
Prüfungsordnung für den Bachelorstudiengang Orthobionik (Besonderer Teil 1)

Fakultät Ingenieurwissenschaften und Gesundheit

Die Prüfungsordnung Besonderer Teil für den Bachelorstudiengang Orthobionik vom 27. November 2023 in der Fassung vom 14. Februar 2024 tritt gemäß Fakultätsratsbeschluss der Fakultät Ingenieurwissenschaften und Gesundheit vom 14. Februar 2024 und Genehmigung des Präsidiums vom 16. April 2024 nach ihrer hochschulöffentlichen Bekanntmachung in Kraft. Die hochschulöffentliche Bekanntmachung erfolgte am 17. April 2024.

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§ 1 Dauer und Verlauf des Studiums

- (1) Die Regelstudienzeit des Bachelorstudiengangs Orthobionik beträgt acht Semester.
- (2) Der Gesamtumfang der Pflicht- und Wahlpflichtbereiche beträgt 240 Leistungspunkte (Credits). Das Studium setzt sich aus 28 Pflichtmodulen (234 Credits) sowie einem Wahlpflichtmodul (sechs Credits) zusammen. Eine Modulübersicht inklusive Angaben zum Workload wird in Anlage 1 aufgezeigt.
- (3) Studierende müssen aus dem Angebot der zentralen Einrichtung HAWK plus Wahlpflichtmodule im Umfang von sechs Credits auswählen.

§ 2 Prüfungen

- (1) Die für die Bachelorprüfung zu erbringenden Prüfungen werden studienbegleitend erbracht und ergeben sich aus der Modulübersicht (Anlage 1). Neben den Prüfungsarten ist in der Modulübersicht bei zusammengesetzten Modulprüfungen die Gewichtung zur Berechnung der Gesamtmodulnote ausgewiesen. Die Gesamtnote des Studienabschlusses ergibt sich aus den Modulnoten, die gemäß der auf sie entfallenden Credits gewichtet werden.
- (2) Eine Abmeldung von Prüfungen (vgl. § 7 Absatz 1 Allgemeiner Teil der Prüfungsordnung) ist bis zehn Tage vor dem jeweiligen Prüfungstermin möglich. Die Prüfungskommission informiert über das entsprechende Verfahren.
- (3) Aufgrund eines speziellen Studienzeitplans in der Orthobionik (Planung der Werkstattzeiten für die berufspraktischen Anwendungen) können praktische Prüfungen abweichend vom allgemeinen Prüfungszeitraum erfolgen. Näheres regelt die Prüfungskommission.
- (4) Die Bestimmungen für die praktischen Studienbestandteile regelt die Ordnung über die berufspraktischen Module im Studiengang Orthobionik.

§ 3 Berufspraktischer Teil des Studiums

- (1) In das Studium sind Praxismodule (Berufspraktische Anwendungen I-V plus Praxissemester) von 2.430 Stunden integriert. Die Verantwortung für die berufspraktische Lehre und Abnahme von Prüfungsleistungen trägt die Hochschule.
- (2) Das in das Studium integrierte Praxissemester mit einem Umfang von 16 Wochen, 640 Stunden sowie die Begleitung und Reflexion der praktischen Studienzeit im Umfang von zwei Semesterwochenstunden findet im siebten Semester statt.
Die Praxisphase kann absolviert werden in orthopädietechnischen Versorgungsbetrieben sowie klinischen Versorgungszentren, welche zur berufspraktischen Ausbildung von individuellen Patientenversorgungen in der Orthopädietechnik geeignet sind.
- (3) Zum Praxissemester (Modul 5006) wird zugelassen, wer bis dahin drei von den fünf berufspraktischen Modulen erfolgreich absolviert hat. Näheres regelt die Prüfungsordnung Besonderer Teil 2 über die berufspraktischen Module im Studiengang Orthobionik in ihrer jeweils gültigen Fassung.

§ 4 Berufspraktische Abschlussprüfungen

- (1) Die prüfungsrechtlichen Vorgaben für die Abschlussprüfungen in der Orthetik sowie Prothetik orientieren sich an den Vorgaben für die Meisterprüfungsarbeit (Abschnitt 2, § 3 OrthBandMstrV 1994).
- (2) Die Zeit von der Genehmigung der Stücke Prothetik und Orthetik bis zur Ablieferung der Stücke beträgt 20 Werktage. Wird nur ein Stück erstellt, verringert sich die Bearbeitungszeit auf 10 Werktage. Im Einzelfall kann auf begründeten Antrag von der Prüfungsleistung zurückgetreten werden (z.B. bei Krankheit oder Ausfall der Patientin/des Patienten).
- (3) Eine Verlängerung der Bearbeitungszeit ist aufgrund der Kürze der Zeit und der Anforderungen nicht möglich. Ein Nachteilsausgleich bleibt hiervon unberührt.
- (4) Näheres regelt die Prüfungsordnung Besonderer Teil 2 über die berufspraktischen Module im Studiengang Orthobionik.
- (5) Zu den Berufspraktischen Abschlussprüfungen wird zugelassen, wer alle Module „Berufspraktische Anwendungen I-V“ erfolgreich bestanden hat.

§ 5 Bachelorarbeit und Kolloquium

- (1) Die Bearbeitungszeit für die Bachelorarbeit (Modul 4010) beträgt acht Wochen.
- (2) Zur Bachelorarbeit wird zugelassen, wer bis dahin mindestens 195 Credits erreicht hat.
- (3) Dem Antrag auf Zulassung zur Bachelorarbeit ist ein Vorschlag für den Themenbereich, dem das Thema für die Bachelorarbeit entnommen werden soll und eine Erklärung, ob die Bachelorarbeit als Einzel- oder Gruppenarbeit vergeben werden soll, beizufügen.
- (4) Zum Kolloquium wird zugelassen, wer bis dahin alle Module mit Ausnahme des Bachelormoduls erfolgreich absolviert hat, und wessen Bachelorarbeit von beiden Prüfenden vorläufig mit mindestens ausreichend bewertet wurde.
- (5) Das Kolloquium soll in der Regel innerhalb von acht Wochen nach Abgabe der Bachelorarbeit durchgeführt werden.
- (6) Das Modul Bachelorarbeit umfasst 15 Credits, wobei auf die Bachelorthesis neun Credits, das Kolloquium drei Credits und das Begleitseminar drei Credits entfallen. Die Modulnote errechnet sich aus Bachelorthesis und Kolloquium. Die Gewichtung von Thesis und Kolloquium für die Modulnote beträgt 3 zu 1.

§ 6 Hochschulgrad, Zeugnis

- (1) Der Studiengang schließt mit dem Kolloquium zur Bachelorarbeit ab.
- (2) Die Hochschule verleiht zum Abschluss den Hochschulgrad Bachelor of Science, abgekürzt B.Sc. Hierüber stellt die Hochschule eine Urkunde mit dem Datum des Zeugnisses aus (Anlage 2). Ein Muster des Bachelorzeugnisses enthält Anlage 3. Gleichzeitig mit dem Zeugnis wird den Studierenden ein Diploma Supplement in Englisch (Anlage 4) der aktuellen HRK-Vorlage entsprechend ausgehändigt.

§ 7 Inkrafttreten und Übergangsregelungen

- (1) Diese Prüfungsordnung tritt am Tag nach ihrer hochschulöffentlichen Bekanntmachung in Kraft und gilt für alle immatrikulierten Studierenden.

Anlage 1: Modulübersicht

Modul-Nr.	Modulname	Credits/Semester								Work-load	Prüf.art
		1	2	3	4	5	6	7	8		
6001	Medizinische Grundlagen I	6								180	K2,PÜ ²
4001	Einführung in die Orthobionik	9								270	R,HO ²
7001	Mathe	6								180	K2 / [2x K0,5] + H ¹
7002	Technische Mechanik	6								180	K2
9001	Einführung in die Grundlagen wissenschaftlichen Denkens und Arbeitens	3								90	EXZ
6002	Medizinische Grundlagen II		6							180	K2, PÜ ²
4002	Orthobionik I		6							180	K2
5001	Berufspraktische Anwendung I		6							180	2x BP ¹
7003	Elektrotechnik		6							180	K2
7004	Werkstoffkunde/Chemie		6							180	K2
6003	Medizinische Grundlagen III			6						180	K2/FS
6004	Gesundheitswesen und Medizinrecht			6						180	K2
4003	Orthobionik II			6						180	K2
5002	Berufspraktische Anwendung II			6						180	2x BP ¹
7005	Konstruktionslehre und CAD in der Medizintechnik			6						180	K1
8001	Betriebswirtschaftliche Grundlagen I				9					270	K2
4004	Orthobionik III				9					270	K2/FS
5003	Berufspraktische Anwendung III				12					360	3x BP ¹
4005	Orthobionik IV					6				180	K2/FS
4007	Wissenschaftliches Arbeiten in der Orthobionik					6				180	H, PR
5004	Berufspraktische Anwendung IV					6				180	2x BP ¹
8002	Betriebswirtschaftliche Grundlagen II					6				180	FS
9002	Individuelles Profilstudium (HAWK plus)					6				180	diverse
4008	Wissenschaft und Technologie zur Entwicklung mod. Versorgungskonzepte						9			270	KE
4006	Orthobionik V						9			270	H,PR
5005	Berufspraktische Anwendung V						12			360	4x BP ¹
5006	Praxissemester							30		900	PB, 2x BP ¹
4009	Studienprojekt								15	450	PA
4010	Bachelormodul								15	450	BS ² , Thesis, Koll. ³

¹ Die einzelnen Prüfungsleistungen gehen jeweils zu gleichen Teilen in die Gesamtnote des Moduls ein.

² unbenotete Studienleistung

³ Die Gewichtung von Bachelorarbeit zu Kolloquium beträgt 3:1.

Abkürzung	Bezeichnung
BP	Berufspraktische Prüfungsstücke
BS	Begleitseminar
EXZ	Exzerpt
FS	Fallstudie
H	Hausarbeit
HO	Hospitation
K0,5/K1/K2	Klausur (0,5 Std./1 Std./2.Std.)
KE	Konzeptentwicklung
Koll.	Kolloquium
PA	Projektarbeit
PB	Praxisbericht
PR	Präsentation
PÜ	Praktische Übung
R	Referat
Thesis	Bachelorthesis
/	oder

Anlage 2: Bachelorurkunde (Muster)

BACHELORURKUNDE

Die HAWK
Hochschule für angewandte Wissenschaft und Kunst
Hildesheim/Holzminde/Göttingen
Fakultät Ingenieurwissenschaften und Gesundheit

verleiht mit dieser Urkunde

geboren am **«Vorname» «Nachname»**
«Geburtsdatum» in «Geburtsort»

den Hochschulgrad **Bachelor of Science**
abgekürzt B. Sc.,
nachdem die Abschlussprüfung im Studiengang

Orthobionik

bestanden wurde.

Göttingen, den «Datum»

«Dekan*in»
Dekan*in

«Studiendekan*in»
Studiendekan*in

Anlage 3: Bachelorzeugnis (Muster)

BACHELORZEUGNIS

geboren am **«Vorname» «Nachname»**
«Geburtsdatum» in «Geburtsort»

hat die Bachelorprüfung im Studiengang

Orthobionik

der Fakultät Ingenieurwissenschaften und Gesundheit
bestanden.

Thema der Bachelorarbeit:

	Credits	Gesamtnote
Gesamtbewertung	000	0,0 (in Worten)

Die Gesamtnote ergibt sich aus den Modulnoten gemäß Anlage zum Bachelorzeugnis.

Göttingen, den «PruefDatum»

«Studiendekan*in»
Studiendekan*in

ANLAGE ZUM BACHELORZEUGNIS

Studiengang

Vorname Nachname
geboren am 00.00.0000 in «Ort»

Module	Credits	Note
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Pflicht- und Wahlpflichtmodule

0,0
0,0
0,0
0,0
0,0
0,0
0,0
0,0
0,0
0,0

Individuelles Profilstudium

0,0
0,0

Bachelorarbeit

0,0

Gesamtnote

Anlage 4: Diploma Supplement (Muster)

DIPLOMA SUPPLEMENT

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.

1. Information identifying the holder of the qualification

1.1	Family name(s)	Nachname	1.2	First name(s)	Vorname
1.3	Date of birth	oo.oo.oooo	1.4	Student ID Number or code	oooooo

2. Information identifying the qualification

- 2.1 Name of Qualification and (if applicable) title conferred (in original language)
Bachelor of Science– B.Sc.
Title Conferred
Bachelor of Science –Studiengang (dt), B.Sc. Orthobionik
(Bachelor of Science – Studiengang (engl.), B.Sc. - Orthobionics)
- 2.2 Main field(s) of study for the qualification
Orthobionics
- 2.3 Name and status of awarding institution (in original language)
HAWK Hochschule für angewandte Wissenschaft und Kunst
Hildesheim/Holzminde/Göttingen
Fakultät Ingenieurwissenschaften und Gesundheit (Faculty of Engineering and Health)
Status (Type/Control)
University of Applied Sciences and Arts / State Institution
- 2.4 Name and status of institution administering studies (in original language)
[as above]
- 2.5 Language(s) of instruction/examination
German

3. Information on the level and duration of the qualification

- 3.1 Level of the qualification
Bachelor programme, undergraduate, first degree, by research with thesis
- 3.2 Official duration of programme in credits and/or years
Four years, 8 semesters, 240ECTS
- 3.3 Access requirement(s)
General Higher Education Entrance Qualification or Entrance Qualification to Universities of Applied Sciences, or foreign equivalent.

4. Information on the programme completed and the results obtained

- 4.1 Mode of Study
Full Time Study
In the event of part-time study (individual application required), the official length of the programme will be extended accordingly.

4.2 Programme learning outcomes

See Transcript of Records enclosed.

The bachelor's degree programme in Orthobionics combines practical training in individual patient care with orthopaedic technical aids with in-depth academic expertise to build problem-solving skills. The programme's interdisciplinary content is designed to meet future job profile requirements for Orthobionics specialists.

Graduates

- are able to treat patients individually who suffer from diseases of the musculoskeletal system and disabled people with orthopaedic devices (Orthotic and prosthetic devices for all supply levels of the human body as well as rehab supplies)
- are able to work as service providers for people who have a physical handicap. And holistically evaluate and solve problems that arise from a person's handicap.
- are able to develop individual fitting concepts with the help of scientific disciplines medicine, orthobionics, biomechanics, engineering sciences, business administration as well as their significance for the clinical-practical and scientific professional activity in orthopaedic technology.
- have in-depth medical expertise, in anatomy, physiology, pathology, neurology.
- have a sound biomechanical knowledge to qualitatively perform and evaluate individual patient fittings for all levels of care and to advance research in orthopaedic technology.
- have a basic knowledge of patient communication, patient management
- have a broad basic knowledge in engineering sciences to understand the use and functionality of materials and functional components in orthopaedic technology and to use digital manufacturing technology.
- know the essential legal principles for placing medical devices on the market as well as the structure of the health care system and basic medical law.
- are able to analyse fundamental management issues and to develop appropriate courses of action. Furthermore, graduates are in a position to set up a business, take on management responsibility and guide trainees.
- are prepared for interprofessional cooperation in their professional lives.
- have competencies of scientific work, critical thinking and independent action based on ethical standards.
- are able to develop evidence-based concepts and critically reflect on orthopaedic fittings for individual patients.
- are able to question their actions and check them for scientific evidence
- are able to develop new innovative approaches to solutions for the further development of orthopedic technical care, analyze them critically and implement them in their practical work
- are able to work, research and communicate scientifically in national and international contexts
- have a self-critical and continuously reflected attitude which enables them to exercise a professional, detached occupational role, taking into account their personality traits and on the basis of a reflected humanistic and democratic view of the world and humanity
- are able to critically analyze social developments and play a decisive role in shaping solutions with a sense of responsibility

4.3 Programme details, individual credits gained and grades/marks obtained

Please refer to the Certificate (Bachelorzeugnis) for a list of courses and grades.

4.4 Grading system and , if available, grade distribution table

Absolute grading scheme: "Sehr Gut" (1,0; 1,3) = Very Good; "Gut" (1,7; 2,0; 2,3) = Good; "Befriedigend" (2,7; 3,0; 3,3) = Satisfactory; "Ausreichend" (3,7; 4,0) = Pass; "Nicht ausreichend" (5,0) = Fail

Statistical distribution of grades: **grading table**

4.5 Overall classification of the qualification **o,o**

The final grade is based on the grades awarded during the study programme and that of the final thesis (with oral component). Please refer to the Certificate (Bachelorzeugnis).

When there are no marks given, not enough results are available yet to determine ECTS-grades.

5. Information on the function of the qualification

5.1 Access to further study

The degree entitles its holder to apply for admission to master programmes.

5.2 Access to a regulated profession (if applicable)

The B.Sc. in Orthobionics entitles its holder to the legally protected professional title "Bachelor of Science" and to exercise professional work in the field(s) for which the degree was awarded.

6. Additional information

6.1 Additional information

Non-academic acquired competencies were credited in an amount of **00** credits in the following modules: ...

6.2 Further information sources

www.hawk.de

7. Certification

This Diploma Supplement refers to the following original documents:

Document on the award of the academic degree

(Bachelorurkunde)

00.00.0000

Certificate (Bachelorzeugnis)

00.00.0000

Transcript of Records dated from

Certification Date:

00.00.0000

(Official Seal / Stamp)

Dean of Studies

8. National higher education system

The information on the national higher education system on the following pages provides a context for the qualification and the type of higher education institution that awarded it.

8. Information on the German higher education systemⁱ

8.1 Types of institutions and institutional status

Higher education (HE) studies in Germany are offered at three types of Higher Education Institutions (HEI).ⁱⁱ

- *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 (FH)/Hochschulen für Angewandte Wissenschaften (HAW)* (Universities of Applied Sciences, UAS) concentrate their study programmes in engineering and other technical disciplines, business-related studies, social work, and design areas. The common mission of applied research and development implies an application-oriented focus of studies, which includes 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.

8.2 Types of programmes and degrees awarded

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 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. Since 1998, two-tier degrees (Bachelor's and Master's) have been introduced in almost all study programmes. This change is designed to provide enlarged variety and flexibility for students in planning and pursuing educational objectives; it also enhances international compatibility of studies.

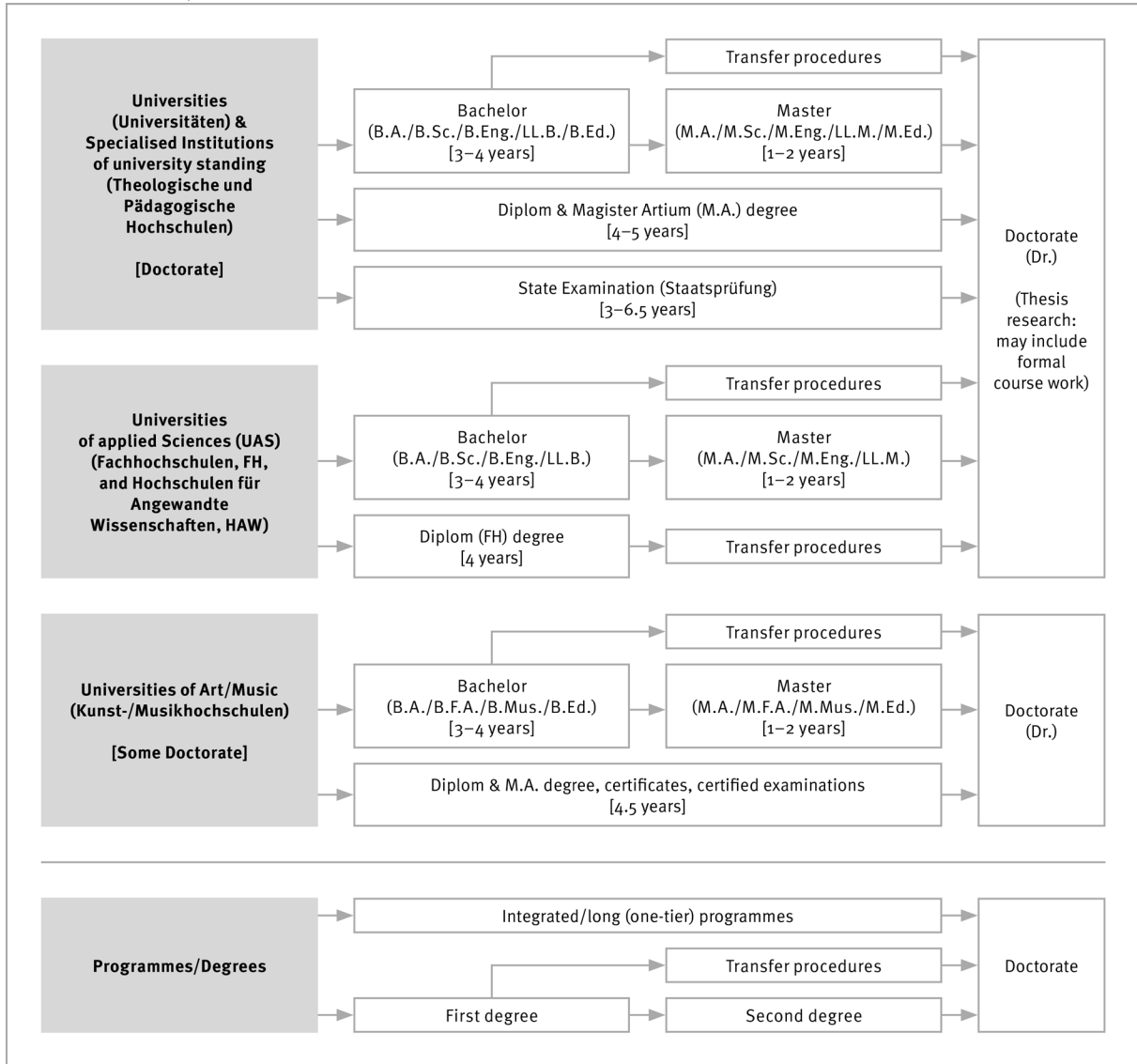
The German Qualifications Framework for Higher Education Qualifications (HQR)ⁱⁱⁱ describes the qualification levels as well as the resulting qualifications and competences of the graduates. The three levels of the HQR correspond to the levels 6, 7 and 8 of the German Qualifications Framework for Lifelong Learning^{iv} and the European Qualifications Framework for Lifelong Learning^v.

For details cf. Sec. 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 organisation 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).^{vi} In 1999, a system of accreditation for Bachelor's and Master's programmes has become operational. All new programmes have to be accredited under this scheme; after a successful accreditation they receive the seal of the Accreditation Council.^{vii}

Table 1: Institutions, programmes and degrees in German higher education



8.4 Organisation and structure of studies

The following programmes apply to all three types of institutions. Bachelor's and Master's study programmes 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 organisation 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's degree programmes lay the academic foundations, provide methodological competences and include skills related to the professional field. The Bachelor's degree is awarded after 3 to 4 years. The Bachelor's degree programme includes a thesis requirement. Study programmes leading to the Bachelor's degree must be accredited according to the Interstate study accreditation treaty.^{viii}

First degree programmes (Bachelor) lead to 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.). The Bachelor's degree corresponds to level 6 of the German Qualifications Framework/ European Qualifications Framework.

8.4.2 Master

Master is the second degree after another 1 to 2 years. Master's programmes may be differentiated by the profile types "practice-oriented" and "research-oriented". Higher Education Institutions define the profile. The Master's degree programme includes a thesis requirement. Study programmes leading to the Master degree must be accredited according to the Interstate study accreditation treaty.^{ix}

Second degree programmes (Master) lead to Master of Arts (M.A.), Master of Science (M.Sc.), Master of Engineering (M.Eng.), Master of Laws (L.L.M.), Master of Fine Arts (M.F.A.), Master of Music (M.Mus.) or Master of Education (M.Ed.). Master's programmes which are designed for continuing education may carry other designations (e.g. MBA).

The Master degree corresponds to level 7 of the German Qualifications Framework/ European Qualifications Framework.

8.4.3 Integrated "long" programmes (one-tier): *Diplom* degrees, *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 specialisations. 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*. The level of qualification is equivalent to the Master's level.

- Integrated studies at *Universitäten (U)* last 4 to 5 years (*Diplom* degree, *Magister Artium*) or 3.5 to 6.5 years (*Staatsprüfung*).

The *Diplom* degree is awarded in engineering disciplines, the natural sciences as well as economics and business. In the humanities, the corresponding degree is usually the *Magister Artium* (M.A.). In the social sciences, the practice varies as a matter of institutional traditions. Studies preparing for the legal, medical and pharmaceutical professions are completed by a *Staatsprüfung*. This applies also to studies preparing for teaching professions of some *Länder*.

The three qualifications (*Diplom*, *Magister Artium* and *Staatsprüfung*) are academically equivalent and correspond to level 7 of the German Qualifications Framework/ European Qualifications Framework.

They qualify to apply for admission to doctoral studies. Further prerequisites for admission may be defined by the Higher Education Institution, cf. Sec. 8.5.

- Integrated studies at *Fachhochschulen (FH)*/ *Hochschulen für Angewandte Wissenschaften (HAW)* Universities of Applied Sciences (UAS) last 4 years and lead to a *Diplom (FH)* degree which corresponds to level 6 of the German Qualifications Framework/ European Qualifications Framework.

Qualified graduates of FH/HAW/UAS may apply for admission to doctoral studies at doctorate-granting institutions, cf. Sec. 8.5.

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

8.5 Doctorate

Universities as well as specialised institutions of university standing, some of the FH/HAW/UAS and some Universities of Art/Music are doctorate-granting institutions. Formal prerequisite for admission to doctoral work is a qualified Master's degree (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 (study 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's degree 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 universities 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 Dissertation research project by a professor as a supervisor.

The doctoral degree corresponds to level 8 of the German Qualifications Framework/ European Qualifications Framework.

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) = Non-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. Specialised variants (*Fachgebundene Hochschulreife*) allow for admission at *Fachhochschulen (FH)*/*Hochschulen für Angewandte Wissenschaften (HAW)* (UAS), universities and equivalent higher education institutions, but only in particular disciplines. Access to study programmes at *Fachhochschulen (FH)*/*Hochschulen für Angewandte Wissenschaften (HAW)* (UAS), is also possible with a *Fachhochschulreife*, which can usually be acquired after 12 years of schooling. Admission to study programmes at Universities of Art/Music and comparable study programmes at other higher education institutions as well as admission to a study programme in sports may be based on other or additional evidence demonstrating individual aptitude.

Applicants with a qualification in vocational education and training 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 (IHK), Betriebswirt/in (IHK) und (HWK), staatlich geprüfte/r Techniker/in, staatlich geprüfte/r Betriebswirt/in, staatlich geprüfte/r Gestalter/in, staatlich geprüfte/r Erzieher/in*). Vocationally qualified applicants can obtain a *Fachgebundene Hochschulreife* 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's duration.^x

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

8.8 National sources of information

- *Kultusministerkonferenz (KMK)* [Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany]; Graurheindorfer Str. 157, D-53117 Bonn; Phone: +49[0]228/501-0, www.kmk.org; E-Mail: hochschulen@kmk.org
- Central Office for Foreign Education (ZaB) as German NARIC; www.kmk.org; E-Mail: zab@kmk.org
- German information office of the *Länder* in the EURYDICE Network, providing the national dossier on the education system; www.kmk.org; E-Mail: eurydice@kmk.org
- *Hochschulrektorenkonferenz (HRK)* [German Rectors' Conference]; Leipziger Platz 11, D-10117 Berlin, Phone: +49 30 206292-11; www.hrk.de; E-Mail: post@hrk.de
- "Higher Education Compass" of the German Rectors' Conference features comprehensive information on institutions, programmes of study, etc. (www.higher-education-compass.de)

ⁱ The information covers only aspects directly relevant to purposes of the Diploma Supplement.

ⁱⁱ *Berufsakademien* are not considered as Higher Education Institutions, they only exist in some of the *Länder*. They offer educational programmes in close cooperation with private companies. Students receive a formal degree and carry out an apprenticeship at the company. Some *Berufsakademien* offer Bachelor courses which are recognised as an academic degree if they are accredited by the Accreditation Council.

ⁱⁱⁱ German Qualifications Framework for Higher Education Degrees. (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 16 February 2017).

^{iv} German Qualifications Framework for Lifelong Learning (DQR). Joint resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany, the German Federal Ministry of Education and Research, the German Conference of Economics Ministers and the German Federal Ministry of Economics and Technology (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 15 November 2012). More information at www.dqr.de

^v Recommendation of the European Parliament and the European Council on the establishment of a European Qualifications Framework for Lifelong Learning of 23 April 2008 (2008/C 111/01 – European Qualifications Framework for Lifelong Learning – EQF).

^{vi} Specimen decree pursuant to Article 4, paragraphs 1 – 4 of the interstate study accreditation treaty (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 7 December 2017).

^{vii} Interstate Treaty on the organisation of a joint accreditation system to ensure the quality of teaching and learning at German higher education institutions (Interstate study accreditation treaty) (Decision of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 8 December 2016), Enacted on 1 January 2018.

^{viii} See note No. 7.

^{ix} See note No. 7.

^x 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 and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 6 March 2009).