

# Technische Universität Dresden

Fakultät Verkehrswissenschaften "Friedrich List"

Aufgrund der bestandenen Diplomprüfung  
im Studiengang Verkehrswirtschaft wird

**Frau Heide Niemann**

geb. am 30. Dezember 1980 in Magdeburg

der akademische Grad

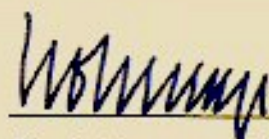
**Diplom-Verkehrswirtschaftlerin**

(Dipl.-Verk.wirtsch.)

verliehen.

Dresden, den 17. Juli 2007

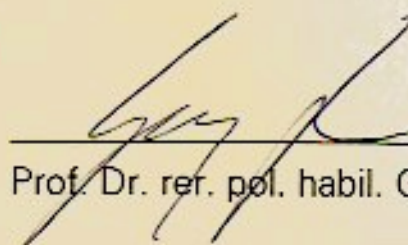
Der Rektor



Prof. Hermann Kokenge

Der Vorsitzende  
des Prüfungsausschusses

(Prägesiegel)



Prof. Dr. rer. pol. habil. G. Hirte



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**

Niemann, Heide

**1.3 Date, Place, Country of Birth**

December 30, 1980, Magdeburg

**1.4 Student ID Number or Code**

n. a.

**2. QUALIFICATION**

**2.1 Name of Qualification** (full, abbreviated; in original language)

Diplom-Verkehrswirtschaftlerin (Dipl.-Verk.wirtsch.)

**Title Conferred** (full, abbreviated; in original language)

n.a. - n.a.

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

Economics and Traffic

Transportation Economics and Policy, Communication Economics, Tourism Economics

**2.3 Institution Awarding the Qualification** (in original language)

Technische Universität Dresden

Fakultät Verkehrswissenschaften "Friedrich List"

**Status (Type / Control)**

University / State Institution

**2.4 Institution Administering Studies** (in original language)

[same]

**Status (Type / Control)**

[same / same]

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

German

### 3. LEVEL OF THE QUALIFICATION

#### 3.1 Level

Graduate/second degree by research with research-oriented Diplom thesis; 4.5 years integrated one-tier programme

#### 3.2 Official Length of Programme

4.5 years

#### 3.3 Access Requirements

Higher Education Entrance Qualification (HEEQ), General or Specialized, cf. Sect. 8.7; or foreign equivalent

### 4. CONTENTS AND RESULTS GAINED

#### 4.1 Mode of Study

Full-time; 4.5 years, incl. final research-oriented Diplom thesis (6 months)

#### 4.2 Programme Requirements/Qualification Profile of the Graduate

The course is divided into two sections, a basic level and an advanced level including the Diplom thesis and internships. The basic level consists of four semesters whereas the main level consists of five semesters. The basic level comprises of: business administration, management, economics, law, mathematics/investment mathematics, statistics, informatics, foundations of traffic engineering, logistics, production management, accounting, environmental protection, languages and general studies "studium generale". The basic course is completed with an intermediate Diplom examination.

The advanced level is comprised of the following fields:

- a. Compulsory subjects: microeconomics for transportation economists; industrial organization and competition policy for transportation economists; marketing in service industries, management systems and techniques in the transportation sector and econometrics and simulation in transport
- a. Optional subjects taken from required fields: management in transportation and logistics, transport policy, communication economics, tourism economics, traffic modelling and econometrics, spatial economics (two options must be chosen from the list)
- b. Free option: To be chosen from the subjects offered by the Faculty of Traffic Science or other subjects relevant to the course, making it possible for students to be able to orientate their degree towards a certain field in which they plan to work.
- c. During the course students have to complete internships (outside the university) totalling at least four months, an internship of four to six weeks to be completed before or during the basic level and a specialized internship of 12 weeks during the advanced level. At the end of the programme a research-oriented Diplom thesis has to be completed.

#### 4.3 Programme Details

See "Prüfungszeugnis" (Final Examination Certificate) for subjects offered in written and oral examinations and topic of Diplom thesis, including evaluations.

#### 4.4 Grading Scheme

General grading scheme cf. 8.6

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

gut

The final grade is calculated on the basis of examinations taken during the advanced level (120 credit points) and the Diplom thesis (30 credit points). The final grade is calculated as a weighted result (weighted with the number of credit points) of the written examination marks and the Diplom thesis.

**5. FUNCTION OF THE QUALIFICATION****5.1 Access to Further Study**

Qualifies to apply for admission to doctoral studies

**5.2 Professional Status**

The Diplom degree entitles its holder to the legally protected professional title, "Diplom-Verkehrswirtschaftlerin (Dipl.-Verk.wirtsch.)", and to exercise professional and scientific work in the field of engineering for which the degree was awarded.

**6. ADDITIONAL INFORMATION****6.1 Additional Information**

Grade passed with distinction:

If the final classification is at least 1.2, the candidate can be awarded the overall grade "Passed with distinction".

**6.2 Further Information Sources**

On the institution: <http://www.tu-dresden.de>

On the faculty: [http://tu-dresden.de/die\\_tu\\_dresden/fakultaeten/vkw/](http://tu-dresden.de/die_tu_dresden/fakultaeten/vkw/)

On the department: [http://tu-dresden.de/die\\_tu\\_dresden/fakultaeten/vkw/iwv](http://tu-dresden.de/die_tu_dresden/fakultaeten/vkw/iwv)

**7. CERTIFICATION**


This Diploma Supplement refers to the following original documents:

Diplomurkunde      July 17, 2007

Prüfungszeugnis    July 17, 2007

Certification Date: July 17, 2007

**8. NATIONAL HIGHER EDUCATION SYSTEM**

  
\_\_\_\_\_  
Prof. Dr. rer. pol. habil. G. Hirte  
Chairman  
Examination Committee/ Economics and Traffic

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 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 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 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).

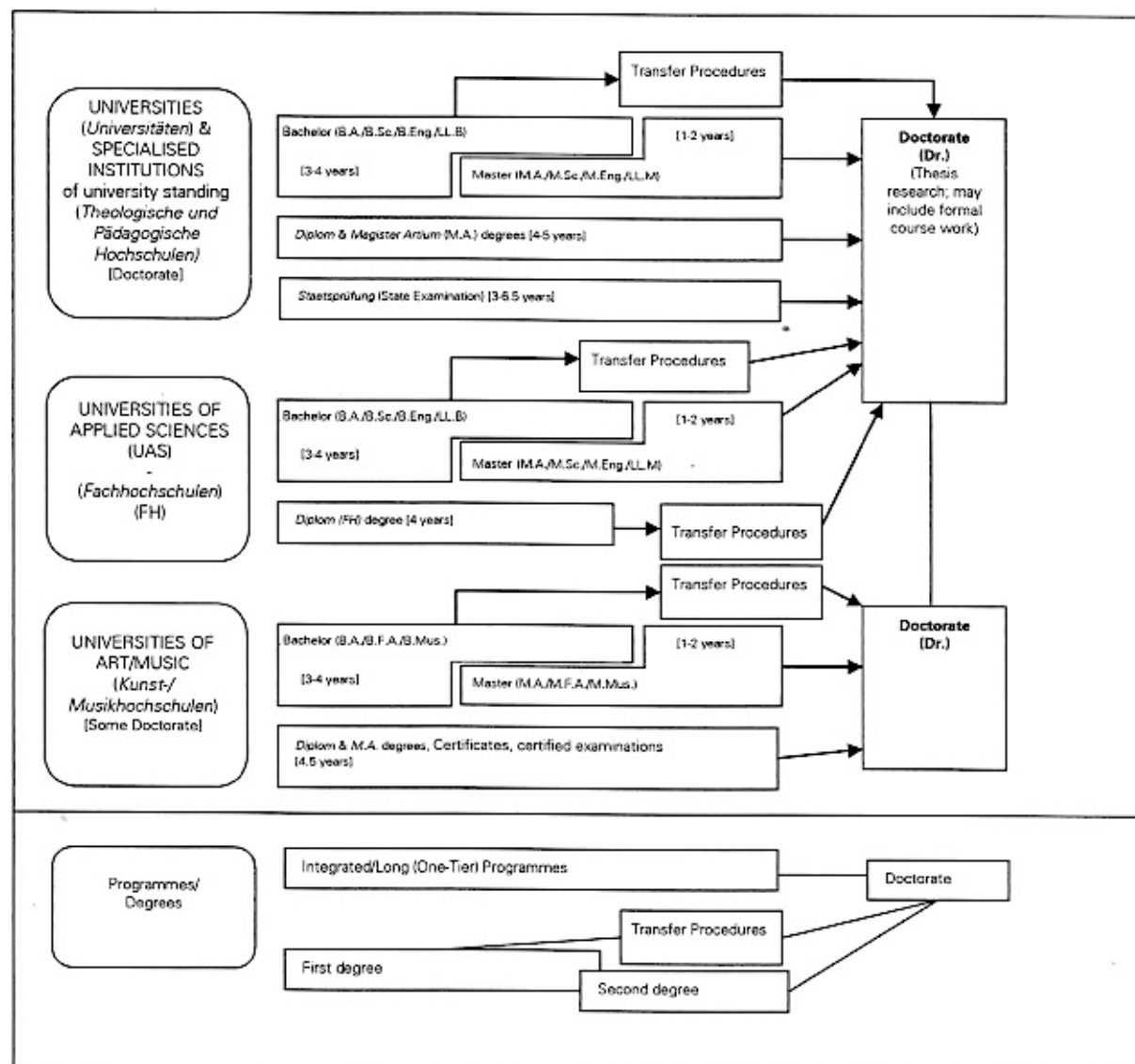
Within the framework of the Bologna-Process one-tier study programmes are successively being replaced by a two-tier study system. Since 1998, a scheme of first- and second-level degree programmes (Bachelor and Master) was introduced to be offered parallel to or instead of integrated 'long' programmes. 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.

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 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>3</sup> In 1999, a system of accreditation for programmes of study has become operational under the control of an Accreditation Council at national level. All new programmes have to be accredited under this scheme; after a successful accreditation they receive the quality-label of the Accreditation Council.<sup>4</sup>

Table 1: Institutions, Programmes and Degrees in German Higher Education





## 8.4 Organization and Structure of Studies

The following programmes apply to all three types of institutions. Bachelor's and Master's study 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 degree study programmes lay the academic foundations, provide methodological skills and lead to qualifications related to the professional field. The Bachelor degree is awarded after 3 to 4 years.

The Bachelor degree programme includes a thesis requirement. Study courses leading to the Bachelor degree must be accredited according to the Law establishing a Foundation for the Accreditation of Study Programmes in Germany.<sup>5</sup>

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.) or Bachelor of Music (B.Mus.).

### 8.4.2 Master

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

The Master degree study programme includes a thesis requirement. Study programmes leading to the Master degree must be accredited according to the Law establishing a Foundation for the Accreditation of Study Programmes in Germany.<sup>6</sup>

Second degree programmes (Master) lead to 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.) or Master of Music (M.Mus.). Master study programmes, which are designed for continuing education or which do not build on the preceding Bachelor study programmes in terms of their content, may carry other designations (e.g. MBA).

### 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 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*. The level of qualification is equivalent to the Master level.

- Integrated studies at *Universitäten* (U) last 4 to 5 years (*Diplom* degree, *Magister Artium*) or 3 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, pharmaceutical and teaching professions are completed by a *Staatsprüfung*. The three qualifications (*Diplom*, *Magister Artium* and *Staatsprüfung*) are academically equivalent. 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)/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 apply for admission to doctoral studies at doctorate-granting institutions, cf. Sec. 8.5.

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

## 8.5 Doctorate

Universities as well as specialized institutions of university standing 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. 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 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.

## 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 institutions may already use the ECTS grading scheme, which operates with the levels A (best 10 %), B (next 25 %), C (next 30 %), D (next 25 %), and E (next 10 %).

## 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 to particular disciplines. Access to *Fachhochschulen* (UAS) is also possible with a *Fachhochschulreife*, which can usually be acquired after 12 years of schooling. Admission to Universities of Art/Music may be based on other or require additional evidence demonstrating individual aptitude. 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]; Lennéstrasse 6, D-53113 Bonn; Fax: +49(0)228/501-229; Phone: +49(0)228/501-0
- Central Office for Foreign Education (ZaE) as German NARIC; www.kmk.org; E-Mail: zaeb@kmk.org
- "Documentation and Educational Information Service" as German EURYDICE-Unit, providing the national dossier on the education system (www.kmk.org/doku/bildungswesen.htm; E-Mail: eurydice@kmk.org)
- Hochschullektorenkonferenz (HRK) [German Rectors' Conference]; Ahnstrasse 39, D-53175 Bonn; Fax: +49(0)228/887-110; Phone: +49(0)228/887-0; www.hrk.de; E-Mail: sekr@hrk.de
- "Higher Education Compass" of the German Rectors' Conference features comprehensive information on institutions, programmes of study, etc. (www.higher-education-compass.de)

<sup>1</sup> The information covers only aspects directly relevant to purposes of the Diploma Supplement. All information as of 1 July 2005.

<sup>2</sup> *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 recognized as an academic degree if they are accredited by a German accreditation agency.

<sup>3</sup> Common structural guidelines of the Länder as set out in Article 9 Clause 2 of the Framework Act for Higher Education (HRG) for the accreditation of Bachelor's and Master's study courses (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany of 10.10.2003, as amended on 21.4.2005).

<sup>4</sup> Law establishing a Foundation "Foundation for the Accreditation of Study Programmes in Germany", entered into force as from 26.2.2005, GV. NRW. 2005, nr. 5, p. 45 in connection with the Declaration of the Länder to the Foundation "Foundation for the Accreditation of Study Programmes in Germany" [Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany of 16.12.2004].

<sup>5</sup> See note No. 4.

<sup>6</sup> See note No. 4.