

## Anlage 6



## 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. HOLDER OF THE QUALIFICATION

**1.1 Family Name/1.2 First Name**  
to be filled in for each student

**1.3 Date, Place, Country of Birth**  
to be filled in for each student

**1.4 Student ID Number or Code**  
to be filled in for each student

### 2. QUALIFICATION

**2.1 Name of Qualification (full, abbreviated; in original language)**  
Master of Science - M. Sc.

*Title Conferred (full, abbreviated; in original language)*  
to be filled in for each student

**2.2 Main Field(s) of Study**  
Mathematics

**2.3 Institution Awarding the Qualification (in original language)**  
Carl von Ossietzky Universität Oldenburg  
Fakultät für Mathematik und Naturwissenschaften

**Status (Type / Control)**  
University / State Institution

**2.4 Institution Administering Studies (in original language)**  
[same 2.3]

**Status (Type / Control)**  
[same/same 2.3]

**2.5 Language(s) of Instruction/Examination**  
German

### 3. LEVEL OF THE QUALIFICATION

#### 3.1 Level

Graduate/second degree (two years), by research with thesis

#### 3.2 Official Length of Program

Two years

#### 3.3 Access Requirements

Bakkalaureus/Bachelor degree (three or four years), in the same or appropriate related field; or foreign equivalent

### 4. CONTENTS AND RESULTS GAINED

#### 4.1 Mode of Study

Full-time; part-time possible

#### 4.2 Programme Requirements

The programme requires the selection of courses with 18 credit points in Pure Mathematics (Analysis, Algebra), of courses with 18 credit points in Mathematical Applications (Stochastics, Numerical Analysis), a seminar in Pure Mathematics and a Seminar in Mathematical Applications, each with 6 credit points, further courses with 18 credit points in a special area, which can be chosen within Pure Mathematics or Mathematical Applications, and a research thesis of 30 credit points in the selected area. Additionally courses with 24 credit points are chosen from courses with practical or interdisciplinary content and from courses in a field where mathematics is applied as computer science, physics, chemistry, biology, environmental sciences, economics. In the application field, 12 – 18 credit points are obligatory.

The program puts emphasis on increased and advanced knowledge of Pure Mathematics and Mathematical Applications, on skills to judge and apply recent mathematical methods, and on the competence to develop new mathematical methods and modern mathematical applications. The course program leaves considerable freedom for individual selections of special qualifications that complement the core competence in mathematics. Throughout the courses, lectures of advanced level are combined with exercises.

#### 4.3 Programme Details

See Transcript for list of courses and grades and topic of thesis, including evaluations.

#### 4.4 Grading Scheme

General grading scheme cf. See. 8.6 - Grade Distribution (Award year) "Sehr gut" (7%) - "Gut" (23%) - "Befriedigend" (50 %) - "Ausreichend" (15%) - "Nicht ausreichend" (5%)

#### 4.5 Overall Classification (in original language)

to be filled in for each student

Based on averaged module examinations weighted by credit points

## 5. FUNCTION OF THE QUALIFICATION

### 5.1 Access to Further Study

Qualifies to apply for admission for doctoral work (thesis research)

### 5.2 Professional Status

The Master title certified by the "Master-Urkunde" entitles the holder to the legally protected professional title "Master of Science"

## 6. ADDITIONAL INFORMATION

### 6.1 Additional Information

*to be filled in for each student* (Any other information on relevant activities of the holder, e.g. work as tutor)

### 6.2 Further Information Sources

On the Institution: [www.uni-oldenburg.de](http://www.uni-oldenburg.de) and on the program [www.mathematik.uni-oldenburg.de](http://www.mathematik.uni-oldenburg.de). For national Information sources cf. Sect. 8.8

## 7. CERTIFICATION

This Diploma Supplement refers to the following original documents:

*to be filled in for each student*

Certification Date: XX.XX.2005

Prof. Dr. ....  
Chairman Examination Committee

(Official Stamp/Seal)

## 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 that awarded it (DSDoc 01/03.00).

**8. INFORMATION ON THE GERMAN HIGHER EDUCATION SYSTEM<sup>1</sup>**

**8.1. Types of Institutions and Institutional Control**

Higher education (HE) studies in Germany are offered at three types of *Hochschulen*<sup>2</sup>

- *Universitäten* (Universities), including various specialized institutions, comprise the whole range of academic disciplines. In the German tradition, universities are also institutional foci of, in particular, basic research, so that advanced stages of study have strong theoretical orientations and research-oriented components.
- *Fachhochschulen* (Universities of Applied Sciences): Programs concentrate in engineering and other technical disciplines, business-related studies, social work, and design areas. The common mission of applied research and development implies a distinct application-oriented focus and professional character of studies, which include one or two semesters of integrated and supervised work assignments in industry, enterprises or other relevant institutions.
- *Kunst- und Musikhochschulen* (Colleges of Art/Music, etc.) offer graduate 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.

<sup>1</sup> The information covers only aspects directly relevant to purposes of the Diploma Supplement. All Information as of 1 Jan 2000.

<sup>2</sup> Hochschule is the generic term for higher education institutions.

HE 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 HE legislation.

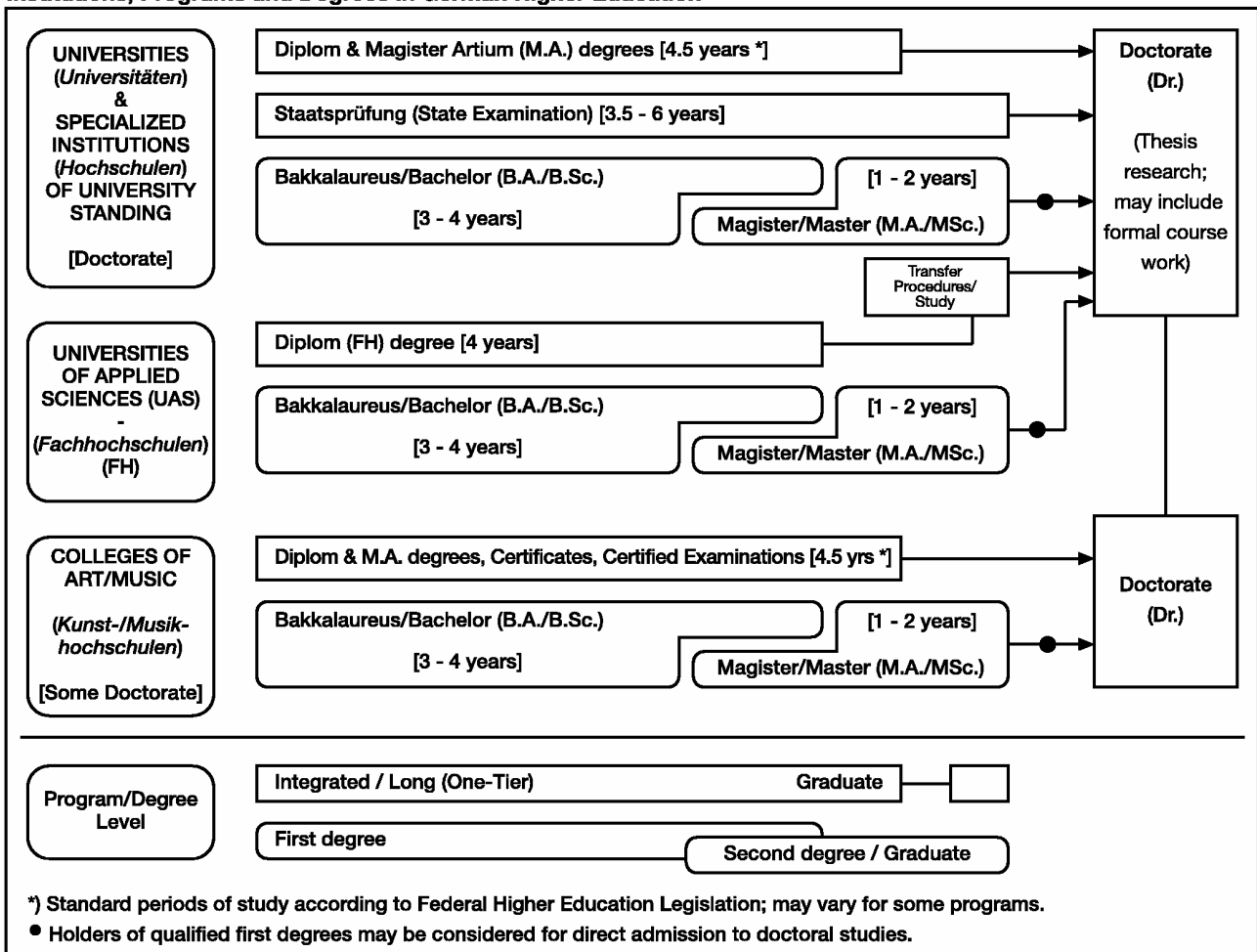
**8.2 Types of programs and degrees awarded**

- Studies in all three types of institutions are traditionally offered in integrated "long" (one-tier) programs leading to *Diplom-* or *Magister Artium* degrees or completion by a *Staatsprüfung* (State Examination).
- In 1998, a new scheme of first- and second-level degree programs (*Bakkalaureus/Bachelor* and *Magister/Master*) was introduced to be offered parallel to or *in lieu* of established integrated "long" programs. While these programs are designed to provide enlarged variety and flexibility to students in planning and pursuing educational objectives, they enhance also international compatibility of studies.
- For details cf. Sec. 8.41 and Sec. 8.42, respectively. Table 1 provides a synoptic summary.

**8.3 Approval/Accreditation of Programs and Degrees**

To ensure quality and comparability of qualifications, the organization of studies and general degree requirements have to conform to principles and regulations jointly established by the Standing Conference of Ministers of

**Institutions, Programs and Degrees in German Higher Education**



Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK) and the Association of German Universities and other Higher Education Institutions (HRK). In 1999, a system of accreditation for programs of study has become operational under the control of an Accreditation Council at national level. Programs and qualifications accredited under this scheme are designated accordingly in the Diploma Supplement.

## 8.4 Organization of Studies

### 8.4.1 Integrated "Long" Programs (One-Tier):

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

Studies are either mono-disciplinary (single subject, *Diplom* degrees, most programs completed by a *Staatsprüfung*) or comprise a combination of either two major or one major and two minor fields (*Magister Artium*). As common characteristics, in the absence of intermediate (first-level) degrees, studies are divided into two stages. The first stage (1.5 to 2 years) focuses - without any components of general education - on broad orientations and foundations of the field(s) of study including propaedeutical subjects. An Intermediate Examination (*Diplom-Vorprüfung* for *Diplom* degrees; *Zwischenprüfung* or credit requirements for the M.A.) is prerequisite to enter the second stage of advanced studies and specializations. Degree requirements always 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*.

- Studies at *Universities* last usually 4.5 years (*Diplom* degree, *Magister Artium*) or 3.5 to 6 years (*Staatsprüfung*). The *Diplom* degree is awarded in engineering disciplines, the exact/natural and economic sciences. 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, pharmaceutical and teaching professions are completed by a *Staatsprüfung*.

The three qualifications are academically equivalent. As the final (and only) degrees offered in these programs at graduate-level, they qualify to apply for admission to doctoral studies, cf. Sec. 8.5.

- Studies at *Fachhochschulen (FH)* /Universities of Applied Sciences (UAS) last 4 years and lead to a *Diplom (FH)* degree. While the *FH/UAS* are non-doctorate granting institutions, qualified graduates may pursue doctoral work at doctorate-granting institutions, cf. Sec. 8.5.

- Studies at *Kunst- and Musikhochschulen* (Colleges of Art/Music, etc.) are more flexible in their organization, depending on the field and individual objectives. In addition to *Diplom/Magister* degrees, awards include Certificates and Certified Examinations for specialized areas and professional purposes.

### 8.4.2 First/Second Degree Programs (Two-tier):

#### *Bakkalaureus/Bachelor, Magister/Master degrees*

These programs apply to all three types of institutions. Their organization makes use of credit point systems and modular components. First degree programs (3 to 4 years) lead to *Bakkalaureus/Bachelor* degrees (B.A., B.Sc.). Graduate second degree programs (1 to 2 years) lead to *Magister/Master* degrees (M.A., M.Sc.). Both may be awarded in dedicated form to indicate particular

specializations or applied/professional orientations (B./M. of ... ; B.A., B.Sc. or M.A., M.Sc. in ... ). All degrees include a thesis requirement.

## 8.5 Doctorate

Universities, most specialized institutions and some Colleges of Art/Music are doctorate-granting institutions. Formal prerequisite for admission to doctoral work is a qualified *Diplom* or *Magister/Master* degree, a *Staatsprüfung*, or a foreign equivalent. Admission further requires the acceptance of the Dissertation research project by a supervisor. Holders of a qualified *Diplom (FH)* degree or other first degrees may be admitted for doctoral studies with specified additional requirements.

## 8.6 Grading Scheme

The grading scheme 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. Some institutions may also use the ECTS grading scheme.

## 8.7 Access to Higher Education

The General Higher Education Entrance Qualification (*Allgemeine Hochschulreife, Abitur*) after 12 to 13 years of schooling gives access to all higher education studies. Specialized variants (*Fachgebundene Hochschulreife*) allow for admission to particular disciplines. Access to *Fachhochschulen/(UAS)* is also possible after 12 years (*Fachhochschulreife*). Admission to Colleges of Art/Music may be based on other or require additional evidence demonstrating individual aptitude.

## 8.8 National Sources of Information

- *Kultusministerkonferenz (KMK)* [Standing Conference of Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany] - Lennéstrasse 6, D-53113 Bonn; Fax: +49/[0]228/501-229; with
  - Central Office for Foreign Education (ZaB) as German NARIC and ENIC; www.kmk.org; E-Mail: zab@kmk.org
  - "Documentation and Educational Information Service" as German EURYDICE-Unit, providing the national dossier on the education system (EURYBASE, annual update, www.eurydice.org; E-Mail eurydice@kmk.org).
- *Hochschulrektorenkonferenz (HRK)* [Association of German Universities and other Higher Education Institutions]. Its "Higher Education Compass" (www.higher-education-compass.hrk.de) features comprehensive information on institutions, programs of study, etc. Ahrstrasse 39, D-53175 Bonn; Fax: +49/[0]228 / 887-210; E-Mail: sekr@hrk.de