

**Departmental Examination Regulations for the
Master of Geomatics
of the Neubrandenburg University of Applied Sciences
dated 20 May 2021**

First amendment statute dated: 22 May 2023

This version is an unofficial version that incorporates the above amendment statute. The text published by the University remains the authoritative and legally binding version.

On the basis of the Framework Examination Regulations of the Neubrandenburg University of Applied Sciences dated 16 August 2017 combined with section 2(1) and section 38(1) of the State University Act of Mecklenburg-Vorpommern in the version of the notification dated 25 January 2011 (Official Gazette of the State of Mecklenburg-Vorpommern, GVOBl. M-V, p 18), last amended by Article 1 of the Act dated 28 September 2020 (GVOBl. M-V, p 878), the Neubrandenburg University of Applied Sciences has issued the following Departmental Examination Regulations for the Master of Geomatics as a statute.

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Section 1

Basic principle, higher education degree

(Section 2 Framework Examination Regulations)

(1) The provisions and regulations of the Framework Examination Regulations of the Neubrandenburg University of Applied Sciences apply in addition to the provisions of these Departmental Examination Regulations.

(2) The Master's programme at the Neubrandenburg University of Applied Sciences in the course 'Geomatics' is awarded with the professional qualification:

Master of Engineering – abbreviation: MEng

Section 2

Normal duration of study

(Section 3 Framework Examination Regulations)

(1) The normal duration of study for the Master's programme until attainment of the appropriate higher education qualification is 1.5 years (three semesters), including the time for the full Master's examination. The time required to prepare the final thesis is also included in this period.

(2) For international students who have not yet completed a work placement, the normal duration of study can be extended by one semester. The Examination Board makes a decision in this regard on an individual basis.

(3) The programme is a full-time course.

Section 3

Entry requirements

(Section 7 Framework Examination Regulations)

(1) Entry to the Master of Geomatics is regulated by the State University Act and the Enrolment Regulations of the Neubrandenburg University of Applied Sciences.

(2) The following prerequisites must be satisfied to be granted entry to the Master of Geomatics:

1. completion of a Bachelor degree in a related field of study with 210 ECTS credits or
2. evidence of an academic qualification recognised on the basis of section 10

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3. of the Framework Examination Regulations as equivalent or completion of a diploma qualification in an affiliated course at a university in the Federal Republic of Germany.

(3) Course applicants must provide evidence of sufficient proficiency in English to B2 level of the Common European Framework of Reference for Languages as follows:

- IELTS test
- TOEFL test
- Cambridge Certificate (B2 First)

(4) A period of at least three years living in an English-speaking region, an initial tertiary qualification with English as the primary teaching language or equivalent attainments are also valid evidence of sufficient English language proficiency. Native speakers are exempt from this obligation to provide proof of language proficiency. In case of doubt, the Examination Board decides about recognition of sufficient language proficiency when requested by the Enrolments and Examination Office. Knowledge of German is recommended.

(5) Deviating from paragraph 2(1), if it is not possible to provide evidence of 210 ECTS credits for a Bachelor course or the necessary subject-related content, it is possible to obtain additional ECTS credits or to subsequently acquire any missing subject-related content by attending modules or classes at the Neubrandenburg University of Applied Sciences. For this purpose, the Examination Board makes individual recommendations for compulsory modules and/or compulsory elective modules in the Faculty of Landscape Sciences and Geomatics to ensure that the qualification objectives are achieved in full. Evidence of having attended additional modules or classes is defined as a prerequisite in the enrolment procedure. In case of doubt, the Examination Board decides whether the prerequisite has been met. The normal duration of study is extended by one semester.

(6) If the consecutive Master's programme is to be completed immediately after the previous Bachelor's course and the Bachelor or other degree certificate is still not available after the application deadline has passed for reasons for which the applicant is not responsible, applicants can be granted provisional entry to the course if they have acquired at least 180 ECTS credits.

Section 4

Compulsory attendance

(Section 5 Framework Examination Regulations)

(1) The assessment prerequisites included in the module descriptions (Appendix 2 of the

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Departmental Study Regulations) define which modules and classes have compulsory attendance or an assessment prerequisite.

(2) The requirement to regularly participate is considered satisfied if no more than 20 per cent of the semester credit hours for the classes has been missed.

(3) Evidence of participation and having satisfied the requirement for compulsory attendance must be submitted by students when registering for examinations. The evidence is provided by the lecturers.

(4) If a student has provided plausible written evidence that, for reasons beyond the student's control, more than 20 per cent of the sessions for the class has been missed, the lecturer decides whether the actual participation time can still be rated as regular participation. Missing time may have to be made up with an appropriate equivalent achievement. The type of compensatory achievement is defined by the lecturer.

(5) If the requirement for regular attendance is not met, the prerequisite for admittance to the module examination is not satisfied.

Section 5

Types of assessments, alternative assessment

(Sections 12 and 15 Framework Examination Regulations)

(1) Projects and presentations are included in the Master of Geomatics as an additional alternative assessment as defined in section 15(1) of the Framework Examination Regulations.

(2) Projects form the basis of academic work and are derived from current real-world problems in geodesy, geoinformatics, engineering surveying and measuring technology as well as process-oriented operations in official and business practice. As part of the projects, students learn and consolidate the practical, regulatory and academic material that is needed to complete tasks that are typical of the discipline and develop the ability to carry out multi-disciplinary collaborative and independent work. Assessments involve completing measurement reports, calculations, graphic representations, programming code and/or functional models, supplemented by written reports. The project results must be presented in a format typical of the discipline for an expert audience. The examiners decide about any exceptions.

(3) The presentation includes independent, systematic review of a topic or issue that incorporates relevant literature or presentation of work and practical results. A presentation is of 15 to 30 minutes' duration.

Section 6

Examination dates

(Section 18a Framework Examination Regulations)

The number, type and scope of the examinations to be taken in a particular semester are defined in the study and examination schedule (Appendix 1).

Section 6a

Majors, compulsory elective modules, teaching/assessment language

(Section 22 Framework Examination Regulations)

(1) For the Master's programme, along with the mathematics and general disciplines, compulsory elective modules must be selected in one of the three possible majors: geodesy and land surveying, geoinformatics, and engineering surveying and measuring technology. The Enrolments and Examination Office must be notified of the selected major at the start of study. For the Master of Geomatics, the major can be changed once during the course upon application to the Examination Board. A change must be submitted at the latest when registering the Master's thesis.

(2) In the Master of Geomatics, students must select nine compulsory elective modules. For the majors, students must choose at least four compulsory elective modules from one major. One compulsory elective module each must be chosen from the mathematics and general disciplines. For the remaining three compulsory elective modules, which can be freely chosen, at most one module can be substituted by:

1. a Master's module from other courses in the same faculty or
2. a Master's module from the teaching programme offered by other faculties.

(3) If more than nine compulsory elective modules are completed, these can be included as additional modules in the certificate without being considered in the final grade. More detailed provisions are contained in section 23 of the Framework Examination Regulations.

(4) The teaching and assessment language is English as a rule.

Section 7

Grading of modules, overall grade

(Section 26 Framework Examination Regulations)

(1) The study and examination schedule (Appendix 1) and the module descriptions

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(Appendix 2 of the Departmental Study Regulations) specify

1. which modules are graded
2. which modules are ungraded and are assessed only as 'passed' or 'failed'
3. which of the graded modules are included in the overall final grade.

(2) Academic tasks and assessments must as a rule be completed in English. They may be completed in a different language, with the approval of the examiner, if the class was also conducted in this language.

Section 8

Master's thesis and Master's colloquium

(Sections 24 and 24a Framework Examination Regulations)

(1) To be admitted to the Master's thesis, candidates must have been enrolled at least since the previous semester in the Geomatics course at the Neubrandenburg University of Applied Sciences.

(2) Admission to the Master's thesis assumes that modules in the Master of Geomatics totalling at least 42 ECTS credits have been passed. If the Examination Board has defined individual prerequisites for the student according to section 3(5), admission to the Master's thesis assumes that these prerequisites are also met in full.

(3) Along with the Master's thesis, another requirement for successful completion of the course is participation in a final colloquium (Master's colloquium). The colloquium is worth seven ECTS credits.

(4) The study and examination schedule specifies when the thesis is prepared during studies. As a rule, it is written in the third semester.

(5) The time required to complete the Master's thesis is 5 months. The topic, definition of the task and the scope must be restricted by the primary adviser to ensure compliance with the deadline for submission of the Master's thesis. A total of 23 ECTS credits are awarded for successfully passing the Master's thesis.

(6) The topic, definition of the task and scope of the Master's thesis must be restricted by the primary adviser to ensure compliance with the deadline for assessing the thesis. A total of 30 ECTS credits are awarded for successfully passing the Master's thesis.

(7) It is possible to register and complete the Master's thesis in an earlier or later semester unless the other admission requirements defined in paragraphs 1 and 2 are not satisfied.

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For later registration for the Master's thesis, section 18b of the Framework Examination Regulations shall apply.

(8) In justified exceptions, the time allowed to complete the Master's thesis may be extended as defined in section 11(7) of the Framework Examination Regulations upon application by the candidate. An extension of up to 30 days in addition to the time provided to complete the thesis is permitted.

(9) The thesis must be graded by two examiners. One of the examiners shall be the supervisor.

Section 9

Repeating examinations

(Sections 27 and 29 Framework Examination Regulations)

(1) All students in the Master of Geomatics can repeat module examinations on the basis of section 29 of the Framework Examination Regulations.

(2) The Examination Board can also decide whether to acknowledge exceptional hardship that requires a fourth attempt at an examination. A substantiated application for special consideration must be submitted. When assessing applications for special consideration, the Examination Board must consider previous achievements by the candidate and estimate the likelihood of success with this final repeat examination.

(3) Repeat examinations are taken in the standard examination period of the following semester. Section 18(1) of the Framework Examination Regulations shall apply accordingly, while section 18(4)(3) of the Framework Examination Regulations shall remain unaffected.

Section 10

Effective date

(1) These Departmental Examination Regulations come into effect after publication within the Neubrandenburg University of Applied Sciences.

(2) These Departmental Examination Regulations apply for the first time for those students who are enrolled in the Master of Geomatics in winter semester 2021/2022.

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Issued on the basis of the decision by the Senate of the Neubrandenburg University of Applied Sciences dated 12 May 2021 and the approval of the Chancellor of the Neubrandenburg University of Applied Sciences dated 20 May 2021.

The Chancellor
of the Neubrandenburg University of Applied Sciences
Prof. Dr Gerd Teschke

Appendix 1 to the first statute to amend the Departmental Study and Departmental Examination Regulations for the Master of Geomatics

- Study and examination schedule

Module ID	Module name	Module type	Allocated semester	Teaching format	CH	Credits	Assessment	Graded/ relevant for final grade ²
Compulsory elective modules								
(at least four modules must be selected from each of one of the majors Geodesy, Geoinformatics, and Engineering Surveying and Measuring Technology)								
Geodesy								
GEO.21.006	Physical Geodesy	CEM	1	V	2	6	M30 or SCH120	yes/yes
				S	2			
GEO.21.009	Real Estate Registry	CEM	2	V	2	6	M30	yes/yes
				S	2			
GEO.21.015	Engineering Geodesy	CEM	2	V	2	6	M30	yes/yes
				Ü	2			
GEO.21.016	Special Methods of Adjustment and Statistics	CEM	1	V	2	6	SCH120 or M30 or AHA50	yes/yes
				Ü	2			
GEO.23.031	Measuring Technology	CEM	1	V	2	6	M30	yes/yes
				Ü	2			
GEO.21.032	Land Readjustment	CEM	1	V	2	6	M30	yes/yes
				S	2			
GEO.21.046	Unmanned Aerial Vehicles	CEM	1	V	2	6	SCH120	yes/yes
				Ü	1			
GEO.21.047	Advanced Surveying 1	CEM	1	V	2	6	M30	yes/yes
				S	2			
GEO.21.048	Advanced Surveying 2	CEM	2	V	2	6	M30	yes/yes
				S	2			
GEO.21.013	Computer Graphics Project in Geoscience	CEM	2	V	2	6	SCH120	yes/yes
				Ü	2			
GEO.21.026	Multimedia	CEM	1	V	2	6	AP	yes/yes
				Ü	2			
GEO.21.025	Geostatistics	CEM	1	V	2	6	AHA15	yes/yes
				S	2			
Geoinformatics								
GEO.23.005	Spatial Databases	CEM	2	V	2	6	AR15	yes/yes
				Ü	2			
GEO.21.008	Spatial Data Infrastructure	CEM	1	V	2	6	M30	yes/yes
				Ü	2			
GEO.23.017	GI Technologies	CEM	2	S	4	6	AR15	yes/yes
GEO.21.040	Remote Sensing	CEM	2	V	2	6	M30	yes/yes
				Ü	2			
GEO.23.050	GIS and Remote Sensing for Sustainable Land and Risk Management	CEM	1	V	1	6	AR15	yes/yes
				S	2			
				Ü	1			
GEO.23.053	Earth Observation and Space Weather	CEM	1	S	2	6	AR30	yes/yes

Module ID	Module name	Module type	Allocated semester	Teaching format	CH	Credits	Assessment	Graded/ relevant for final grade ²
	Impact							
GEO.21.022	Data Mining	CEM	1	V Ü	2 2	6	AHA8	yes/yes
GEO.23.033	Software Project	CEM	2	S	1	6	AR30	yes/yes
GEO.23.034	Practical Computer Science	CEM	2	S Ü	2 2	6	AP6 and AP15	yes/yes
GEO.21.045	IT Security	CEM	1	V Ü	2 2	6	SCH120 or AHA15	yes/yes
GEO.23.014	Marine GIS	CEM	1	V Ü	2 2	6	AR15	yes/yes
GEO.23.035	Geoinformatics Excursion	CEM	2	V Ü	2 2	6	AHA15	yes/yes
Engineering Surveying and Measuring Technology								
GEO.21.016	Special Methods of Adjustment and Statistics	CEM	1	V Ü	2 2	6	M30	yes/yes
GEO.21.031	Measuring Technology	CEM	1	V Ü	2 2	6	M30	yes/yes
GEO.21.046	Unmanned Aerial Vehicles	CEM	1	V Ü	2 1	6	SCH120	yes/yes
GEO.21.047	Advanced Surveying 1	CEM	1	V S	2 2	6	M30	yes/yes
GEO.21.048	Advanced Surveying 2	CEM	2	V S	2 2	6	M30	yes/yes
GEO.21.013	Computer Graphics Project in Geoscience	CEM	2	V Ü	2 2	6	SCH120	yes/yes
GEO.21.026	Multimedia	CEM	1	V Ü	2 2	6	AP	yes/yes
GEO.21.033	Software Project	CEM	2	S	1	6	AR30	yes/yes
Mathematics (at least one module from the group must be selected)								
GEO.21.001	Higher Mathematics	CEM	1	V Ü	2 2	6	SCH120	yes/yes
GEO.21.028	Differential Geometry	CEM	2	V S	2 2	6	SCH120	yes/yes
GEO.21.052	Numerical Analysis	CEM	1	V Ü	2 2	6	AP6 and AP15	yes/yes
GEO.21.025	Geostatistics	CEM	1	V S	2 2	6	AHA15	yes/yes
GEO.23.034	Practical Computer Science	CEM	2	S Ü	2 2	6	AP6 and AP15	yes/yes
General (at least one module from the group must be selected)								
GEO.23.049	German Language	CEM	1	S	4	6	K120	yes/yes
GEO.21.045	IT Security	CEM	1	V Ü	2 2	6	SCH120 or AHA15	yes/yes
GEO.21.002	Management in Business and Authorities	CEM	2	V Ü	2 2	6	SCH120	yes/yes
Compulsory modules								

Module ID	Module name	Module type	Allocated semester	Teaching format	CH	Credits	Assessment	Graded/ relevant for final grade ²
GEO.23.007	Application Project	CM	S1-2		1	6	AP and AHA15	yes/yes
GEO.23.090	Master's thesis with Master's colloquium	CM	3	-	-	30	MA60 and AKQ45	yes/yes

Explanations:

Module type (abbreviations):

- CM = compulsory module
CEM = compulsory elective module

Assessments (abbreviations):

- SCH n = written assessment (written examination) in minutes
AHA = alternative assessment – assignment/research project/project work
AR = alternative assessment – presentation with paper
AP = additional alternative assessments as per section 15 of the Framework Examination Regulations and section 6 of the Departmental Examination Regulations – type and scope are specified in the module description
M n = oral examination
MA = Master's thesis
AKQ = Master's colloquium

Teaching formats (abbreviations):

- V = lecture
S = seminar
SU = tuition in seminars
Ü = tutorial

- Sem. = semester
CH = semester credit hours
Credits = credit points that are awarded in the module upon successful completion of assessments; 1 credit \cong 30 contact hours (student workload)

Appendix 2 to the Departmental Examination Regulations for the Master's course Geomatics Diploma Supplement



Hochschule Neubrandenburg
University of Applied Sciences

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) | «Name» |
| 1.2 | First name | «Vorname» |
| 1.3 | Date of birth | «GebDatumL» |
| 1.4 | Student ID number or code | Not of public interest |

2 Information identifying the qualification

- | | | |
|-----|--|--|
| 2.1 | Name of qualification and title conferred in original language | |
| | Master of Engineering (MEng) Geomatics | |

- 2.2 Main field(s) of study for the qualification
- Geomatics
- 2.3 Name and status of awarding institution in original language
- Hochschule Neubrandenburg – University of Applied Sciences
Hochschule (University of Applied Sciences), state institution of Mecklenburg-Vorpommern, Germany
- 2.4 Name and status of institution (if different from 2.3) administering studies in original language
- Hochschule Neubrandenburg – University of Applied Sciences
State institution of higher education / Mecklenburg-Vorpommern, Germany
- 2.5 Language(s) of instruction/assessment
- English
- 3 Information on the level and duration of the qualification
- 3.1 Level of qualification
- Second degree (postgraduate degree) with thesis
- 3.2 Official duration of programme in credits and/or years
- 3 semesters (1.5 years), 16 weeks of classes per semester, 30 ECTS credits per semester, thesis included in final semester
- 3.3 Access requirement(s)
- Degree in an appropriate subject area (Bachelor or other degree document issued after the final examination) with a grade equivalent to 'good' (see sections 8.4 and 8.7)
- 4 Information on the programme completed and the results obtained
- 4.1 Mode of study
- Full time, modular.
- 4.2 Programme learning outcomes
- The aim of the Master of Geomatics is to independently work on tasks in geodesy and geoinformatics as well as industrial metrology within a given period. The Master's degree provides a broad range of specialist knowledge through application-oriented teaching and the ability to responsibly recognise practical problems in the field of geodesy and geoinformatics, to develop cost-effective solutions that comply with regulations and to critically compare them to each other, and to successfully implement a selected alternative in practice. Taking on responsible tasks requires not only specialist knowledge but also confidence and decisiveness as well as the ability to cooperate. Accordingly, the training is also geared towards imparting key qualifications and promoting personal

development.

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

See 'Module Catalogue' for the list of modules;

See 'Final Examination Certificate' for subjects offered in final examinations (written and oral) and topics for the thesis, including evaluations.

4.4 Grading system and, if available, grade distribution table

The grading scheme is explained in section 8.6.

4.5 Overall classification of the qualification in original language

Based on weighted average of grades in examination fields. The following differentiations are possible:

1.0	sehr gut	/	very good	=	A	4.0 grade points
1.3	sehr gut	/	very good	=	A-	3.7 grade points
1.7	gut	/	good	=	B+	3.3 grade points
2.0	gut	/	good	=	B	3.0 grade points
2.3	gut	/	good	=	B-	2.7 grade points
2.7	befriedigend	/	satisfactory	=	C+	2.3 grade points
3.0	befriedigend	/	satisfactory	=	C	2.0 grade points
3.3	befriedigend	/	satisfactory	=	C-	1.7 grade points
3.7	ausreichend	/	sufficient	=	D+	1.3 grade points
4.0	ausreichend	/	sufficient	=	D	1.0 grade point

5 Information on the function of the qualification

5.1 Access to further study

Graduates with the relevant grades can continue with third-cycle programmes at other universities in the Bologna Process Qualifications Framework for the European Higher Education Area. The MEng degree is an academic qualification and enables the holder to use the title Master of Engineering (Geomatics).

5.2 Access to a regulated profession in

- surveying, engineering, planning, environmental and consulting offices
- urban, regional, state and landscape planning
- administrative bodies
- environmental monitoring and planning
- development of information services (e.g. tourism)
- software development company
- research institutions
- photogrammetry, cartography and remote sensing
- cadastral administration, surveying offices and authorities
- education, research and teaching
- civil engineering
- quality assurance in mechanical and plant engineering
- supply and disposal companies
- agriculture and forestry

6 Additional information

6.1 Additional information

Dean
Faculty of Landscape Sciences and Geomatics
Neubrandenburg University of Applied Sciences
Brodaer Strasse 2
17033 Neubrandenburg, Germany

6.2 Further information sources

On the institution: www.hs-nb.de

7 Certification

This Diploma Supplement refers to the following original

documents: Urkunde über die Verleihung des Mastergrades

(Master Certificate) dated

«PruefDatum»

Zeugnis über die Materprüfung (Final Examination Certificate)

dated «PruefDatum» Notenspiegel (Transcript of Records) dated

«PruefDatum»

Certification Date:

Official Stamp/Seal

Chair of the Examination Board

8 Information on the German Higher Education System¹

8.1 Types of institutions and institutional status

Higher education studies in Germany are offered at three types of higher education institutions (HEI).²

- Universitäten (universities), including various specialised institutions, offer the whole range of academic disciplines. In the German tradition, universities focus particularly on basic research with advanced studies having a predominantly 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 for studies, which includes integrated and supervised work assignments in industry, businesses or other relevant institutions.
- Kunst- und Musikhochschulen (universities of art/music) offer studies for artistic careers in the fine arts, performing arts and music; in fields such as directing, production, writing in theatre, film, and other media; and in various design areas, architecture, media and communication.

Higher education institutions are either state or state-recognised institutions. Their operations, including the organisation of studies and designation and awarding of degrees, are 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 increase variety and flexibility for students when planning and pursuing educational objectives; it also enhances international compatibility of studies.

The German Qualifications Framework for Higher Education Qualifications (HQR)³ describes the qualification levels and resulting qualifications and expertise of graduates. The three levels of the HQR correspond to levels 6, 7 and 8 of the German Qualifications Framework for Lifelong Learning⁴ and the European Qualifications Framework for Lifelong Learning⁵.

For details, see sections 8.4.1, 8.4.2 and 8.4.3. Table 1 provides a summary.

¹ The information covers only aspects directly relevant to the purposes of the Diploma Supplement.

² Berufsakademien are not considered to be higher education institutions and 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 that are recognised as an academic degree if they are accredited by the German Accreditation Council.

³ 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).

⁴ 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

⁵ 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).

8.3 Approval/accreditation of programmes and degrees

To ensure the quality and comparability of qualifications, the organisation of studies and general degree requirements must conform to the 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).⁶ In 1999, a system of accreditation for Bachelor's and Master's programmes came into effect. All new programmes must be accredited under this scheme; after successful accreditation, they receive the seal of the Accreditation Council.⁷

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 uses modular components and the European Credit Transfer and Accumulation System (ECTS) with 30 credits corresponding to one semester.

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 Treaty on study accreditation.⁸

First degree programmes (Bachelor) lead to Bachelor of Arts (BA), Bachelor of Science (BSc), Bachelor of Engineering (BEng), Bachelor of Laws (LLB), Bachelor of Fine Arts (BFA), Bachelor of Music (BMus) or Bachelor of Education (BEd).

The Bachelor's degree corresponds to level 6 of the German Qualifications Framework/European Qualifications Framework.

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's degree must be accredited according to the Interstate Treaty on study accreditation treaty.⁹

Second degree programmes (Master) lead to Master of Arts (MA), Master of Science (MSc), Master of Engineering (MEng), Master of Laws (LLM), Master of Fine Arts (MFA), Master of Music (MMus) or Master of Education (MEd). Master's programmes that are designed for continuing education may carry other designations (e.g. MBA).

The Master's degree corresponds to level 7 of the German Qualifications

⁶ Specimen decree pursuant to Article 4(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).

⁷ 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.

⁸ See note no. 7

⁹ See note no. 7

Framework/European Qualifications Framework.

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 state examination) or is made up of a combination of either two major or one major and two minor fields (Magister Artium). The first stage (1.5 to 2 years) has a broad orientation and provides foundations of the field(s) of study. An intermediate examination (Diplom-Vorprüfung for Diplom degrees; Zwischenprüfung or credit requirements for the Magister Artium) is a 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 or state examination. 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 and economics and business. In the humanities, the corresponding degree is usually the Magister Artium (MA). In the social sciences, the practice varies based on institutional traditions. Studies preparing for the legal, medical and pharmaceutical professions are completed by a Staatsprüfung or state examination. 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, see section 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 that 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 institutions that grant doctorates; see section 8.5.
- Studies at Kunst- and Musikhochschulen (universities of art/music) 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.

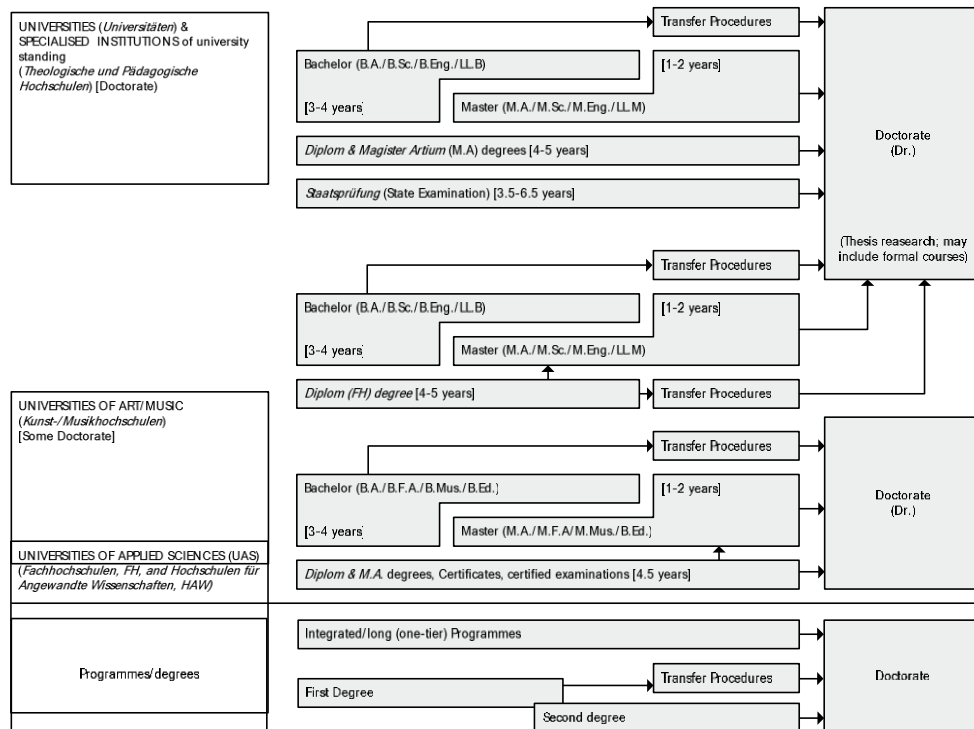
8.5 Doctorate

Universities as well as specialised institutions of university standing, some of the FH/HAW/UAS and some universities of art/music are institutions that grant doctorates. 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 acquiring a further degree through a procedure to determine their aptitude. Universities or institutions that grant doctorates regulate entry to a doctorate programme and 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.

Table 1 Institutions, programmes and degrees in German higher education



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) = Insufficient/Fail. The minimum passing grade is 'Ausreichend' (4). Verbal designations of grades may vary in some cases and for doctoral degrees.

Grade distribution tables as described in the ECTS Users' Guide are also 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 grants admission to all higher educational studies. Specialised variants (Fachgebundene Hochschulreife) grant admission to 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 access to all study programmes, provided that 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 2 years' duration plus professional practice of normally at least 3 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 successful completion of trial studies of at least one year's duration.¹⁰

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-53113 Bonn; phone: +49(0)228/501-0; www.kmk.org; email: hochschulen@kmk.org
- Central Office for Foreign Education (ZaB) as German National Academic Recognition Information Centre (NARIC); www.kmk.org; email: zab@kmk.org
- German information office of the Länder in the EURYDICE Network, providing the national dossier on the education system; www.kmk.org; email: Eurydice@kmk.org
- Hochschulrektorenkonferenz (HRK) [German Rectors' Conference]; Leipziger Platz 11, D-10117 Berlin; Phone: +49 (30) 206292-11; www.hrk.de; email: post@hrk.de
- 'Higher Education Compass' of the German Rectors' Conference features comprehensive information on institutions, programmes of study, etc. (www.higher-education-com-pass.de)

¹⁰ 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).