

DIPLOMA SUPPLEMENT

This Diploma Supplement follows the model 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 judgments, 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):

1.2. Given name(s):

1.3. Date of birth (day-month-year):

1.4. Study number at the coordinating university (Aalborg University):

2. INFORMATION IDENTIFYING THE QUALIFICATION

2.1. Name of qualification and title conferred (in original language):

Master of Science (MSc) in Environmental Studies - Cities & Sustainability (joint degree).

2.2. Information on quality labels:

Erasmus Mundus

2.3. Main field(s) of study for the qualification:

Environmental Engineering and Management.

2.4. Name (in original language) and status of awarding institutions:

Aalborg Universitet (DK), Technische Universität Hamburg-Harburg (DE), Universidade de Aveiro (PT) Universidad Autònoma de Barcelona (ES). All public universities.

2.5. Language(s) of instruction/examination:

English

3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

3.1. Level of qualification:

Denmark – A long cycle research based qualification - normally requiring a total of 5 years of full time higher education studies (3-year BSc and 2-year MSc), regulated by the Ministerial Regulation No. 1520 of 16 December 2013.

Spain – University Master

Portugal - University Higher Education degrees of Mestre (ISCED 5A)

Germany – Master of Science (MSc)

3.2. Official length of programme:

2 years full-time study equivalent of 120 ECTS.

3.3. Admission requirement(s):

The Master of Science (MSc) in Environmental Studies - Cities & Sustainability has joint admission. The admission requirements are as follows:

- A Bachelor's degree or equivalent, at a second-class (upper) level or higher, in an engineering, science, technology, or management subject;
- A minimum total of 16 credits (ECTS) earned in mathematics and basics of natural sciences;
- An appropriate level of competence in the English language, through the attainment of, at a minimum, B2 (Effective Operational Proficiency) in the Common European Framework of Reference for Languages.

4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

4.1. Mode of study:

The Master programme is a 2-year, research-based, full-time study programme.

4.2. Programme requirements:

The student must satisfy programme requirements as prescribed in the course syllabus and obtain a minimum of 120 ECTS credits. At the end of the studies, in the second year, the student must have completed the project work or practicum as well as the master thesis. Student's mobility among the consortium universities is also mandatory. Moreover, the student must undertake at least one national language course of the consortium universities.

The graduate will have acquired skills and competences through studies undertaken in a research environment.

On the basis of the studies, the graduate can perform highly specialized functions in the labor market. In addition, the graduate has qualifications for research (PhD studies). Compared to the undergraduate, the graduate has expanded expertise and independence, so that the graduate independently applies scientific theory and method in academic and occupational / professional contexts.

The graduate of the Master programme:

- | | |
|-------------|---|
| Knowledge | <ul style="list-style-type: none"> • Has profound knowledge in the following subject areas that, in selected topics, are based on the highest international research <ul style="list-style-type: none"> ○ Sustainable Development ○ Urban Planning ○ Ecological Economics ○ Environmental Processes ○ Air Pollution ○ Risk Analysis ○ Life-Cycle Assessment ○ Material and energy flow analysis ○ Environmental Management ○ Environmental Technology • Can understand and, on a scientific basis, reflect on the subject areas' knowledge and identify scientific problems. • In depth knowledge of relevant national and international research • Has profound knowledge about the implications of research ethics • Possesses expert understanding in extension of the previous degree / or a broad perspective on the discipline of the Bachelor degree / or new professional competence next to the Bachelor degree • Possesses insight into and understanding of the societal conditions under which environmental and sustainability policies, strategies, plans, technologies and projects are implemented |
| Skills | <ul style="list-style-type: none"> • Excels in analysing complex urban environmental problems, designing new and innovative solutions, scientific methods and tools, and general skills related to employment within Environmental Studies • Can evaluate and select among the subject areas' scientific theories, methods, tools and general skills and, on a scientific basis, advance new analyses and solutions • Can communicate research-based knowledge and discuss professional and scientific problems with both peers and non-specialists. |
| Competences | <ul style="list-style-type: none"> • Can manage work and development in complex and unpredictable situations requiring new solutions • Can <u>independently initiate and implement</u> discipline-specific and interdisciplinary cooperation and assume professional responsibility • Can independently take responsibility for own professional development and specialisation • Can act successfully in an international and inter-cultural environment |

4.3. Programme details and individual grades/marks/credits obtained:

Please refer to the diploma

4.4. Grading scheme:

GRADING SCALE CONVERSION TABLE

The ECTS scale	ECTS Grade	AAU	TUHH	UA	UAB
excellent	A	12	1; 1.3	20-17	10-9.0
very good	B	10	1.7; 2.0	16-15	8.9-8.0
good	C	7	2.3; 2.7	14	7.9-7.0
satisfactory	D	4	3.0; 3.3	13	6.9-6.0
sufficient	E	2	3.7; 4.0	12-10	5.9-5.0
not passed	Fx/F	0/-3	4.3/5.0	< 10	< 5.0

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1. Access to further study:

Denmark – Ph.D. studies.

Germany – Qualifies to apply for admission for doctoral work (thesis research). Prerequisite: overall grade of at least "gut"; availability of doctoral thesis research project.

Portugal - The qualification allows applying for the degree of Doutor (ISCED 6) in accordance with section 7 information on the national higher education systems.

Spain - Qualifies to apply for admission for doctoral work (thesis research).

5.2. Professional status:

The MSc degree in this discipline entitles its holder to the legally protected professional title “Master of Science (MSc) in Environmental Studies - Cities & Sustainability” and to exercise professional work in the field(s) of Environmental Engineering and Management for which the degree was awarded.

6. ADDITIONAL INFORMATION**6.1. Further information sources:**

On the JEMES CiSu programme www.jemes-cisu.eu

On the institutions:

www.aau.dk

www.tuhh.de

www.ua.pt

www.uab.cat

7. CERTIFICATION OF THE SUPPLEMENT**7.1. Date:****7.2. Signature**

Grethe Nørgaard Jensen

7.3. Capacity

Administrative Officer

7.4. Official Stamp or seal**8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEMS**

The description of the four national education systems can be found in the forthcoming sections.

INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM - DENMARK

Public higher education institutions in Denmark are regulated by national legislation concerning degree structures, teacher qualifications and examinations. All programmes are accredited by national, independent accreditation agencies and the Accreditation Council.

Higher education institutions

Higher education is offered by five types of higher education institutions. Most of the higher education institutions are regulated by the Ministry of Higher Education and Science (type 1-5). The Ministry of Culture regulates a small number of higher education institutions offering first, second and third cycle degree programmes in fine and performing arts (type 5).

1. Academies of Professional Higher Education (Erhvervsakademi) offering professionally oriented short cycle and first cycle degree programmes.
2. University Colleges (Professionshøjskole) offering professionally oriented first cycle degree programmes.
3. Maritime Education and Training Institutions offering professionally oriented short cycle and first cycle degree programmes.
4. Research universities (Universitet) offering first, second and third cycle degree programmes in all academic disciplines.
5. University level institutions offering first, second and third cycle degree programmes in subject fields such as architecture, design, music and fine and performing arts.

Danish higher education institutions use the European Credit Transfer System (ECTS) for measuring study activities. 60 ECTS correspond to one year of full-time study.

Diagram of Institutions, Programmes and Degrees in the Danish Higher Education System

Danish qualifications levels	Ordinary higher education Degrees	Adult/continuing higher education degrees	Qualifications Framework for the European Higher Education Area – Bologna Framework	European/National Qualifications Framework for Lifelong Learning - EQF/NQF
Academy Profession level	Academy Profession (AP) degree (90-150 ECTS)	Academy Profession (AP) degree (60 ECTS) (also known as Further Adult Education (VVU) degree)	Short cycle	Level 5
Bachelor's level	Professional Bachelor's degree (180-270 ECTS)*	Diploma degree (60 ECTS)	First cycle	Level 6
	Bachelor's degree (within the arts) (180 ECTS)			
	Bachelor's degree (180 ECTS)			
Master's level	Master's degree (within the arts) (120-180 ECTS)	Master degree (60-90 ECTS)	Second cycle	Level 7
	Master's degree (120 ECTS)**			
PhD level	PhD degree (180 ECTS)		Third cycle	Level 8

* Can be obtained through a full regular bachelor's programme (180-270 ECTS) or a top up bachelor's programme following an Academy Profession degree.

** A few Master's programme are up to 180 ECTS.

Qualification framework

The qualification levels form the basis for the Danish National Qualifications Framework for Higher Education, which is certified in accordance with the overarching Bologna Framework according to the principles adopted by the European Ministers of Higher Education. Danish higher education qualifications at levels 5-8 of the Danish

Qualifications Framework for Lifelong Learning (NQF) are also compatible with levels 5-8 of the European Qualifications Framework (EQF).

Admission and progression

General access to higher education in Denmark requires an Upper Secondary School Leaving Certificate or

comparable qualifications. Admission to some particular programmes requires entrance examination or submission of a portfolio of artistic work.

Completion of a short cycle degree qualifies students for admission to a first cycle programme. Holders of an Academy Profession degree can obtain a Professional Bachelor's degree within the same field of study through a top-up programme. Completion of a first cycle degree qualifies students for admission to the second cycle.

Ordinary Higher Education degrees

The Academy Profession degree is awarded after 90-150 ECTS and includes a period of work placement of at least 15 ECTS. The programmes are development-based and combine theoretical studies with a practical approach. Programmes are, among others, offered within Marketing Management, Computer Science and Chemical and Biotechnical Science. The Danish title is field of study followed by the abbreviation *AK* and the English title is *AP Graduate in* [field of study].

The Professional Bachelor's degree is awarded after 180-270 ECTS and includes a period of work placement of at least 30 ECTS. The programmes are applied programmes. They are development-based and combine theoretical studies with a practical approach. Examples of professional bachelor's degree holders are nurses, primary and lower secondary school teachers and certain types of engineers. The Danish title is *Professionsbachelor i* [field of study] and the English title is *Bachelor of* [field of study].

The Bachelor's degree from a university is awarded after 180 ECTS. The programmes are research-based and are offered in all scientific fields. The Danish title is *Bachelor (BA) i* [field of study] or *Bachelor (BSc) i* [field of study] and the English title is *Bachelor of Arts (BA) in* [field of study] or *Bachelor of Science (BSc) in* [field of study].

The Bachelor's degree (within the arts) is awarded after 180 ECTS. The programmes are based on research and artistic research. Programmes are offered within the fine arts. The Danish title is *Bachelor (BA) i* [field of study] or *Bachelor i musik (BMus)* [field of study] or *Bachelor i billedkunst (BFA)* [field of study] and the English title is *Bachelor of Arts (BA) in* [field of study] or *Bachelor of Music (BMus)* [field of study]] or *Bachelor of Fine Arts (BFA) in* [field of study]. A higher education degree within theatre or filmmaking is awarded after 4 years of study (240 ECTS).

The Master's degree is awarded after 120 ECTS. The programmes are research-based and are offered in all scientific fields. The Danish title is abbreviated to *cand.*[latin abbreviation of academic area] *i* [field of study]. The English title is *Master of Arts (MA) in* [field of study] or *Master of Science (MSc) in* [field of study].

The Master's degree (within the arts) is awarded after 120-180 ECTS. The programmes are based on research and artistic research. The Danish title is abbreviated to *cand.*[latin abbreviation of academic area] [field of study]. The English title is *Master of Arts (MFA) in* [field of study] or *Master of Music (MMus)* [field of study] or *Master of Fine Arts (MFA) in* [field of study]. Music Academies offer a specialist degree of 2 to 4 years following the master's degree.

The PhD degree is awarded after 180 ECTS. PhD programmes are offered by the universities and some university level institutions offering degrees in the artistic and cultural field.

Detailed descriptions of degree levels can be found in the Danish Qualifications Framework at www.nqf.dk. Please consult the relevant Diploma Supplement for information about the learning outcome of the specific degrees.

Adult and continuing higher education

The programmes normally consist of 2 years of part-time study, equivalent to 1 year of full-time study (60 ECTS credits). Certain master programmes require 1½ years of full-time study (90 ECTS credits). Admission requirements are a relevant educational qualification and at least 2 years of relevant work experience.

Adult education qualifications are available at levels corresponding to those of the ordinary higher education system.

The Further Adult Education degree (*videregående voksenuddannelse/akademiuddannelse*) is awarded after studies at short cycle level and gives access to diploma programmes.

The Diploma degree (*diplomuddannelse*) is awarded after studies at first cycle level and gives access to master programmes.

The Master degree (*masteruddannelse*) is awarded after studies at second cycle level.

The 7-point grading scale

The grading system used in all state-regulated education programmes as of September 2007 is the 7-point grading scale. Apart from the 7-point grading scale, pass/fail assessment may also be used. 02 is the minimum grade for passing an exam.

Description of grades: 12: For an excellent performance displaying a high level of command of all aspects of the relevant material, with no or only a few minor weaknesses; 10: For a very good performance displaying a high level of command of most aspects of the relevant material, with only minor weaknesses; 7: For a good performance displaying good command of the relevant material but also some weaknesses; 4: For a fair performance displaying some command of the relevant material but also some major weaknesses; 02 For a performance meeting only the minimum requirements for acceptance; 00: For a performance which does not meet the minimum requirements for acceptance; -3 For: a performance which is unacceptable in all respects.

Danish grading scale	12	10	7	4	02	00	-3
The ECTS grading scale	A	B	C	D	E	Fx	F

Apart from the 7-point grading scale, pass/fail assessment may also be used. 02 is the minimum grade for passing an exam

INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM - GERMANY¹

Types of Institutions and Institutional Status

Higher education (HE) studies in Germany are offered at three types of Higher Education Institutions (HEI).²

- *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 organisation 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 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.

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.

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.⁵

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.

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.⁶

First degree programmes (Bachelor) lead to Bachelor of Arts (B.A.), Bachelor of Science (B.Sc.), Bachelor of Engineering (B.Eng.), Bachelor of Laws (LL.B.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.Mus.) or Bachelor of Education (B.Ed.).

Master

Master is the second degree after another 1 to 2 years. Master study programmes may be differentiated by the profile types "practice-oriented" 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.⁷

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).

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 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, see next section.

- 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, see next section.

- 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 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.

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, which operates with the levels A (best 10 %), B (next 25 %), C (next 30 %), D (next 25 %), and E (next 10 %).

German Grading Scale	1.0-1.3	1.7-2.0	2.3-2.7	3.0-3.3	3.7-4.0	4.3	5.0
The ECTS grading scale	A	B	C	D	E	Fx	F

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.

National Sources of Information

- Kultusministerkonferenz (KMK) [Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany]; Graurheindorfer Str. 157, D-53117 Bonn; Tel.: +49(0)228/501-0; Fax: +49(0)228/501-777

- 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/deutsche-eurydice-stelle-der-laender.html>)

- 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)

¹ The information covers only aspects directly relevant to purposes of the Diploma Supplement. All information as of 1 July 2010.

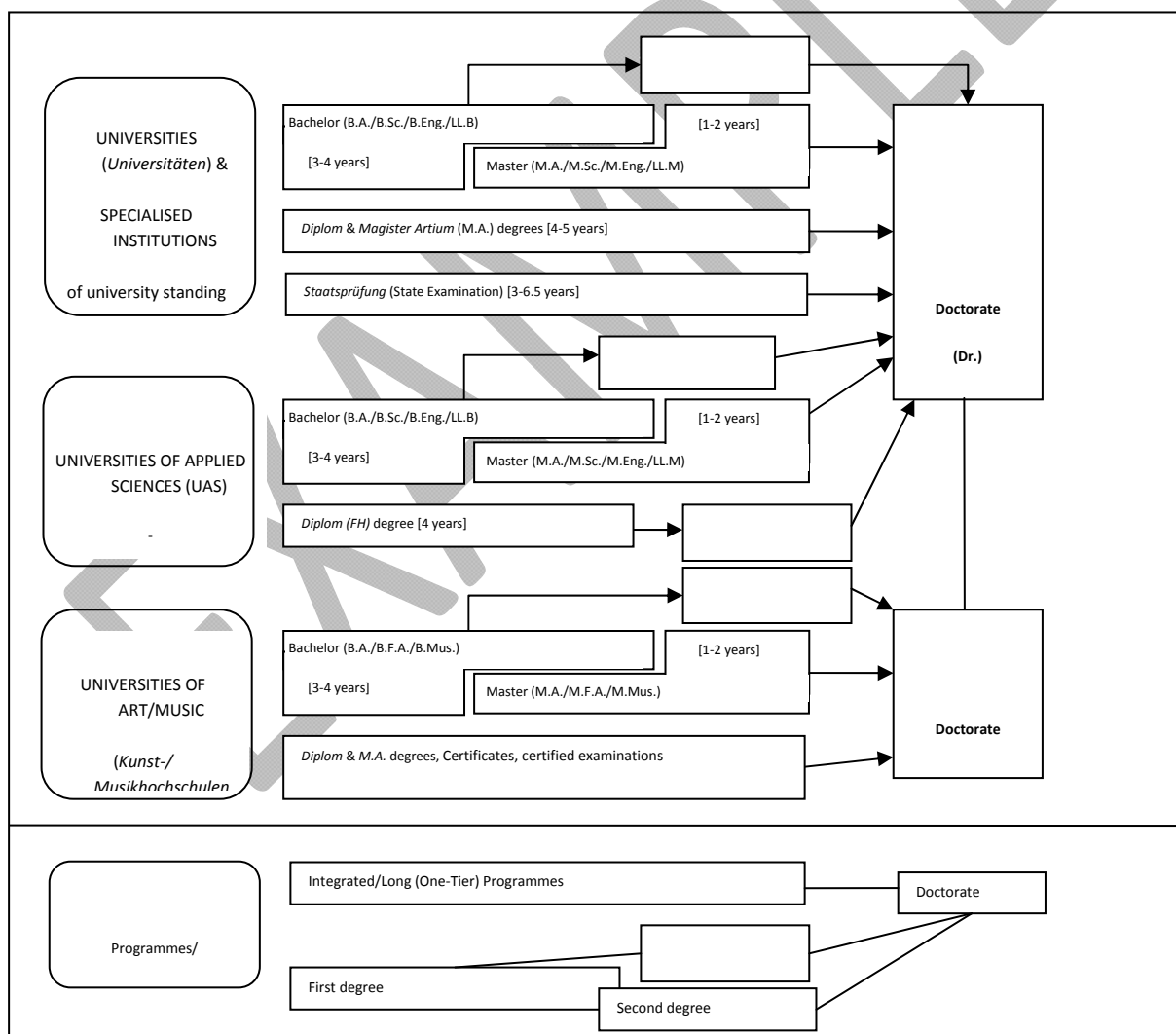
² *Berufsakademien* are not considered as Higher Education Institutions, they only exist in some of the Länder. They offer educational programmes in close cooperation with private companies. Students receive a formal degree and carry out an apprenticeship at the company. Some *Berufsakademien* offer Bachelor courses which are recognized as an academic degree if they are accredited by a German accreditation agency.

³ German Qualification 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 21.04.2005).

⁴ Common structural guidelines of the Länder 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 04.02.2010).

^{5, 6, 7} "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).

Diagram of Institutions, Programmes and Degrees in German Higher Education System



INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM - PORTUGAL

The Framework Law on the Education System (Law nr. 46/86, dated 14 October 1986, further amended by Laws nr.115/97, dated 19 September and nr. 49/2005, dated 30 August) establishes the general legal framework of the Education System.

According to this Law, the educational system comprises three levels: basic, secondary and higher education.

Pre-school education is optional and is for children between the ages of three and the age of entering basic education.

Basic Education is universal, compulsory and free and comprises three cycles, the first cycle lasts for four years, the second lasts for two years and the third lasts for three years.

Secondary education is compulsory and it comprises a 3 - year cycle (corresponding to 10th, 11th and 12th year of schooling).

Higher Education Structure

The first steps towards the legal reform of the system of higher education were made in 2005, with the introduction of the new credit system (ECTS) for the cycles of study, mobility mechanisms, diploma supplement, amongst others. Changes were also made to the Basic Law for the Education System in order to implement the Bologna Process.

The new structure divided into three cycles of studies was created in 2006 and it was completely implemented in Portugal in 2009/2010. Generic qualification descriptors were also defined for each of the cycles of studies, based on acquired competences, as well as the structure for the first and second cycles of study in terms of typical ECTS intervals.

Portuguese higher education includes university and polytechnic education. University education is offered by public and private university institutions while polytechnic education is offered by public and private non-university institutions. Private higher education institutions must be subject to the previous recognition of the Ministry of Education and Science. The higher education system comprises also a concordatory institution.

Licenciado degree

Both university and polytechnic institutions confer the degree of licenciado (bachelor). In polytechnic education, the cycle of studies that leads to the degree of licenciado has 180 credits and a normal length of six curricular semesters of students' work. In certain cases namely those covered by internal legislation or by European legislation, the cycle of studies can have up to 240 credits with a normal length of up to seven or eight curricular semesters of students' work.

In university education, the cycle of studies that leads to the degree of licenciado has from 180 to 240 credits and a

normal length between six to eight curricular semesters of students' work.

In the first cycle of studies the degree of licenciado is conferred, by universities or polytechnics institutions, to those that, after concluding all the curricular units that integrate the study programme of the licenciatura course, have obtained the established number of credits.

Mestre degree

Both university and polytechnic institutions confer the degree of mestre (master). The cycle of studies that leads to the degree of mestre has from 90 to 120 credits and a normal length of between three to four curricular semesters of students' work or in exceptional circumstances, 60 credits and a duration of two semesters, resulting from a stable and consolidated practice in that specific field at international level.

In polytechnic education, the cycle of studies that leads to the mestre degree must ensure predominantly that the student acquires a professional specialization. In university education, the cycle of studies that

leads to the mestre degree must ensure that the student acquires an academic specialization resorting to research, innovation or expansion of professional competences. In university education, the mestre degree may also be conferred after an integrated cycle of studies, with 300 to 360 credits and a normal length of 10 to 12 curricular semesters of students' work, in cases for which the access to the practice of a certain professional activity depends on that length of time established by legal EU standards or resulting from a stable practice consolidated in the European Union. In this cycle of studies the degree of licenciado is conferred to those who have obtained 180 credits corresponding to the first six semesters of work.

The degree of mestre is conferred to those that, after concluding all the curricular units that integrate the study programme of the mestrado course, have obtained the established number of credits, as well as successfully defended in public their dissertation, their project work or their traineeship report.

Doutor degree

The Doutor (doctor) degree is conferred by universities and university institutes. The degree of Doutor is conferred to those that, after concluding all the curricular units that integrate the study programme of the Doutoramento (doctorate) course, when applicable, and have successfully defended their thesis in the public act.

Access conditions

General regime to accede to higher education

National and foreign students wishing to apply through the general regime to the first cycle of studies, must fulfil the following conditions:

- Have successfully completed a secondary course or a national or foreign qualification legally equivalent;

- Have set for the entrance examinations required for the degree programme the student wishes to attend and get the minimal mark required (there are higher education institutions that accept foreign tests or exams);
- Have fulfilled the prerequisites for the higher education course the student wishes to attend, if required.

Special conditions

Besides the regime geral (general regime), there are special conditions for top level athletes, Portuguese citizens on an official mission abroad, national or foreign staff in diplomatic mission, permanent staff of the Portuguese Armed Forces and scholarship holders within the framework of cooperation agreements signed by Portugal.

Special Competitions

Besides the general regime and the special conditions there are also special competitions for applicants with certain specific qualifications thus allowing new publics to accede to higher education in a perspective of lifelong learning, namely:

- applicants over 23 years old who have passed a especial exam for assessing their capacity to accede to higher education;
- holders of a specialization technological course (non higher education post-secondary course).

Admission to higher education institutions is subject to numerus clausus

Admission to the second cycle of studies

Those who meet the following conditions may apply to the cycle of studies that leads to the mestre degree:

- Holders of the licenciado degree or legal equivalent;
- Holders of a foreign academic degree dully recognised as satisfying the objectives identical to the licenciado degree by the competent scientific body of

the higher education institution where one wishes to be admitted;

- Holders of an academic, scientific or professional curriculum vitae that is recognized as attesting the capacity to carry out this cycle of studies by the statutorily competent scientific body of the higher education institution to which they wish to be admitted.

Admission to the third cycle of studies

Those who meet the following conditions may apply to the cycle of studies that leads to the doutor (doctor) degree:

- Holders of the mestre (master) degree or legal equivalent;
- Holders of a licenciado degree who have a particularly relevant academic or scientific curriculum vitae that is recognized as attesting the capacity to carry out this cycle of studies by the statutorily competent scientific body of the higher education institution to which they wish to be admitted.
- Holders of an academic, scientific or professional curriculum vitae that is recognized as attesting the capacity to carry out this cycle of studies by the statutorily competent scientific body of the higher education institution to which they wish to be admitted.

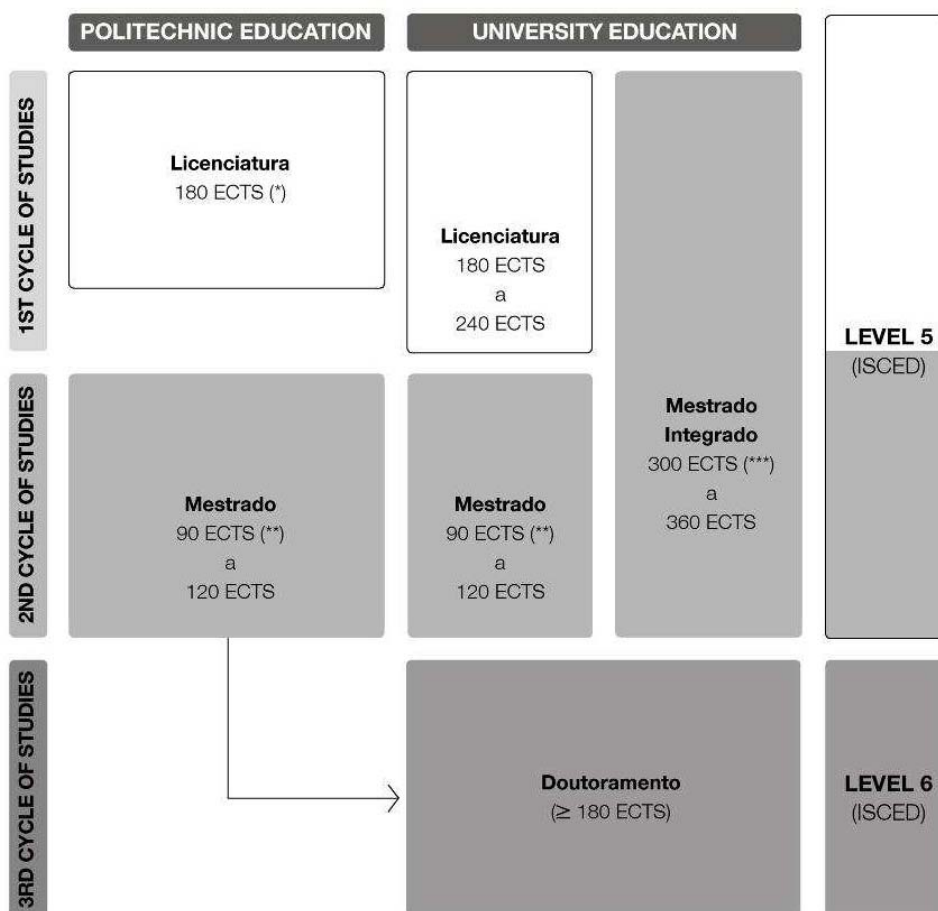
Classification System

The degrees of licenciado and mestre shall have a final classification between 10 and 20 on a numerical scale of 0 to 20, as well as its equivalent in the European scale of comparability of classifications.

The grading scheme in universities in Portugal comprises a 20 point scale. The minimum passing grade is 10.

The academic degree of doutor is assigned a final classification pursuant to the regulating standards approved by the university that confers it.

Diagram of Institutions, Programmes and Degrees in Portuguese Higher Education System



(*) Except when in order to exercise a certain professional activity requiring education and training rating between 210 and 240 ECTS.

(**) In exceptional circumstances, and subject to the fulfillment of every requirement relating to the definition of the objectives of the degree and the conditions for acquiring the latter, a cycle of studies leading to a *Mestre* degree in a specialized field may be amount 60 credits resulting from a stable and consolidated practice in that specific field at international level.

(***) A *Mestre* degree may also be granted following an integrated cycle of studies of which the duration, for the purposes of obtaining access to a professional activity, a) is established by European Union regulations; and b) results from a regular and consolidated practice within the European Union; in such cases, a *Licenciado* degree is granted to students having obtained 180 ECTS (3 years, 6 semesters).



INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM - SPAIN

The Spanish University System is made up of two types of universities: public and private.

According to the Organic Law 6/2001¹ of universities, the public universities are institutions created by the Law of the Legislative Assembly of the Autonomous Community, established within its jurisdiction and also those institutions created by Law by the Spanish Parliament, proposed by the government and in accordance to the Autonomous Community where the institution will be established.

In contrast, Private Universities are those institutions created by physical persons or legal bodies in virtue of section 6 of article 27 of the Spanish Constitution, with respect to the constitutional principles and subject to the Organic Law 6/2001 of universities.

That is to say that whether a university be public or private depends on ownership: on the one hand there are public universities created by a public entity; and on the other hand there are private universities created by physical persons or legal bodies.

There are also universities that are specialized in online studies that allow to study and obtain Bachelor's, Master and Doctorate degrees. Additionally, more and more public and private universities include the possibility of taking part of their academic offer online.

Degrees that are offered

According to what is established in the Organic Law 6/2001², within the autonomy of the universities, they can issue an official degree that are valid within the National territory, in addition to diplomas and non-official degrees.

- Official degrees:

Official University degrees are valid in all National territory, are established by the Government and are adapted to the European Higher Education Area (EHEA). Therefore, they have official validity in all the countries that comprise the EHEA. These degrees are equivalent to/recognized in other countries that do not pertain to this area (countries like Latin America, Asia, Africa, etc.).

- Non-official degrees:

Meanwhile, non-official degrees are created by the university and do not have validity in the EHEA. Therefore they are not equivalent in other countries, but valid only by the same public or private university that has given the degree.

The degrees may be differentiated by its denomination according to whether it is non-official or official. The

denomination of the official university degrees are: **Bachelor's, Masters and Doctorate** while the denominations of the non-official university degrees are **Non-official Bachelor's Degree, Non-official Masters, Masters Specialist and Masters Expert**. Non-official Doctorates Degrees do not exist.

For more information about the Spanish University System Degrees, the official as well as the non-official, please visit our search engine of degrees in <http://universidad.es/en/spain/study-spain/degrees>

Since the adaptation of the Spanish university system to the European Higher Education Area (EHEA), the structure of university studies in Spain now comprises three cycles: bachelor's degrees (in Spanish, Grado), master's degrees, and doctoral degrees. The bachelor's and the master's degrees are taught in the following areas of knowledge:

- Arts and Humanities.
- Experimental Sciences.
- Health Sciences.
- Social and Legal Sciences.
- Engineering and Architecture.

1st Cycle: Bachelor's degree

The bachelor's degree (grado) replaces the old qualifications of undergraduate diplomas and degrees. To obtain a bachelor's degree, students must earn a total of 240 ECTS credits over four academic years (including an end of degree dissertation).

The bachelor's degree is structured as follows:

- Basic training subjects (minimum of 60 credits).
- Obligatory subjects.
- Optional subjects.
- External placements (maximum of 60 credits).
- End of degree dissertation (minimum of 6 credits and a maximum of 30).
- Cultural activities (maximum 6 credits).

Students must enroll for a minimum of 9 credits and a maximum of 90 in each academic year.

2nd Cycle: Master's degree

Master's degrees comprise between 60 and 120 ECTS credits, spread over one or two academic years.

Official master's studies aim to prepare students for academic, professional or research work and lead to the award of the master's degree which is valid in all countries that are members of the European Higher Education Area (EHEA).

Students will be admitted on master's programmes in accordance with the assessment criteria stipulated for the degree in question.

The universities' Commission for the Coordination of University Degrees establishes the procedures and criteria for admission to master's programmes.

¹ http://www.boe.es/diario_boe/txt.php?id=BOE-A-2001-24515

² http://www.boe.es/diario_boe/txt.php?id=BOE-A-2001-24515

3rd Cycle: Doctoral degree

The goal of Doctoral programs in Spain is to train the student in advanced research techniques. These programs are divided in two parts or ciclos: the first part consists of studying 60 credits, which can form part of the Master's degree; the second is the actual research, which culminates in the student's public defence of his/her original research project (doctoral thesis). Regarding the duration of the program, there is a maximum of three years studying and researching full-time, or five years part-time.

International Doctorate

To obtain the honorary mention of "European Doctorate", the doctorate student must have spent at least 3 months outside of Spain carrying out studies or conducting research; part of the thesis must be written and must be presented in one of the languages, other than Spain's official languages, of the European scientific community; the student must have had consultation regarding the thesis with at least two expert doctors from a non-Spanish European university or research centre; and on the thesis judging panel, at least one of the panellist experts must be from a non-Spanish European country.

Doctorate Schools

Universities will be able to establish Doctorate Schools, which most properly focus and direct the doctoral training programs carried out by each university, in addition to promoting collaboration with public and private research institutions or national and international businesses.

For their part, the schools will facilitate the organisation of the doctoral program around one or more branches of knowledge or across multiple disciplines. They will also attempt to attract a group of researchers with diverse backgrounds in order to improve the well-roundedness, skills, and competence of the doctoral students.

For more information on the postgraduate studies offered by Spanish universities, please visit the Ministry de Education website at <http://universidad.es/en>.

ECTS credits

ECTS credits (ECTS = European Credit Transfer System) are the standard adopted by all the universities in the European Higher Education Area (EHEA) in the process of convergence between Europe's higher education systems.

ECTS credits are based on the work completed by the student, and cover hours of class, self-study, written work, and practicals.

An ECTS credit represents 25 hours of study. A student studying full-time is expected to obtain 60 ECTS credits in an academic year.

Grading Scheme

The grading scheme in universities in Spain comprises a 10 point scale. The minimum passing grade is 5.

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 %).

Spanish Grading Scale	10-9.0	8.9-8.0	7.9-7.0	6.9-6.0	5.9-5.0	4.9-3.1	3.0-0
The ECTS grading scale	A	B	C	D	E	Fx	F

Diagram of Institutions, Programmes and Degrees in Spanish Higher Education System

