Master) schließen mit den Graden Master of Arts (M.A.), Master of Science (M.Sc.), Master of Engineering (M.Eng.), Master of Laws (LL.M.), Master of Fine Arts (M.F.A.), Master of Music (M.Mus.) oder Master of Education (M.Ed.) ab. Weiterbildende Masterstudiengänge können andere Bezeichnungen erhalten (z.B. MBA).

Der Mastergrad entspricht der Qualifikationsstufe 7 des DQR/EQR.

#### 8.4.3 Integrierte „lange“ einstufige Studiengänge:

##### Diplom, Magister Artium, Staatsprüfung

Ein integrierter Studiengang ist entweder mono-disziplinär (Diplomabschlüsse und die meisten Staatsprüfungen) oder besteht aus einer Kombination von entweder zwei Hauptfächern oder einem Haupt- und zwei Nebenfächern (Magister Artium). Das Vorstudium (1,5 bis 2 Jahre) dient der breiten Orientierung und dem Grundlagenwerb im jeweiligen Fach. Eine Zwischenprüfung (bzw. Vordiplom) ist Voraussetzung für die Zulassung zum Hauptstudium, d.h. zum fortgeschrittenen Studium und der Spezialisierung. Voraussetzung für den Abschluss sind die Vorlage einer schriftlichen Abschlussarbeit (Dauer bis zu 6 Monaten) und umfangreiche schriftliche und mündliche Abschlussprüfungen. Ähnliche Regelungen gelten für die Staatsprüfung. Die erworbene Qualifikation entspricht dem Master.

- Die Regelstudienzeit an *Universitäten* beträgt bei integrierten Studiengängen 4 bis 5 Jahre (Diplom, Magister Artium) oder 3 bis 6,5 Jahre (Staatsprüfung). Mit dem Diplom werden ingenieur-, natur- und wirtschaftswissenschaftliche Studiengänge abgeschlossen. In den Geisteswissenschaften ist der entsprechende Abschluss in der Regel der Magister Artium (M.A.). In den Sozialwissenschaften variiert die Praxis je nach Tradition der jeweiligen Hochschule. Juristische, medizinische und pharmazeutische Studiengänge schließen mit der Staatsprüfung ab. Dies gilt in einigen Ländern auch für Lehramtsstudiengänge.

Die drei Qualifikationen (Diplom, Magister Artium und Staatsprüfung) sind akademisch gleichwertig und auf der Qualifikationsstufe 7 des DQR/EQR angesiedelt. Sie bilden die formale Voraussetzung zur Promotion. Weitere Zulassungsvoraussetzungen können von der Hochschule festgelegt werden, s. Abschnitt 8.5.

- Die Regelstudienzeit an *Fachhochschulen* (FH) beträgt bei integrierten Studiengängen 4 Jahre und schließt mit dem Diplom (FH) ab. Dieses ist auf der Qualifikationsstufe 8 des DQR/EQR angesiedelt. Fachhochschulen haben kein Promotionsrecht; qualifizierte Absolventen können sich für die Zulassung zur Promotion an promotionsberechtigten Hochschulen bewerben, s. Abschnitt 8.5.

- Das Studium an *Kunst- und Musikhochschulen* ist in seiner Organisation und Struktur abhängig vom jeweiligen Fachgebiet und der individuellen Zielsetzung. Neben dem Diplom- bzw. Magisterabschluss gibt es bei integrierten Studiengängen Zertifikate und zertifizierte Abschlussprüfungen für spezielle Bereiche und berufliche Zwecke.

#### 8.5 Promotion

Universitäten sowie gleichgestellte Hochschulen und einige Kunst- und Musikhochschulen sind promotionsberechtigt. Formale Voraussetzung für die Zulassung zur Promotion ist ein qualifizierter Masterabschluss (Fachhochschulen und Universitäten), ein Magisterabschluss, ein Diplom, eine Staatsprüfung oder ein äquivalenter ausländischer Abschluss. Entsprechende Abschlüsse von Kunst- und Musikhochschulen können in Ausnahmefällen (wissenschaftliche Studiengänge, z.B.

Musiktheorie, Musikwissenschaften, Kunst- und Musikpädagogik, Medienwissenschaften) formal den Zugang zur Promotion eröffnen. Besonders qualifizierte Inhaber eines Bachelorgrades oder eines Diploms (FH) können ohne einen weiteren Studienabschluss im Wege eines Eignungsfeststellungsverfahrens zur Promotion zugelassen werden. Die Universitäten bzw. promotionsberechtigten Hochschulen regeln sowohl die Zulassung zur Promotion als auch die Art der Eignungsprüfung. Voraussetzung für die Zulassung ist außerdem, dass das Promotionsprojekt von einem Hochschullehrer als Betreuer angenommen wird.

Die Promotion entspricht der Qualifikationsstufe 8 des DQR/EQR.

#### 8.6 Benotungsskala

Die deutsche Benotungsskala umfasst üblicherweise 5 Grade (mit zahlenmäßigen Entsprechungen; es können auch Zwischennoten vergeben werden): „Sehr gut“ (1), „Gut“ (2), „Befriedigend“ (3), „Ausreichend“ (4), „Nicht ausreichend“ (5). Zum Bestehen ist mindestens die Note „Ausreichend“ (4) notwendig. Die Bezeichnung für die Noten kann in Einzelfällen und für den Doktorgrad abweichen. Außerdem findet eine Einstufungstabelle nach dem Modell des ECTS-Leitfadens Verwendung, aus der die relative Verteilung der Noten in Bezug auf eine Referenzgruppe hervorgeht.

#### 8.7 Hochschulzugang

Die Allgemeine Hochschulreife (Abitur) nach 12 bis 13 Schuljahren ermöglicht den Zugang zu allen Studiengängen. Die Fachgebundene Hochschulreife ermöglicht den Zugang zu allen Studiengängen an Fachhochschulen, an Universitäten und gleichgestellten Hochschulen, aber nur zu bestimmten Fächern. Das Studium an Fachhochschulen ist auch mit der Fachhochschulreife möglich, die in der Regel nach 12 Schuljahren erworben wird. Der Zugang zu Studiengängen an Kunst- und Musikhochschulen und entsprechenden Studiengängen an anderen Hochschulen sowie der Zugang zu einem Sportstudiengang kann auf der Grundlage von anderen bzw. zusätzlichen Voraussetzungen zum Nachweis einer besonderen Eignung erfolgen.

Beruflich qualifizierte Bewerber ohne schulische Hochschulzugangsberechtigung erhalten eine allgemeine Hochschulzugangsberechtigung und damit Zugang zu allen Studiengängen, wenn sie Inhaber von Abschlüssen bestimmter, staatlich geregelter beruflicher Aufstiegsfortbildungen sind (zum Beispiel Meister/in im Handwerk, Industriemeister/in, Fachwirt/in (IHK), Betriebswirt/in (IHK) und (HWK), staatliche geprüfte/r Techniker/in, staatliche geprüfte/r Betriebswirt/in, staatlich geprüfte/r Gestalter/in, staatlich geprüfte/r Erzieher/in. Eine fachgebundene Hochschulzugangsberechtigung erhalten beruflich qualifizierte Bewerber mit einem Abschluss einer staatlich geregelten, mindestens zweijährigen Berufsausbildung und i.d.R. mindestens dreijähriger Berufspraxis, die ein Eignungsfeststellungsverfahren an einer Hochschule oder staatlichen Stelle erfolgreich durchlaufen haben; das Eignungsfeststellungsverfahren kann durch ein nachweislich erfolgreich absolviertes Probestudium von mindestens einem Jahr ersetzt werden.<sup>2</sup> Die Hochschulen können in bestimmten Fällen zusätzliche spezifische Zulassungsverfahren durchführen.

#### 8.8 Informationsquellen in der Bundesrepublik

- Kultusministerkonferenz (KMK) (Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland); Graurheindorfer Str. 157, D-53117 Bonn; Tel.: +49(0)228/501-0; Fax: +49(0)228/501-777
- Zentralstelle für ausländisches Bildungswesen (ZaB) als deutsche NARIC; www.kmk.org; E-Mail: zab@kmk.org
- Deutsche Informationsstelle der Länder im EURYDICE-Netz, für Informationen zum Bildungswesen in Deutschland; www.kmk.org; E-Mail: eurydice@kmk.org
- Hochschulrektorenkonferenz (HRK); Ahrstr. 39, D-53175 Bonn; Fax: +49(0)228/887-110; Tel.: +49(0)228/887-0; www.hrk.de; E-Mail: post@hrk.de
- „Hochschulkompass“ der Hochschulrektorenkonferenz, enthält umfassende Informationen zu Hochschulen, Studiengängen etc. (www.hochschulkompass.de)

<sup>1</sup> Die Information berücksichtigt nur die Aspekte, die direkt das Diploma Supplement betreffen. Informationsstand 03/2019.

<sup>2</sup> Berufskademies sind keine Hochschulen, es gibt sie nur in einigen Bundesländern. Sie bieten Studiengänge in enger Zusammenarbeit mit privaten Unternehmen an. Studierende erhalten einen offiziellen Abschluss und machen eine Ausbildung im Betrieb. Manche Berufskademies bieten Bachelorstudiengänge an, deren Abschlüsse einem Bachelorgrad einer Hochschule gleichgestellt werden können, wenn sie von einer deutschen Akkreditierungsagentur akkreditiert sind.

<sup>3</sup> Qualifikationsrahmen für deutsche Hochschulabschlüsse (Beschluss der Kultusministerkonferenz vom 16.02.2017).

<sup>4</sup> Deutscher Qualifikationsrahmen für lebenslanges Lernen (DQR), Gemeinsamer Beschluss der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland, des Bundesministeriums für Bildung und Forschung, der Wirtschaftsministerkonferenz und des Bundesministeriums für Wirtschaft und Technologie (Beschluss der Kultusministerkonferenz vom 15.11.2012). Ausführliche Informationen unter www.dqr.de

<sup>5</sup> Empfehlung des Europäischen Parlaments und des Europäischen Rates zur Einrichtung des Europäischen Qualifikationsrahmens für lebenslanges Lernen vom 23.04.2008 (2008/C 111/01 – Europäischer Qualifikationsrahmen für lebenslanges Lernen – EQR).

<sup>6</sup> Musterrechtsverordnung gemäß Artikel 4 Absätze 1 – 4 Studienakkreditierungsstaatsvertrag (Beschluss der Kultusministerkonferenz vom 07.12.2017).

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- <sup>7</sup> Staatsvertrag über die Organisation eines gemeinsamen Akkreditierungssystems zur Qualitätssicherung in Studium und Lehre an deutschen Hochschulen (Studienakkreditierungsstaatsvertrag) (Beschluss der KMK vom 08.12.2016) In Kraft getreten am 01.01.2018.
- <sup>8</sup> Siehe Fußnote Nr. 7.
- <sup>9</sup> Siehe Fußnote Nr. 7.
- <sup>10</sup> Hochschulzugang für beruflich qualifizierte Bewerber ohne schulische Hochschulzugangsberechtigung (Beschluss der Kultusministerkonferenz vom 06.03.2009).

Date of certification: «pdatum»

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Dr. Stefan Kühne  
Head of Student Services and International Relations



## **Annex no. 7): Diploma Supplement (English template)**



**Hochschule  
Zittau/Görlitz**  
UNIVERSITY OF APPLIED SCIENCES

This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

# ***Diploma Supplement***

## **1 INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION**

- 1.1 Family Name(s) / 1.2 First Name(s):**                    *«name», «vorname»*  
**1.3 Date and Place of Birth:**                                    *«gebdatum», «gebort»*  
**1.4 Student ID number or Code**                                *«Matrikelnr»*

## **2 INFORMATION IDENTIFYING THE QUALIFICATION**

- 2.1 Name of qualification and (if applicable) title conferred (including its abbreviation, in original language):**

Master of Engineering – M.Eng.

- 2.2 Main field(s) of study for the qualification:**

Mechatronics

- 2.3 Name and status of awarding institution (in original language):**

Hochschule Zittau/Görlitz, University of Applied Sciences  
 Fakultät Elektrotechnik und Informatik (Faculty of Electrical Engineering and Computer Science)

**Status (type and sponsorship):**

Public University of Applied Sciences

- 2.4 Name and status of institution administering studies (in original language):**

[see 2.3]

**Status (type and sponsorship):**

[see 2.3]

- 2.5 Language(s) of instruction/examination:**

German and English

## **3 INFORMATION ON THE LEVEL OF THE QUALIFICATION**

- 3.1 Level of qualification:**

Second degree, with Master thesis

- 3.2 Official length of the programme (standard time to degree):**

one-and-a-half-year integrated programme (90 ECTS credits) including a Master's thesis

- 3.3 Access requirement(s):**

First degree (Bachelor or *Diplom-Ingenieur*) in a study programme of electrical engineering, mechatronics or mechanical engineering with a grade point average in final examinations above 2.5.

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**4 INFORMATION ON THE CONTENTS AND RESULTS GAINED****4.1 Mode of study:**

Full-time

**Learning outcomes**

The study course "Mechatronics-Master" is an interdisciplinary programme and is based on the classical academic engineering disciplines of mechanical engineering, electrical engineering and computer science. A "Master of Engineering" title in mechatronics qualifies post-graduates to develop complex and comprehensive technical systems, technologies, devices and procedures with a high automation level in connection about technical, operational and ecological questions.

Through their studies, the graduates will be able to work independently on research topics and to develop additional technical and professional perspectives through a possible subsequent doctorate.

At the same time, they should be able to take over leading positions in the profession, assisted by additional language skills.

An important basis for the ability for scientific work and the application-oriented use of technical knowledge is the development of extended (consecutive) competences in the field of machine dynamics, control engineering, numerical analysis, artificial intelligence and communication technology.

The graduates will be particularly qualified in the area of machine-oriented programming for the solution of development tasks (design).

With the Master's thesis, the students demonstrate the ability to handle a complex task with scientific content and preferably practical orientation from the field of mechatronics in a company or at the university using scientific methods within a semester.

**4.3 Programme details**

See Transcript of Records and Academic Transcript (*Zeugnis über die Master-Prüfung*) for a list of examinations (written and oral) and the topic of the Master's thesis.

**4.4 Grading scheme and grade distribution guidance**

See 8.6

**4.5 Overall classification**

„«notentext»" (based on the results of the final examinations (see 4.3))

**5 INFORMATION ON THE FUNCTION OF THE QUALIFICATION****5.1 Access to further study:**

The Master degree qualifies to apply for admission for PhD study at a university whereas different additional admission prerequisites are regulated in the doctorate orders of the faculties of each university.

**5.2 Professional status / Access to regulated professions (if applicable)**

A degree mechatronics entitles its holder to carry Master of Engineering exercise professional work in the field of mechatronics, electrical engineering and mechanical engineering. The Master degree qualifies for a position within an upper division of the German Civil Service.

**6 ADDITIONAL INFORMATION****6.1 Additional information**

The underlying Master degree programme was accredited on 01.07.2016 according to the regulations on accreditation defined by the Accreditation Council - Foundation for the Accreditation of Study Programmes in Germany. The holder of this degree fulfils the prerequisites for higher civil service positions.

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## 6.2 Further information sources

University website: <http://www.hszg.de/>

Faculty website: <https://www.hszg.de/hochschule/struktur-und-organisation/fakultaeten/elektrotechnik-und-informatik.html>

For information on the German education system see section 8.

## 7 CERTIFICATION OF THE SUPPLEMENT

This Diploma Supplement refers to the following original documents:

Master-Urkunde (Master Degree Certificate, (German and English) «datum»

*Zeugnis über die Master-Prüfung* (Academic Transcript, German) «datum»

*Transcript of Records* (Englisch) «datum»

## 8 INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

The following pages provide information on the German higher education system including qualifications and types of awarding institutions.

Date of certification: «datum»

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Head of Student Services and International Relations

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8 INFORMATION ON HIGHER EDUCATION IN GERMANY<sup>1</sup>

8.1 Types of institutions and their status:

Higher education (HE) studies in Germany are offered at three types of Higher Education Institutions (HEI).<sup>2</sup>

- *Universitäten* (Universities) including various specialized institutions, offer the whole range of academic disciplines. In the German tradition, universities focus in particular on basic research so that advanced stages of study have mainly theoretical orientation and research-oriented components.

- *Fachhochschulen* (Universities of Applied Sciences) concentrate their study programmes in engineering and technical disciplines, business-related studies, social work, and design. The common mission of applied research and development implies an application-oriented focus and professional character of studies, which include integrated and supervised work assignments in industry, enterprises or other relevant institutions.

- *Kunst- und Musikhochschulen* (Universities of Art/Music) offer studies for artistic careers in fine arts, performing arts and music; in such fields as directing, production, writing in theatre, film, and other media; and in a variety of design areas, architecture, media and communication.

Higher Education Institutions are either state or state-recognized institutions. In their operations, including the organization of studies and the designation and award of degrees, they are both subject to higher education legislation.

Types of programmes and awarded degrees:

Studies in all three types of institutions have traditionally been offered in integrated "long" (one-tier) programmes leading to *Diplom* or *Magister Artium* degrees or were completed by a *Staatsprüfung* (State Examination).

Within the framework of the Bologna-Process, one-tier study programmes are successively being replaced by a two-tier study system. The implementation of tiered programmes (Bachelor and Masters) has begun in 1998. These programmes are designed to provide enlarged variety and flexibility to students in planning and pursuing educational objectives they also enhance international compatibility of studies.

The German Qualifications Framework for Higher Education Degrees<sup>3</sup>, the German Qualifications Framework for Lifelong Learning<sup>4</sup> and the

European Qualifications Framework for Lifelong Learning (EQF)<sup>5</sup> describe the degrees of the German Higher Education System. They contain the classification of the qualification levels and the resulting qualifications and competences of graduates. For details see section 8.4.1, 8.4.2, and 8.4.3 respectively. Table 1 provides a synoptic summary.

8.3 Approval/Accreditation of programmes and degrees

To ensure quality and comparability of qualifications, the organization of studies and general degree requirements have to conform to principles and regulations established by the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK).<sup>6</sup> In 1999, an accreditation scheme for Bachelor's and Master's degree programmes has become operational. All new programmes must be accredited under this scheme; after a successful accreditation they receive the quality-label of the Accreditation Council.<sup>7</sup>

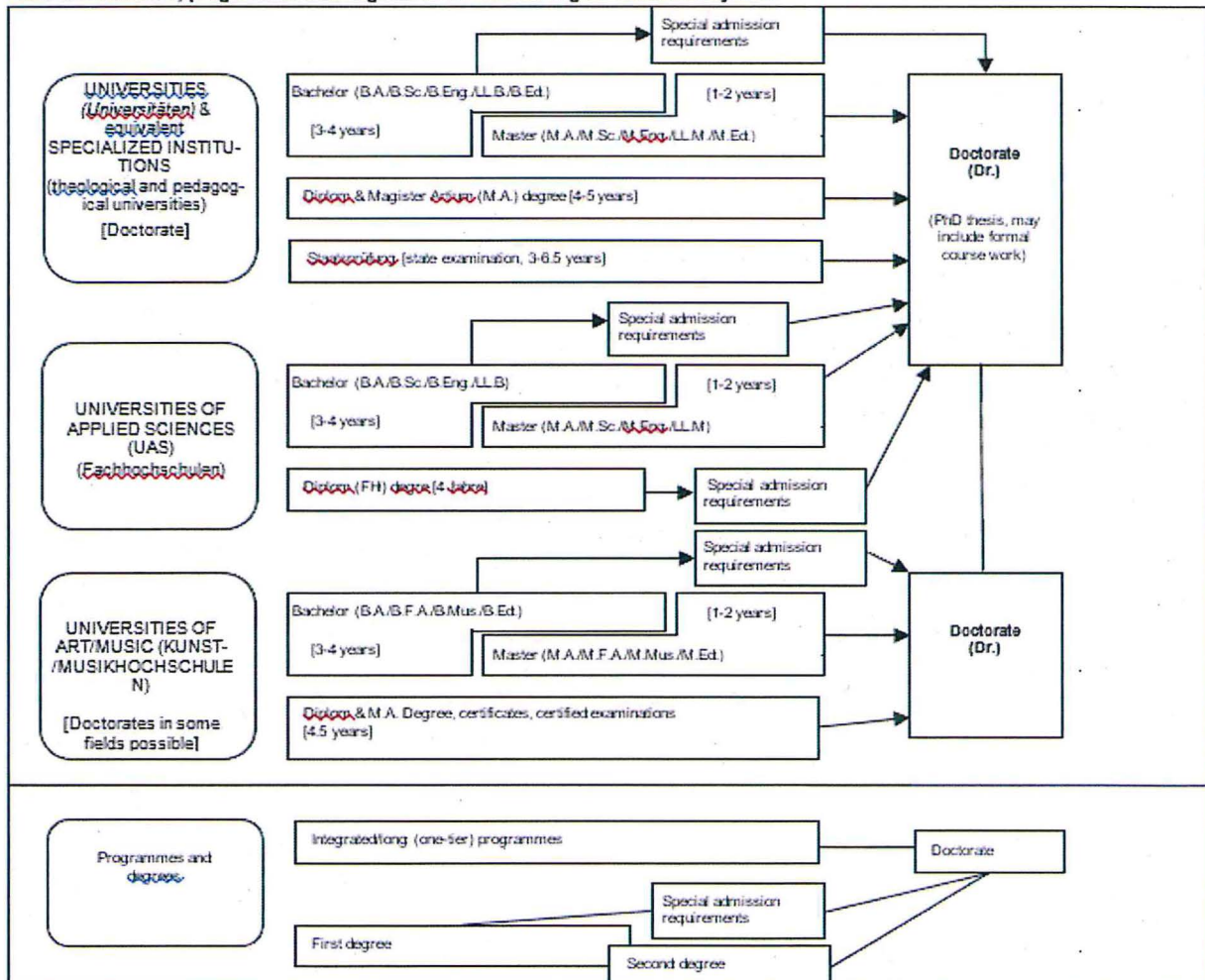
8.4 Organization and structure of studies

The following programmes apply to all three types of institutions. Bachelor's and Master's degree courses may be studied consecutively, at various higher education institutions, at different types of higher education institutions and with phases of professional work between the first and the second qualification. The organization of the study programmes makes use of modular components and of the European Credit Transfer and Accumulation System (ECTS) with 30 credits corresponding to one semester.

8.4.1 Bachelor

Bachelor programmes lay the academic foundations, provide methodological skills and lead to qualifications related to the professional field. The Bachelor's degree is awarded after 3 to 4 years. Bachelor programmes includes a written thesis requirement. Programmes leading to a Bachelor degree must be accredited according to the Law on the Establishment of a Foundation for the Accreditation of Study Programmes in Germany.<sup>8</sup>

Table 1: Institutions, programmes and degrees in the German Higher Education System



First degree programmes (Bachelor) lead to the degree of Bachelor of Arts (B.A.), Bachelor of Science (B.Sc.), Bachelor of Engineering (B.Eng.), Bachelor of Laws (LL.B.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.Mus.) or Bachelor of Education (B.Ed.). Bachelor degrees correspond to EQF Level 6.

#### 8.4.2 Master

Master is the second degree after another 1 to 2 years. Masters programmes can be differentiated by the profile types "practice-oriented" and "research-oriented". Higher Education Institutions define the profile of each Masters programme.

The Master's degree programme includes a thesis requirement. Programmes leading to a Master's degree must be accredited according to the Law on the Establishment of a Foundation for the Accreditation of Study Programmes in Germany.<sup>3</sup>

Second degree programmes (Masters) lead to the degree of Master of Arts (M.A.), Master of Science (M.Sc.), Master of Engineering (M.Eng.), Master of Laws (LL.M.), Master of Fine Arts (M.F.A.), Master of Music (M.Mus.) or Master of Education. Continuing education Masters programmes may have different designations (e.g. MBA).

A Master's degree corresponds to EQF Level 7.

#### 8.4.3 Integrated "long" one-tier programmes:

##### *Diplom, Magister Artium, Staatsprüfung*

An integrated study programme is either mono-disciplinary (Diplom degrees, most programmes completed by a *Staatsprüfung*) or comprises a combination of either two major or one major and two minor fields (*Magister Artium*). The first stage (1.5 to 2 years) focuses on broad orientations and foundations of the field(s) of study. An Intermediate Examination (*Diplom-Vorprüfung* for Diplom degrees; *Zwischenprüfung* or credit requirements for the *Magister Artium*) is prerequisite to enter the second stage of advanced studies and specializations. Degree requirements include submission of a thesis (up to 6 months duration) and comprehensive final written and oral examinations. Similar regulations apply to studies leading to a *Staatsprüfung*. Their qualifications corresponds to those of a Master's programme.

- The standard time to degree at Universities is 4 to 5 years in integrated programmes (*Diplom, Magister Artium*) or 3 to 6.5 years (*Staatsprüfung*). *Diplom* programmes lead to degrees in engineering, natural sciences and economics/business administration. The respective degree in arts and humanities is usually *Magister Artium* (M.A.). In social sciences, the type of awarded degree depends on the tradition of each university in this respect. Law, medical, and pharmaceutical programmes are completed with a *Staatsprüfung*. In some states, this also applies for teaching degree programmes.

All three qualifications (*Diplom, Magister Artium, Staatsprüfung*) are deemed equal in academic terms and enter into EQF level 7. They are the prerequisite for doctorates. *Universitäten* (U) may set further prerequisites (see 8.5).

- The standard time to degree at *Fachhochschulen* (universities of applied sciences (UAS)) is 4 years in integrated programmes and are completed with the degree *Diplom (FH)*. *Diplom (FH)* degrees correspond to EQF Level 6. While UAS are non-doctorate granting institutions, qualified graduates may apply for admission to doctoral studies at doctorate-granting institutions (see section 8.5).

- Studies at *Kunst-/Musikhochschulen* (Universities of Art/Music) are more diverse in their organization, depending on the field and individual objectives. In addition to *Diplom/Magister* degrees, their integrated degree programmes awards include certificates and certified examinations for specialized areas and professional purposes.

#### 8.5 Doctorate

Universities, equivalent higher education institutions and some universities of art/music are doctorate-granting institutions. Formal prerequisite for admission to doctoral work is a qualified Master (UAS and U), a *Magister* degree, a *Diplom*, a *Staatsprüfung*, or a foreign equivalent. Comparable degrees from universities of art and music can in exceptional cases (degree programmes such as music theory, musicology, pedagogy of arts and music, media studies) also formally qualify for doctoral work. Particularly qualified holders of a Bachelor or a *Diplom*

(FH) degree may also be admitted to doctoral studies without acquisition of a further degree by means of a procedure to determine their aptitude. The *Universitäten* (U), respectively the doctorate-granting institutions regulate entry to a doctorate as well as the structure of the procedure to determine aptitude. Admission further requires the acceptance of the PhD project by a professor as a supervisor.

Doctoral degrees correspond to EQF Level 8.

#### 8.6 Grading Scheme

The grading scheme in Germany usually comprises five levels (with numerical equivalents; intermediate grades may be given): "Sehr Gut" (1) = Very Good; "Gut" (2) = Good; "Befriedigend" (3) = Satisfactory; "Ausreichend" (4) = Sufficient; "Nicht ausreichend" (5) = Not Sufficient/Fail. The minimum passing grade is "Ausreichend" (4). Verbal designations of grades may vary in some cases and for doctoral degrees.

In addition, grade distribution tables as described in the ECTS Users' Guide are used to indicate the relative distribution of grades within a reference group.

#### 8.7 Access to Higher Education

The General Higher Education Entrance Qualification (*Allgemeine Hochschulreife, Abitur*) after 12 to 13 years of schooling allows for admission to all higher educational studies. Specialized variants (*Fachgebundene Hochschulreife*) allow for admission at *Fachhochschulen* (UAS), universities and equivalent higher education institutions, but only in particular disciplines. Access to degree programmes at UAS is also possible with a university of applied sciences entrance qualification (*Fachhochschulreife*), which can usually be acquired after 12 years of schooling. Admission to degree programmes at universities of art/music and comparable degree programmes at other higher education institutions, and admission to a degree programme in sports may be based on other or additional evidence demonstrating individual aptitude.

Applicants with a vocational qualification but without a school-based higher education entrance qualification are entitled to a general higher education entrance qualification and thus to access to all study programmes, provided they have obtained advanced further training certificates in particular state-regulated vocational fields (e.g. *Meister/Meisterin im Handwerk; Industriemeister/in, Fachwirt/in (HK und HWK), staatlich geprüfte/r Betriebswirt/in, staatliche geprüfte/r Gestalter/in, staatlich geprüfte/r Erzieher/in*). Vocationally qualified applicants can obtain a *Fachgebundene Hochschulreife* (specialized higher education entrance) after completing a state-regulated vocational education of at least two years' duration plus professional practice of normally at least three years' duration, after having successfully passed an aptitude test at a higher education institution or other state institution; the aptitude test may be replaced by successfully completed trial studies of at least one year.<sup>6</sup>

Higher Education Institutions may in certain cases apply additional admission procedures.

#### 8.8 National Sources of Information

- *Kultusministerkonferenz (KMK)* [Standing Conference of Ministers for Education of the Länder in the Federal Republic of Germany]; Graurheindorfer Str. 157, D-53117 Bonn; Tel.: +49 228/501-0; Fax: +49 228/501-777
- *Zentralstelle für ausländisches Bildungswesen (ZaB)* [Central Office for Foreign Education] as German NARIC; www.kmk.org; Email:
- *Deutsche Informationsstelle der Länder im EURYDICE-Netz* [German Information Office in the EURYDICE Network]; www.kmk.org; Email:eurydice@kmk.org
- *Hochschulrektorenkonferenz (HRK)* [German Rectors' Conference]; Ahstr. 39, D-53175 Bonn; Fax: +49 228/887-110; Tel.: +49 228/887-0; www.hrk.de; Email: post@hrk.de
- *Hochschulkompass* [Higher Education Compass of the German Rectors' Conference] including comprehensive information on institutions, degree programmes, etc. (www.hochschulkompass.de)

<sup>1</sup> The following information on higher education in Germany includes only aspects directly applying to the Diploma Supplement. Last revised: 03/2019.

<sup>2</sup> *Berufsakademien* (Academies of Cooperative Education) are not universities and they are not available in all federal states. They offer courses in close cooperation with private companies. Graduates receive a state-recognized qualification and complete a vocational training in a company. Some Academies of Cooperative Education offer Bachelor's degrees, which can be equated with a university degree if they have been accredited by a German accreditation agency.

<sup>3</sup> German Qualifications Framework for Higher Education Degrees (Resolution of the Standing Conference of Ministers for Education of 16/02/2017).

<sup>4</sup> German Qualifications Framework for Lifelong Learning, Joint Resolution of the Standing Conference of Ministers for Education, the Federal Ministry of Education and Research, the Standing Conference of Ministers for Economic Affairs and the Federal Ministry of Economics (Resolution of the Standing Conference of Ministers for Education). Detailed information on www.dqr.de.

<sup>5</sup> Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning - European Qualifications Framework for Lifelong Learning - EQF).

<sup>6</sup> Specimen statutory order pursuant to Article 4, subsections 1 - 4 of the Interstate Study Programme Accrediting Agreement (Resolution of the Standing Conference of Ministers for Education of 7 December 2017).

<sup>7</sup> Interstate Agreement on the Organization of a Common Accreditation System for Quality Assurance in Teaching and Learning at German Higher Education Institutions (Interstate Study Programme Accrediting Agreement, Resolution of the Standing Conference of Ministers for Education of 8 December 2016), entry into force on 01 January 2018.

Diploma Supplement - «vorname» «name»

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<sup>11</sup> See footnote 7.

<sup>12</sup> See footnote 7.

<sup>13</sup> Access to higher education for applicants with a vocational qualification, but without a school-based higher education entrance qualification (Resolution of the Standing Conference of the Ministers of Education of 6 March 2009).

Date of certification: «datum»

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