







### **DIPLOMA SUPPLEMENT**

#### **Preamble**

The Diploma Supplement was developed by the European Commission, Council of Europe and by 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 is free from any value-judgements, equivalence statements or suggestions about recognition. Information is provided in eight sections. Where information is not provided, an explanation will give the reason why.

# 1. Information identifying the holder of the qualification

1.1 FAMILY NAME

1.2 GIVEN NAME

- 1.3 DATE OF BIRTH (day, month, year) XXXXXXX
- 1.4 STUDENT IDENTIFICATION NUMBER XXXXXXX

### 2. Information identifying the qualification

2.1 NAME OF QUALIFICATION AND TITLE CONFERRED

European Masters Programme in Software Engineering

- 2.2 MAIN FIELD(S) OF STUDY FOR THE
  QUALIFICATION
  - Software Engineering
- 2.3 NAME AND STATUS OF AWARDING INSTITUTION XXXXXXXX
- 2.4 NAME AND STATUS OF INSTITUTION
  ADMINISTERING STUDIES
  See 2.3
- 2.5 LANGUAGE(S) OF
  INSTRUCTION/EXAMINATION
  English

# 3. Information on the level of the qualification

- 3.1 LEVEL OF QUALIFICATION

  Graduate joint degree with thesis
- 3.2 OFFICIAL LENGTH OF PROGRAMME Two years 120 CP/ECTS credits
- 3.3 ACCESS REQUIREMENTS
- Bachelor Degree in Software Engineering, Computer Science, Computer Engineering or degrees with equivalent skills.
- Proof of a minimum knowledge of English such as a TOEFL (>=550 paper-based / >=213 Internet-based), IELTS (> 6.0) or equivalent.

To access this fixed intake programme, an admission procedure is required.

# 4. Information on the contents and results gained

- 4.1 MODE OF STUDY
  Full time, lectures, lab and seminar
  activities
- 4.2 PROGRAMME REQUIREMENTS

EMSE is a two-year programme (120 ECTS) completely taught in English. Students take EMSE at any two institutions of the consortium (50% of ECTS in each institution).

- The EMSE programme is based on core knowledge areas, empirical software engineering research, transversal skills, partner-specific topic in software engineering and an internship.
- 4.3 PROGRAMME DETAILS AND THE
  INDIVIDUAL GRADES/MARKS/CREDITS
  OBTAINED
  See table on page 2
- 4.4 GRADING SCHEME AND GRADE
  DISTRIBUTION GUIDANCE
  Individual subjects are graded on a scale
  based on the visited University (see
  Additional Information: table Grading
  Scheme)

The statistic distribution of grades refers to the data of programmes belonging to the same class. The number of years considered corresponds to the normal duration of the programme.

4.5 OVERALL CLASSIFICATION OF THE QUALIFICATION

Final graduation mark: XXXXXXX Final exam date: XXXXXXX

The final grade is based on the scale of the second host University. (see Additional Information: table Overall Classification).

The statistic distribution of grades refers to the data of programmes belonging to the same class. The number of years considered corresponds to the normal duration of the programme.

# 5. Information on the function of the qualification

5.1 ACCESS TO FURTHER STUDY
Students who pass the course are qualified to apply for admission to doctoral studies (Ph.D. thesis research in computer science).
5.2 PROFESSIONAL STATUS
Students who pass the course have gained the capabilities to exercise as professional software engineers.

### 6. Additional information

6.1 ADDITIONAL INFORMATION
The qualification is a double degree.
6.2 FURTHER INFORMATION SOURCES
On the European Masters Programme in
Software Engineering website:
 <a href="http://emse.inf.unibz.it/">http://emse.inf.unibz.it/</a>,
European Qualifications Framework:
 <a href="http://ec.europa.eu/eqf/compare">http://ec.europa.eu/eqf/compare</a> en.htm.

### 7. Certification of the supplement

7.1 DATE

7.2 NAME AND SIGNATURE XXXXXXX

7.3 CAPACITY
XXXXXXX

7.4 OFFICIAL STAMP/SEAL

### PROGRAMME DETAILS AND THE INDIVIDUAL GRADES/MARKS/CREDITS OBTAINED

	Course	Language	СР	Grade	Date	SDS	Validation	Extra- curricula
1								
2								
3								

LEGENDA:
CP = credit points / ECTS credits
SDS = scientific disciplinary sector
N.A. = not available

RPL = recognition of prior learning
E = extracurricular / activity exceeding the number of credit points established for the programme
IM = international mobility / activity completed abroad
NM = national mobility / activity completed at another Italian university

### **Additional information**

Supervisor: XXXXXXXX Second supervisor: XXXXXXXX

The student completed an integrated programme with the XXXXXXX (D), within the "European Masters Programme in Software Engineering". A double degree is awarded upon programme's completion.

# 8. Information on the national higher education system

#### 8.1 The Italian Higher Education System

The Italian university system is organised in three cycles, according to the Bologna structure: the main academic degrees are the *Laurea* (1<sup>st</sup> cycle), the *Laurea Magistrale* (2<sup>nd</sup> cycle) and the *Dottorato di Ricerca* (3<sup>rd</sup> cycle). The system also offers other study programmes and related qualifications.

First cycle. This cycle consists exclusively of Corsi di Laurea. These degree programmes provide students with an adequate command of general scientific methods and contents as well as with specific professional skills. The general access requirement is the Italian school leaving qualification awarded after completion of 13 years of schooling and passing the relevant State examination; comparable foreign qualifications may also be accepted. Admission to some degree courses may be based on specific course requirements. The studies last 3 years. The Laurea is awarded to students who have gained 180 ECTS credits (called Crediti Formativi Universitari - CFU) and satisfied all curricular requirements, including the production of a final written paper or equivalent final project. The Laurea gives access to the Corsi  $\it di\ Laurea\ Magistrale$  as well as to other  $2^{nd}$  cycle programmes.

Second cycle. The main degree programmes in this cycle are the Corsi di Laurea Magistrale. They provide education at an advanced level for exercise of highly qualified activities in specific areas. Access is by a Laurea degree or a comparable foreign degree; admission is based on specific course requirements determined by single universities. The studies last 2 years. The Laurea Magistrale degree is awarded to students who have gained 120 ECTS/CFU credits and satisfied all curricular requirements, including the production and public defence of an original dissertation. Some programmes (namely, those in dentistry, medicine, veterinary medicine, pharmacy, construction engineering/architecture, law, primary education) are defined "single cycle programmes" (Corsi a ciclo unico); for these programmes access is by the Italian school leaving qualification (or a comparable foreign qualification); admission is based on entrance exams. The studies last 5 years (6 years and 360 ECTS/CFU credits in

the cases of medicine and dentistry). A *Laurea Magistrale* degree is awarded to students who have gained 300 ECTS/CFU credits and satisfied all curricular requirements, including the production and public defence of an original dissertation. A *Laurea Magistrale* degree gives access to *Corsi di Dottorato di Ricerca* as well as to other 3<sup>rd</sup> cycle study

Third cycle. The main degree programmes in this cycle are *Corsi di Dottorato di Ricerca* (research doctorate programmes); the students/young researchers enrolled in these programmes will acquire methodologies for advanced scientific research, will be trained in new technologies and will work in research laboratories, wherever appropriate. Access is by a *Laurea Magistrale* degree (or a comparable foreign degree); admission is based on a competitive exam; studies last at least three years and include the completion and public defence of an original research project.

#### Other programmes

- Corsi di Specializzazione. These are 3<sup>rd</sup> cycle programmes intended to provide students with the knowledge and skills required for the practice of highly qualified professions, mainly in medical, clinical and surgical specialities. Admission is by a Laurea Magistrale degree (or by a comparable foreign degree) and is based on a competitive exam; studies may last from 2 (120 ECTS/CFU credits) to 6 years (360 ECTS/CFU credits) to 6 years (360 ECTS/CFU credits) degreed is a Diploma di Specializzazione.
- Corsi di Master Universitario di primo livello. These are 2<sup>nd</sup> cycle programmes intended to provide students with further specialization or higher continuing education after completion of the first cycle. Access is by a Laurea degree (or a comparable foreign degree); admission may be subject to additional requirements. Studies last at least 1 year (60 ECTS/CFU credits). The qualification awarded (Master Universitario di primo livello) does not give access to Corsi di Dottorato di Ricerca or to any other 3rd cycle programme, since this type of course does not belong to the general requirements established at national level, but it is offered under the autonomous responsibility of each university.
- Corsi di *Master Universitario di secondo livello*. These are 3<sup>rd</sup> cycle programmes intended to provide

students with further specialization or higher continuing education studies after completion of the second cycle. Access is by a Laurea Magistrale degree (or a comparable foreign degree); admission may be subject to additional requirements. Studies last at least 1 year (60 ECTS/CFU credits). The qualification awarded (Master Universitario di secondo livello) does not give access to Corsi di Dottorato di Ricerca or to any other 3rd cycle programmes, since this type of course does not belong to the general requirements established at national level, but it is offered under the autonomous responsibility of each university.

**Credits**: degree courses are structured in credits (*Crediti Formativi Universitari - CFU*). University credits are based on the workload students need in order to achieve the expected learning outcomes. Each credit corresponds to 25 hours of student workload, including independent study. The average workload of a full time student is conventionally fixed at 60 credits per year. Thus, the CFU fully coincide with ECTS credits.

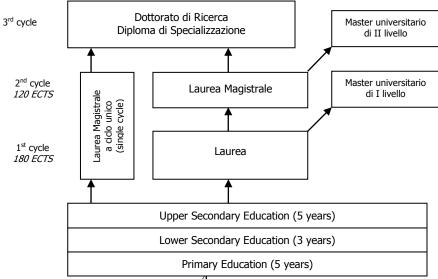
Classes of Degree Courses: all degree programmes of Laurea and Laurea Magistrale sharing general educational objectives are grouped into "classes". In developing the specific learning outcomes of single programmes, Universities have to comply with some national requirements for each class concerning the types (and corresponding amount of credits) of teaching-learning activities to be included. Degrees belonging to the same class have the same legal value.

**Academic Titles**: Those who receive the *Laurea* are entitled to be called "*Dottore"*, the holders of a Laurea Magistrale have a right to the title of "*Dottore Magistrale*", the *Dottorato di ricerca* confers the title of "*Dottore di Ricerca*" or "PhD".

**Joint Degrees**: Italian universities are allowed to establish degree programmes in cooperation with Italian and foreign partner universities, on completion of which joint or double/multiple degrees can be awarded.

Further information:
Italian Qualifications Framework (Quadro dei Titoli
Italiani – QTI)
http://www.quadrodeititoli.it/

### The Italian University System



### 8.2 The Finnish higher education system

The Finnish education system consists of basic education, general and vocational upper secondary education, higher education and adult education. The basic education consists of a nine-year compulsory school for all children from 7 to 16 years of age.

Post-compulsory education is given by general upper secondary schools and vocational institutions. The general upper second- ary school provides a threeyear general education curriculum, at the end of which the pupil takes the national Matriculation examination (ylioppilastutkinto/studentexamen). Vocational institutions provide three-year programmes, which lead to upper secondary qualifications (ammatillinen vocational perustutkinto/yrkesinriktad grundexamen).

General eligibility for higher education is given by the Matriculation examination and the upper secondary vocational qualification. These qualifications require at least 12 years of schooling. Equivalent foreign qualifications also give general eligibility for higher education.

The Finnish higher education system comprises universities (yliopisto/universitet) and polytechnics (ammattikorkeakoulu, AMK/ yrkeshögskola, YH). All universities engage in both education and research and have the right to award doctorates. The polytechnics are multi-field institutions of professional higher education. Polytechnics engage in applied research and development. The polytechnics use the terms polytechnic or university of applied sciences when referring to themselves. This higher education system description uses the term polytechnic.

First and second cycle higher education studies are measured in credits (opintopiste/studiepoäng). Study courses are quantified according to the work load required. One year of studies is equivalent to 1600 hours of student work on average and is de-fined as 60 credits. The credit system complies with the European Credit Transfer and Accumulation System (ECTS).

**University degrees.** The Government Decree on University Degrees (794/2004) defines the objectives, extent and overall structure of degrees. The universities decide on the detailed contents and structure of the degrees they award. They also decide on their curricula and forms of instruction.

**First-cycle university degree.** The first-cycle university degree consists of at least 180 credits (three years of full-time study). The degree is called kandidaat- ti/kandidat in all fields of study except Law (oikeusnotaari/rättsnotarie) and Pharmacy (farmaseutti/farmaceut). The determined English translation for all these degrees is Bachelor's degree, the most common degrees being the Bachelor of Arts or Bache- lor of Science.

Studies leading to the degree provide the student with: (1) knowledge of the fundamentals of the major and minor subjects or corresponding study entities or studies included in the degree programme and the prerequisites for following developments in the field; (2) knowledge and skills needed for scientific thinking and the use of scientific methods or knowledge and skills needed for artistic work; (3) knowledge and skills needed for studies leading to a higher university degree and for continuous learn- ing; (4) a capacity for applying the acquired knowledge and skills to work; and (5) adequate language and communication skills.

Studies leading to the degree may include: basic and intermediate studies; language and communication studies; interdiscipli- nary programmes; other studies and work practice for professional development. The degree includes a Bachelor's thesis (6-10 credits).

Second-cycle university degree. The secondcycle university degree consists of at least 120 credits (two years of full-time study). The extent of studies re- quired for a programme leading to the second cycle university degree which is geared towards foreign students is a minimum of 90 credits. The degree is usually called maisteri/magister. Other second-cycle degree titles are diplomi-insinööri/ diplom- ingenjör (Technology), proviisori/provisor (Pharmacy) and arkkitehti/arkitekt (Architecture). The determined English transla- tion for all these degrees is Master's degree, the most common degrees being the Master of Arts or Master of Science. The second-cycle university degree title in the fields of Medicine, Veterinary Medicine and Dentistry is lisensiaatti/licentiat, the English title being Licentiate. The admission requirement for the second-cycle university degree is a first-cycle degree. In the fields of Medicine and Dentistry the university may arrange the education leading to the secondcycle university degree without including a first-cycle university degree in the education. In Medicine the degree consists of 360 credits (six years of full-time study) and in Dentistry the degree consists of 300 credits (five years of full-time study).

Studies leading to the second-cycle university degree provide the student with: (1) good overall knowledge of the major sub- ject or a corresponding entity and conversance with the fundamentals of the minor subject or good knowledge of the ad- vanced studies included in the degree programme; (2) knowledge and skills needed to apply scientific knowledge and scientific methods or knowledge and skills needed for independent and demanding artistic work; (3) knowledge and skills needed for independently operating as an expert and developer of the field; (4) knowledge and skills needed for scientific or artistic post- graduate education; and (5) good language and communication skills.

The studies leading to the second-cycle university degree may include: basic and intermediate studies and advanced studies; language and communication studies; interdisciplinary study programmes; other studies; and internship improving expertise. The degree includes a Master's thesis (20–40 credits).

**Doctoral degrees.** Students can apply for doctoral studies after the completion of a relevant second-cycle degree. The aim of doctoral studies is to provide student with an in-depth knowledge of their field of research and capabilities to produce novel scientific knowledge independently.

A pre-doctoral degree of lisensiaatti/licentiat (Licentiate) may be taken before the Doctor's degree and in general it takes two years of full-time study to complete.

The Doctor's degree takes approximately four years to complete after the second-cycle degree or two further years following the pre-doctoral degree. A student who has been admitted to complete the Doctor's degree must complete a given amount of studies, show independent and critical thinking in the field of research and write a Doctor's dissertation and defend it in public.

**Polytechnic degrees.** The government decree on polytechnics (352/2003 including amendments) defines the objectives, extent and overall structure of polytechnic degrees. The Ministry of Education confirms the degree programmes of polytechnics, and within the framework of these regulations, the polytechnics decide on the content and structure of their degrees in more detail. The polytechnics also decide on their annual curricula and forms of instruction.

**First-cycle polytechnic degrees.** The first-cycle polytechnic degree consists of 180, 210 or 240 credits (three to four years of full-time study) depending on the field of study. For specific reasons, the Ministry of Education may confirm the scope of the degree to exceed 240 credits. The first-cycle polytechnic degree is called ammattikorkeakoulututkinto/yrkeshögskoleexamen. The determined English translation for the degree is Bachelor's degree. The degree titles indicate the field of study, e.g. Bachelor of Engineering or Bachelor of Health Care.

Studies leading to the degree provide the student with (1) broad overall knowledge and skills with relevant theoretical back- ground for working as expert of the field; (2) knowledge and skills needed for following and advancing developments in the field; (3) knowledge and skills needed for continuous learning; (4) adequate language and communication skills; and (5) knowledge and skills required in the field internationally.

The first-cycle polytechnic degree comprises basic and professional studies, elective studies, a practical training period and a Bachelor's thesis or a final project.

**The second-cycle polytechnic degrees.** The second-cycle polytechnic degree consists of 60 or 90 credits (a year or a year and a half of full-time study). The degree is called ylempi ammattikorkeakoulututkinto/högre

yrkeshögskoleexamen. The determined English translation for the second- cycle polytechnic degree is Master's degree. The degree titles indicate the field of study, e.g. Master of Culture and Arts or Master of Business Administration. Eligibility for second-cycle polytechnic degrees is given by a relevant first-cycle degree with at least three years of relevant work or artistic experience.

Studies leading to the degree provide the student with (1) broad and advanced knowledge and skills for developing the profes- sional field as well as the theoretical skills for working in demanding expert and leadership positions in the field; (2) profound understanding of the field, its relation to work life and society at large as well as the knowledge and skills needed for following and analysing both theoretical and professional developments in the field; (3) capacity for life-long learning and continuous development of one's own expertise (4) good language and communication skills required in work life; and (5) knowledge and skills needed to function and communicate in the field internationally. The second-cycle polytechnic degree comprises advanced professional studies, elective studies and a final thesis or a final pro- ject.

**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.

**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 onetier 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.

The German Qualification Framework for Higher Education Degrees3 describes the degrees of the German Higher Education System. It contains the classification of the qualification levels as well as the resulting qualifications and competencies of the graduates.

For details cf. Sec a), b) and c). Tab. 1 respectively. Table 1 provides a synoptic summary.

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).4 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>3</sup>

Organisation 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.

a) 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>4</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

Bachelor of Laws (LL.B.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.Mus.) or Bachelor of Education (B.Ed.).

b) Master. Master is the second degree after another 1 to 2 years. Master study programmes may be differentiated by the profile types "practiceoriented" and "research-oriented". Higher Education Institutions define the profile.

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. 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 study programmes which are designed for continuing education may carry other designations (e.g. MBA).

c) Integrated "Long" Programmes (One-Tier): Diplom degrees, Magister Artium, Staatsprüfung. An integrated study programme is either monodisciplinary (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 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 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. They qualify to apply for admission to doctoral studies. Further prerequisites for admission may be defined by the Higher Education Institution, cf. Doctorate

- 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
- While the FH/UAS are non-doctorate granting institutions, qualified graduates may apply for admission to doctoral studies at doctorategranting institutions, cf. *Doctorate*.
- Studies at Kunst- and 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.

Doctorate. Universities as well as specialised 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.

**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 partly already use an ECTS grading scheme.

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 (Fachgebundende Hochschulreife) allow for admission to particular disciplines. Access to

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

<sup>&</sup>lt;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>&</sup>lt;sup>3</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: 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>&</sup>lt;sup>4</sup> See note No. 3

<sup>&</sup>lt;sup>5</sup> See note No. 3

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.

### **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 (ZaB) as German NARIC; 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 (http://www.kmk.org/dokumentation/zusammenarbe it-auf- europaeischer-ebene-im-eurydice-informationsnetz.html; E-Mail: eurydice@kmk.org)
- Hochschulrektorenkonferenz (HRK) [German Rectors' Conference]; Ahrstrasse 39, D-53175 Bonn; Fax: +49[0]228/887-110; Phone: +49[0]228/887-0; 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).

#### 8.4 The Spanish Higher Education System

University studies in Spain are regulated by Royal Decree 1393/2007 of 29 October (modified by Royal Decree 861/2010, of 2 July), establishing the regulations for official university teaching according to the guidelines emanating from the European Higher Education Area (EHEA). As such, three levels of higher education are set: Bachelor's, Master's and Doctorate.

**First Cycle: Bachelor.** Bachelor's Degree studies constitute the first level of university teaching and replace the previous levels of Diploma (Diplomado) and Licentiate (Licenciado). In general, these have a loading of 240 ECTS credits (including the End of Bachelor's Degree Project), spread over four academic years.

The Bachelor's Degree, as well as being assigned to an area of knowledge (Arts and Humanities, Sciences, Health Sciences, Social and Legal Sciences or Engineering and Architecture), is structured as follows:

- Basic training subjects (minimum of 60 ECTS credits)
- Mandatory subjects
- Optional subjects
- External practice (maximum of 60 ECTS credits)
- End of Degree Project (minimum of 6 and maximum of 30 ECTS credits)

- Recognition for cultural activities (maximum of 6 ECTS credits).

Degree students must enrol in each academic course for a minimum of 9 and a maximum of 90 ECTS credits corresponding to the curriculum for the corresponding degree.

**Second Cycle: Masters.** University Masters' Degrees are the second level of higher education in Spain. The purpose of these official studies is student specialisation in his or her academic, professional or research training and they culminate with the awarding of a Master's degree valid in all the signatory countries to the European Higher Education Area (EHEA).

As regards their characteristics, they can have a duration of between 60 and 120 ECTS credits spread over one or two academic years. To be admitted, you need to meet the specific and merit assessment criteria applicable to the selected University Master's degree, where appropriate.

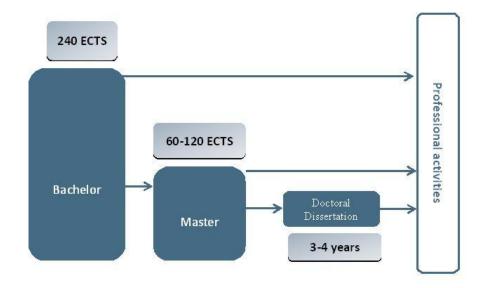
Spanish universities have a Coordination Commission for degrees which sets the procedures and criteria for admission to the Master's programme in any of its periods.

**Third Cycle: Doctorate.** Doctorate studies in Spain are regulated by Royal Decree 99/2011, of 28

January and have the objective of providing advanced training of the student in research techniques. They are divided into two cycles: one of studies, of at least 60 ECTS credits, which can be part of a Master's programme; and another of research, culminating in the public defence of an original piece of research work (the Doctoral Thesis), by the student.

As regards the maximum time available for passing doctorate studies, a maximum full-time period of three years is set, giving the student an option to pass this part-time over a maximum period of five years.

It is also possible to obtain a "European Doctorate" mention, for which the person studying for a doctorate will have to had spent a minimum of three months outside Spain taking studies or carrying out research; part of his or her thesis will need to be written and presented in one of the habitual languages for scientific communication other than those official languages in Spain; needing to be reviewed by at least two experts doctors from a non-Spanish higher education establishment or research institute; and at least one non-Spanish expert will need to be on the panel evaluating the thesis.



# **ADDITIONAL INFORMATION**

### **Grading Scheme**

UNIBZ		OY		UN	IKL	UPM		
Final Grade	Percentage of students gaining this grade							
30cl	12,69%	5	23,70%	1	15,25%	10	6,24%	
30	12,69%	4	35,61%	1,3	12,25%	9	30,11%	
29	7,53%	3	24,13%	1,7	9,89%	8	32,69%	
28	8,82%	2	11,01%	2	9,51%	7	17,20%	
27	9,03%	1	5,54%	2,3	9,06%	6	6,67%	
26	8,60%		100,00%	2,7	8,21%	5	5,16%	
25	6,88%			3	5,63%	4	0,22%	
24	6,45%			3,3	5,07%	3	1,08%	
23	6,88%			3,7	4,43%	2	0,65%	
22	7,74%			4	5,89%		100%	
21	1,72%			5	14,81%			
20	4,52%				100,00%			
19	1,94%							
18	4,52%							
	100,00%							

(The ranking is from the highest to the lowest)

# **Overall Classification**

UNIBZ		OY		UN	NIKL .	UPM		
Course grade	Percentage of students gaining this grade							
110 cl	32,20%	5	4,40%	1	2,50%	10	4,17%	
110	5,08%	4	35,16%	1,1	1,70%	9	45,83%	
109	5,08%	3	43,41%	1,2	12,40%	8	29,17%	
108	1,69%	2	15,38%	1,3	4,10%	7	12,50%	
107	5,08%	1	1,65%	1,4	7,40%	6	8,33%	
106	1,69%		100,00%	1,5	10,70%			
105	5,08%			1,6	10,70%			
104	3,39%			1,7	9,90%			
103	5,08%			1,8	9,10%			
102	3,39%			1,9	4,10%			
101	6,78%			2	7,40%			
100	5,08%			2,1	3,30%			
99	3,39%			2,2	4,10%			
98	3,39%			2,3	1,70%			
97	1,69%			2,4	5,00%			
95	1,69%			2,5	1,70%			
92	6,78%	<u> </u>		2,6	1,70%			
91	1,69%			2,7	1,70%			
81	1,69%			2,9	0,80%			
	100,00%				100,00%			

(The ranking is from the highest to the lowest)