

IMPLEMENTATION OF THE SPANISH HIGHER EDUCATION QUALIFICATIONS FRAMEWORK (MECES) IN THE DESIGN AND EX ANTE ACCREDITATION OF EDUCATION PROGRAMMES







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CONTENTS

CONTENTS	5
FOREWORD TO THE SECOND EDITION	7
1. INTRODUCTION	8
What are the goals of this document?	9
To whom is this document addressed?	10
What are national qualifications frameworks?	10
Why are qualifications frameworks important?	10
Genesis of the European Qualifications Frameworks	11
Spanish Qualifications Framework for Higher Education (MECES) ¹	13
2. CATALAN AND SPANISH HIGHER EDUCATION SYSTEM	14
Overall responsibility	14
Structure of higher education in Catalonia	15
Access to HE in Catalonia	18
Recognition of previous studies, credits and professional and work experience	23
3. THE QUALIFICATIONS FRAMEWORK	25
Relationship between the CHE-QF and Spanish and European qualifications frameworks	26
Description of HE levels: learning outcomes	29
4. SPECIFICATIONS OF QUALIFICATIONS	31
Specifications of level-1 qualifications	31
Specifications of level-2 qualifications	35
Specifications of level-3 qualifications	42
Specifications of level-4 qualifications	48
5. THE USE OF THE QUALIFICATIONS FRAMEWORK IN VALIDATION AND ACCREDITATION	52
ANNEX 1. OFFICIAL HIGHER EDUCATION QUALIFICATIONS IN CATALONIA AND SPAIN	53
ANNEX 2. PATHWAYS AND INTERCONNECTION OF OFFICIAL HIGHER EDUCATION DEGREES IN	
CATALONIA AND SDAIN	EΩ

FOREWORD TO THE SECOND EDITION

A review to update the Catalan Higher Education Qualifications Framework (CHE-QF) was required due to legislative changes since its publication. However, the description of the different qualifications remains unchanged, as neither the European Qualifications Framework (EQF) nor the Spanish Higher Education Qualifications Framework (MECES) has changed.

The main changes introduced in the CHE-QF are as follows:

- > The legal regulations affecting higher education (HE) degree programmes have been updated.
- > University bachelor's degrees of 180 ECTS credits (3 years) have been eliminated, since they are no longer valid in Spain.
- > All definitions are aligned with the Focus 1 and 2 documents.
- > The names of higher education (HE) study programmes in Arts have been updated.
- > The section on credit recognition has been rewritten.
- > Specification of the relationships between the different frameworks: CHE-QF, MECES, QF-EHEA, MECU and EQF.

1. INTRODUCTION

This document is an initiative of AQU Catalunya derived from the experience acquired in the accreditation of university degree programmes. This experience showed that the summary nature of the Spanish Higher Education Qualifications Framework (MECES, from the Spanish acronym) needed to be implemented to meet one of its objectives: adapting to the design of education programmes and the subsequent accreditation process in the case of university degrees and higher education (HE) study programmes in Arts.

The MECES has been applicable since 2011 and establishes descriptors for four levels of HE: qualification as an advanced technician, and bachelor's, master's and PhD degrees. Furthermore, proposals for university degree programmes and HE study programmes in Arts in Spain have to undergo external assessment prior to their implementation (an *exante* accreditation process called validation). Among other things, this assessment has to check that the proposed learning outcomes for the education programmes are aligned with the MECES. AQU Catalunya has been carrying out this activity since 2011.

However, during this time a number of incidents have emerged raising doubts as to whether MECES sufficiently covers the range of degree programmes offered. For example, the most commonly observed problems are related to: generic vs. specialist bachelor's degrees; bachelor's degrees of 240 ECTS credits vs. bachelor's degrees of 180 (no longer valid), 300 or more ECTS credits; non-specialist university master's degrees; non-demanding admission criteria in university master's degrees; coexistence of different orientations in the same master's degree programme (academic, professional and research); recognition of credits between different educational levels; level-7 degree programmes; and recognised and non-recognised degree programmes (official qualifications). It is obvious that the current MECES does not accurately reflect the reality which, in turn, makes the assessment process less obvious, compromising its transparency.

The objective of this document is to build on this experience and analyse how other NQFs deal with these kinds of degrees through an NQF Committee that has integrated these two perspectives (contextual and international). The group driving this proposal for a HE qualifications framework for Catalonia did not approach the task intending to create a completely new proposal, which would have been very difficult, as qualifications frameworks have been established in many countries for years with very similar structures and contents. Rather, the aim was to compile the best experiences and definitions in a single document, so the Catalan university system could improve the design of learning outcomes in higher education qualifications.

¹ Ministerio de Educación, "<u>Real Decreto 1027/2011, de 15 de julio, por el que se establece el Marco Español de Cualificaciones para la Educación Superior</u>", *Boletín Oficial del Estado* (185), 2021, pp. 87912-87918. BOE-A-2011-13317.

Moreover, this document is a purely academic exercise that has no legal validity outside Catalan HE institutions. National qualification frameworks are drawn up with the help of all the social agents involved in education and employment outcomes for students pursuing HE study programmes: universities and other higher education institutions, governments through their education, business and industrial strategy and labour departments, associations of employers, unions, professional organisations, etc. In addition, a national qualifications framework (NFQ) in Europe must be referenced to the European Qualifications Framework (EQF)² through a report demonstrating the alignment of the two. This exercise is not going to be carried out in the case of this proposal for the reasons explained in this introduction.

This proposal adopts the structure of the Australian Qualifications Framework and incorporates definitions and best practices from the qualifications frameworks of Great Britain, the Netherlands, Sweden, Denmark and Norway. It also follows the premises of the European Qualifications Framework and the Qualifications Framework of the European Higher Education Area.

What are the goals of this document?

- > To draw up the MECES legal text to adapt it to the current needs of the Catalan university system. The result of this deployment is presented as the Catalan Higher Education Qualifications Framework (CHE-QF). Its implementation is compatible with the European and Spanish frameworks, but has improved certain aspects, such as the structure and definitions, to make it more useful for end users. It also has the function of making the HE levels in Catalonia more understandable to society.
- > To propose a useful framework for the design, validation and accreditation of university degree programmes and HE study programmes in Arts, aligned with the assessment criteria used in Europe, Spain and Catalonia for this purpose.

² Council of the European Union, "Council recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning", Official Journal of the European Union (OJ), C 189, 15.6.2017, pp. 15–28. Document 32017H0615(01).

To whom is this document addressed?

This document is addressed to students, teaching staff, employers and society in general, to inform them about the profile of students who have obtained a specific academic qualification. It should also enable comparison between Catalan qualifications and those offered in other European countries.

It is also aimed at universities, to facilitate the design of degree programmes, and to bodies involved in validation and accreditation processes.

What are national qualifications frameworks?

NQFs are instruments for the development and classification of qualifications based on a set of criteria for the specific learning levels obtained by students. They are based on the knowledge, skills and competence (the learning outcomes) that have to be acquired and the learning volume: ECTS credits, in this context. They also aim to integrate and coordinate national qualifications and improve transparency for the labour market and civil society.

An NQF brings together all the official qualifications of a country, arranges them in a clearly defined structure and establishes the relationships between them in terms of such factors as access and equivalence. In this context, qualifications are understood as sets of certified or documented skills – with no regard given to the respective learning path.³

Why are qualifications frameworks important?

In general, qualifications frameworks are important instruments for achieving comparability and transparency within the European Higher Education Area (EHEA). This facilitates student mobility within and between HE systems. They also help HE institutions develop modules and qualifications based on learning outcomes and credits, and improve recognition of qualifications and prior learning (London Communiqué, 2007).⁴

Thus, the two main objectives of the qualifications frameworks are:

- > To make qualifications transparent to students and society, so that students know what they need to learn and society knows what to expect.
- > To enabling flexibility and transferability between different educational and occupational fields and levels and between learning venues in order to eliminate barriers that currently block horizontal and vertical education pathways.

³ Georg Hanf and Ute Hippach-Schneider, "What Purpose Do National Qualifications Frameworks Serve? - A Look at Other Countries", *Berufsbildung in Wissenschaft Und Praxis*, Special Edition (2005): 9-14.

⁴ EHEA Ministerial Conference, "<u>London Cummuniqué. Towards the European Higher Education Area: Responding to Challenges in a Globalised World</u>", 18 May 2007.

Qualifications frameworks may also have other functions:

- > Foster the more rational design and development of qualifications.
- > Make it easier for governments to guide skills development.
- > Encourage educational mobility through the use of credit transfer systems.
- > Enhance the marketability of courses and programmes at international level.
- > Improve the representation of a country's qualification potential in international statistics.

The value of an NQF lies in its potential to contribute to policy goals such as lifelong learning, recognition of skills, or improving the quality of education and training. Therefore, its design should relate to the goals which it is intended to support and to the context in which it will operate. It is unhelpful to think of the NQF as entities with fixed or universal characteristics – other than the need to establish a set of levels and criteria for registering and allocating qualifications to these levels.

Genesis of the European Qualifications Frameworks

The impetus for work on the overarching framework came from the Berlin Communiqué, adopted in 2003:⁵

"Ministers encourage the member States to elaborate a framework of comparable and compatible qualifications for their higher education systems, which should seek to describe qualifications in terms of workload, level, learning outcomes, competences and profile."

In Europe, there are two major qualifications frameworks that serve as an umbrella for NQFs. The first is the **Qualifications Framework for the European Higher Education Area** (QF-EHEA),⁶ which was adopted in May 2005 by ministers to assist in implementing the Bologna Process, which was revised at the Ministerial Conference in Paris in May 2018.⁷ It covers HE qualifications only and is valid for all 49 EHEA member states, whether they are part of the European Union or not. The QF-EHEA provides the framework in which the NQFs for HE qualifications in these 49 countries should be drawn up and represents the "face" of

⁵ EHEA Ministerial Conference, "<u>Berlin Communiqué</u>: <u>Realising the European Higher Education Area</u>", 19 September 2003.

⁶ Bologna Working Group on Qualifications Frameworks, <u>A Framework for Qualifications of the European Higher Education Area</u> (Copenhagen: Ministry of Science, Technology and Innovation, 2005).

⁷ EHEA Ministerial Conference, "<u>The Framework of Qualifications for the European Higher Education Area</u>", 24 May 2018.

European HE qualifications for the rest of the world.

The second is the European Qualifications Framework for Lifelong Learning (EQF),² drawn up by the European Commission. It was signed on 23 April 2008 by the presidents of the European Parliament and of the Council of the European Union, and was revised in 2017. It covers all levels of education and is valid and binding for all EU countries, EU accession countries and countries in the European Economic Area.

Since the QF-EHEA and the EQF do not use the same terminology for HE qualifications, there may appear to be two different general frameworks in place for HE in Europe. It should therefore be stressed that, while the wording of the EQF is not identical to that of the QF-EHEA, there are no major differences between the two, and it is perfectly possible to draw up NQFs compatible with both the EQF and the QF-EHEA. This was recognised by Ministers in the London Communiqué (2007):⁴

"We are satisfied that national qualifications frameworks compatible with the overarching Framework for Qualifications of the EHEA [QF-EHEA] will also be compatible with the proposal from the European Commission on a European Qualifications Framework for Lifelong Learning [EQF]."

Spanish Qualifications Framework for Higher Education (MECES)¹

The MECES was officially published on 3 August 2011 in Royal Decree 1027/2011. It is a legal document of mandatory compliance. It includes 4 levels, generic descriptors based on the Dublin Descriptors,⁸ it refers to ECTS expectations and is focussed on learning outcomes and competence levels.

Table 1 shows the levels established in the MECES for HE.

Table 1. Educational levels in higher education

Lev	vels	Qualifications
1	Qualification as an advanced technician	Advanced Technician in Vocational Training Advanced Technician in Plastic Arts and Design Advanced Technician in Sports Education
2	Bachelor's degrees	Bachelor's degree Bachelor's degree in Arts
3	Master's degrees	University master's degree Master's degree in Arts Bachelor's degree of at least 300 ECTS credits including at least 60 ECTS credits at master's degree level
4	PhD	PhD diploma

The MECES has been applied in the design of university qualifications adapted to the EHEA and in *ex ante* and *ex post* accreditations carried out by all the quality assurance agencies in Spain, including AQU Catalunya.

INTRODUCTION • 13

⁸ The Dublin Descriptors were developed by the Joint Quality Initiative (an informal network of ministries and quality assurance agencies from Austria, Belgium, Denmark, Germany, Ireland, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland and United Kingdom). They consist of the cycle descriptors (or "level descriptors") presented in 2003 and adopted in 2005 as the Qualifications Framework of the European Higher Education Area. They offer generic statements of typical expectations of achievements and abilities associated with awards that represent the end of each of a (Bologna) cycle or level. The descriptors are phrased in terms of **competence** levels, not learning outcomes, and they make it possible to distinguish the different cycles in a broad, general manner.

2. CATALAN AND SPANISH HIGHER EDUCATION SYSTEM

Overall responsibility

Competence in HE are shared between the Administración General del Estado (General State Administration, AGE), through the ministries responsible for education (for vocational training and HE study programmes in Arts) and universities, and the autonomous communities; in Catalonia. the Ministries of Education and of Research and Universities. The central education administration executes the general guidelines of the Spanish Government on education policy and regulates the basic elements or aspects of the system; whereas, the autonomous community education authorities develop the Spanish State regulations and have executive and administrative authority for managing the education system in their own territory.

University education is regulated by Organic Law 2/2023 of 22 March on the university system (LOSU).⁹ All other courses are regulated by Organic Law 2/2006, of 3 May, on Education (LOE).¹⁰ A series of royal decrees have developed and set out more detail on the responsibilities of the State Administration.

The Catalan autonomous community has authority for the creation, modification and elimination of programmes in both public and private universities, and also for the core funding of public universities. These aspects are regulated by Law 1/2003, of 19 February, on Catalan universities (LUC).¹¹

The body in charge of ensuring this functional coordination at HE level in Spain is the General Conference for Higher Education Policy, made up of the autonomous communities' ministers for Education or Universities and the central government Minister for Universities. The Spanish Government, through the ministry responsible for universities, regulates the conditions for obtaining, issuing and recognising qualifications, including those leading the practice of a regulated profession. Spain is a signatory to the Lisbon Recognition Convention and has adopted European directives on the recognition of professional qualifications. According to Spanish State regulations, Catalonia is responsible for funding HE institutions and AQU Catalunya is responsible for quality

⁹ Jefatura del Estado, "<u>Ley Orgánica 2/2023, de 22 de marzo, del Sistema Universitario</u>", *Boletín Oficial del Estado* (70), 2023, pp. 43267-43339. BOE-A-2023-7500.

¹⁰ Jefatura del Estado, "<u>Ley Orgánica 2/2006, de 3 de mayo, de Educación</u>", *Boletín Oficial del Estado* (106), 2006, pp. 17158-1720. BOE-A-2006-7899.

¹¹ Presidència de la Generalitat de Catalunya, "<u>Llei 1/2003, de 19 de febrer, d'universitats de Catalunya</u>", *Diari Oficial de la Generalitat de Catalunya* (3326), 2003, pp. 3326-3345.

¹² Council of Europe, "Convention on the Recognition of Qualifications Concerning Higher Education in the European Region", OJ (165), 1999.

assurance in HE for Catalonia, a role that includes validation/accreditation.

On 5 March 2023, the UN Global Convention on the Recognition of Qualifications concerning Higher Education entered into force.13 Although Spain is not yet a signatory to the Convention, it is advisable for Catalan universities and other HE institutions to apply it, as far as possible.

Structure of higher education in Catalonia

Higher education comprises university, art and professional studies. University education is provided in universities, while HE study programmes in Arts and advanced vocational training are provided in the same type of institutions as those offering intermediate vocational training (secondary studies).

Advanced vocational training

This consists of a series of education programmes that provide qualifications for a number of professional fields, as well as access to employment and active participation in social, cultural and economic life. It is regulated by Organic Law 2/2006, of 3 May, on education.¹⁰

Advanced vocational training is organised into modularly structured training cycles, including a vocational module, which requires students to prepare a project during the last stage of the education programme. Each training cycle is related to one of the 26 professional areas established by the National Catalogue of Professional Competence Standards (CNECP), previously known as the National Catalogue of Professional Qualifications (CNCP).14

The Catalan Government is responsible for the annual organisation of the academic year. Generally, the duration of the academic year comprises a minimum of 175 days, distributed between the first fortnight of September and the end of June, grouped in semesters.

Vocational training is provided both in public and private education institutions, authorised by the Catalan Government. Students who have successfully completed the advanced training cycles receive the vocational qualification of advanced technician (level 1, EQF 5). This qualification is also awarded for HE study programmes in Sports Education and Plastic Arts and Design (considered programmes under a special system).

¹³ United Nations Educational, Scientific and Cultural Organization, "Global Convention on the Recognition of Qualifications Concerning Higher Education" (UNESCO, 5 March 2023).

¹⁴ Instituto Nacional de las Cualificaciones (INCUAL), "Catálogo Nacional de Cualificaciones Profesionales" (Ministerio de Educación y Formación Profesional, March 2022).

Vocational training qualifications

The most significant professions in Spain are organised by professional families and levels as established by Royal Decree 1128/2003.¹⁵ The CNECP/CNCP describes the structure and content of professional qualifications subject to recognition and accreditation.

The National Institute of Qualifications (INCUAL) is responsible for the catalogue. This institute gives support to the General Council for Professional Training and has the mission to define, prepare and maintain the CNECP/CNCP in Spain. Due to shared areas of powers in Spain, there is a homologous body in Catalonia, the Catalan Institute for Professional Qualifications.

The set of instruments and actions required to promote and develop integration of the vocational training offer, through the CNECP/CNCP, make up the National System for Qualifications and Vocational Training (SNCFP). The whole system seeks to promote and develop the appraisal and accreditation of the respective professional competences in order to favour professional and social development and to fulfil the needs of the productive system.

HE study programmes in Arts

These courses are regulated by Royal Decree 1614/2009¹⁶ and are organised into **bachelor's degrees in Arts** (level 2, EQF 6) and **master's degrees in Arts** (level 3, EQF 7), both equivalent to their university counterparts at the same educational level. These are considered programmes under a special system and are specified in the HE study programmes of Music, Dance, Dramatic Art, Conservation and Restoration of Cultural Heritage, and Plastic Arts and Design. The latter include Ceramics and Glass (see Table 2). These studies are offered in both public and private non-university institutions. The Spanish academic system does not cover level 4 (PhDs) for programmes under a special system. However, the Generalitat de Catalunya may look to reach agreements with universities to organise specific doctoral studies in Arts.

The Catalan Government is responsible for the annual organisation of the academic year. Generally, the duration of the academic year comprises a minimum of 175 days, distributed between the first fortnight of September and the end of June, grouped in semesters.

¹⁵ Ministerio de la Presidencia, "<u>Real Decreto 1128/2003, de 5 de septiembre, por el que se regula el Catálogo Nacional de Cualificaciones Profesionales</u>", *Boletín Oficial del Estado* (223), 2003, pp. 34293-34296. BOE-A-2003-17588.

¹⁶ Ministerio de Educación, "Real Decreto 1614/2009, de 26 de octubre, por el que se establece la ordenación de las enseñanzas artísticas superiores reguladas por la Ley Orgánica 2/2006, de 3 de mayo, de Educación", *Boletín Oficial del Estado* (259), 2009, pp. 89743-89752. BOE-A-2009-17005.

Table 2. Centres providing HE study programmes in Arts in Catalonia

Centre where they are taught	Arts
Higher conservatories or higher schools of	Music
music and dance	Dance
Higher schools of performing arts	Performing Arts Education
Higher schools for the preservation and	Preservation and Restoration of Cultural Assets
restoration of cultural assets	Education
Higher schools of design	Design Education
Higher schools of plastic arts	Plastic Arts and Design Education

University education

University education organisation and quality assurance is regulated by Royal Decree 822/2021.¹⁷ University education is organised into three cycles: **bachelor's degree** (level 2, EQF 6), **master's degree** (level 3, EQF 7) and **PhD** (level 4, EQF 8).

Each university designs the organisation of the academic year and includes it in their bylaws. The workload in a full-time academic year of formal education is 60 ECTS credits. As a general rule, the university academic year has 220 teaching days and is divided into two semesters (30 ECTS credits each):

- > The first semester runs from the beginning of the academic year, mid-September, to the end of January or the beginning of February, when students sit their final assessment exams for the subjects they have studied during the first semester and the partial exams for year-long subjects, where appropriate.
- > The second semester runs from the beginning of February to the end of May. Both the final assessment exams for the subjects in this semester and the year-long subjects are held between June and July.

Universities offer a second round of exams for those who have not passed their subjects. Timetable and organisation are established by each university.

University study programmes are delivered both in public and private institutions, which are authorised by an Act of the Catalan Parliament.

¹⁷ Ministerio de Universidades, "<u>Real Decreto 822/2021</u>, de 28 de septiembre, por el que se establece la organización de las enseñanzas universitarias y del procedimiento de aseguramiento de su calidad", *Boletín Oficial del Estado* (233), 2021, pp. 119537-119578. BOE-A-2021-15781.

Access to HE in Catalonia

Access to qualification as an advanced technician

To access advanced vocational qualifications (level 1, EQF 5), students must meet one of the following requirements:

- > Hold an **upper secondary education certificate or equivalent** (Spanish or Catalan baccalaureate, EQF 4).
- > Have a **qualification as a technician** (intermediate vocational training certificate, EQF 4).
- > Have completed a 700-hour preparatory course.
- > Hold a qualification as an **advanced technician** in vocational training or equivalent (EQF 5).
- > Have passed an **entrance examination** to advanced vocational training cycles.
- > Have a university degree or equivalent (at least EQF 6).

Bearing in mind that there are different admission paths, the Catalan Government allocates places according to the following criteria:

- > between 60% and 70% of places are set aside for students who have an upper secondary education certificate (Catalan or Spanish baccalaureate);
- > between 20% and 30% of places are reserved for students who have passed the preparatory course;
- > between 10% and 20% of places are reserved for students applying for admission through other pathways.

Access to qualifications in HE study programmes in Arts

The general requirements for access to these courses are:

- > Having an **upper secondary education certificate** or having passed the university entrance exam for over-25s (EQF 4).
- > Having passed the specific test for the qualification and specialisation the student wishes to access.

Access to bachelor's degrees

Access to bachelor's degrees is expected to change from the academic year 2024-2025.

As a general rule, students must pass a single entrance examination, which will be taken into account together with the marks obtained from their upper secondary education studies. The basic characteristics will be established by the Spanish Government, after consultation with the Sectoral Conference on Education and the General Conference on University Policy, and after a report from the Council of Universities and the State School Council.

The Spanish Government, following a report from the General Conference on University Policy, regulates university access, establishing the general conditions applicable throughout Spain. The education authorities in the autonomous communities adapt and develop them in their respective areas of management.

Access to official university bachelor's degree programmes is based on respect for fundamental rights and the principles of equality, non-discrimination, merit and ability. The principles of universal accessibility and design for all are also taken into account.

The General Conference on University Policy is the body responsible for ensuring student admission to official university bachelor's degree programmes is general, objective, universal, valid in all Spanish universities and meets EHEA criteria.

Until the academic year 2023-2024, students holding any of the following qualifications can access official bachelor's degrees:

- a) Upper secondary education certificate from the Spanish education system or another qualification declared equivalent (EQF 4).
- b) European Baccalaureate or International Baccalaureate diploma.
- c) Baccalaureate qualifications, diplomas and studies from European Union Member States or other states with which international reciprocity agreements have been signed.
- d) Qualifications, diplomas and studies officially recognised as equivalent to the upper secondary education system qualification obtained or studied in education systems in non-European Union states with which international reciprocity agreements have not been signed.
- e) Qualification of Advanced Technician in Vocational Training, Advanced Technician in Plastic Arts and Design or Advanced Technician in Sports (EQF 5), or qualifications, diplomas and studies declared or recognised as equivalent to the above-mentioned qualifications.
- Qualifications, diplomas and studies other than those equivalent to the upper secondary education certificate, Advanced Technician in Vocational Training, Advanced Technician in Plastic Arts and Design and Advanced Technician in Sports in the Spanish education system obtained or completed in a European Union Member State or other states with which international reciprocity agreements have

been signed, when the academic requirements demanded in that Member State for access to universities are met.

- g) Official university bachelor's degree (EQF 6) or master's degree (EQF 7) or equivalent.
- h) Official qualifications of university diploma, technical architect, technical engineer, graduate, architect and engineer qualifications from the previous university system or equivalent qualifications.

Access is also open to persons in any of these situations:

- i) Persons of the following ages and over, who meet certain conditions:
 - o 25 years of age who have passed the specific entrance exam;
 - 40 years of age and working or with professional experience in a particular field of study;
 - o 45 years of age who have passed the specific entrance exam.
- *j)* Persons who have partially taken foreign or Spanish university studies, or completed foreign university studies without obtaining official recognition or equivalence in Spain and who wish to continue studying at a Spanish university (in this case, an essential requirement is that the corresponding university has recognised at least 30 ECTS credits).
- *k)* Persons for whom university is accessible based on the previous regulations of the Spanish education system.

The most common access pathways are \boldsymbol{a} and \boldsymbol{e} .

Public universities establish both the admission procedures and the criteria to take into consideration in each procedure, which depend on the certificate held by the candidate:

- > Persons with qualifications from sections a, b, c.
 - Universities may exclusively use the final mark obtained from the upper secondary education studies or establish admission procedures.
 - If they establish admission procedures, universities must use one or several of the following criteria:
 - Branch and subjects taken in previous studies equivalent to the upper secondary education certificate (related to the university qualification chosen);
 - Marks obtained in specific subjects taken or in the final evaluation of the studies equivalent to the Spanish baccalaureate;
 - o Additional academic or vocational training;
 - o Higher education previously pursued.
 - In addition, universities may exceptionally establish specific knowledge and/or skills assessments.
- > Persons with qualifications from sections d, e, f, g, h, j, k.

- Universities **must establish** admission procedures for sections d, e.
- Universities may establish admission procedures for f, g, h, j, k.
- In all cases, the admission procedures established by the universities must use one or more of the following assessment criteria:
 - the final mark obtained in the courses taken, or in specific modules or subjects;
 - relationship between the curricula of the previous qualifications and the university degrees applied for;
 - o bridging academic or professional courses;
 - o previously completed HE study programmes.

Exceptionally, universities may establish specific knowledge or competence assessments.

Access to university master's degrees and master's degrees in Arts

The requirements to access these qualifications are as follows:

- > An official Spanish **bachelor's degree** or equivalent.
- > Another university master's degree.
- > Qualifications at the same level as the Spanish bachelor's or master's degree issued by universities and HE institutions of an EHEA country that grant access to these studies in that country.
- > Qualifications from education systems not in the EHEA which are equivalent to the bachelor's degree, without the need for official recognition of the degree, but requiring confirmation by the university (in the case of official university master's degrees) or the competent education authority (in the case of official master's degrees in Arts) of the level of training involved, provided the qualification allows access to postgraduate university studies in the country in which it was awarded.

Universities may exceptionally establish conditional enrolment procedures for access to a university master's degree, on the basis of specific regulations approved by their governing bodies. This type of enrolment allows undergraduate students who have still to pass the bachelor's degree final-year project and lack up to 9 ECTS credits to access and enrol in a university master's degree, although the master's degree cannot be obtained if the bachelor's degree has not been obtained beforehand. The universities guarantee priority enrolment for students who hold an official university bachelor's degree.

This procedure may take into account credits pending recognition or transfer in the bachelor's degree, or the requirement to pass a certain level of knowledge in a foreign language in order to obtain the degree. In the field of Engineering and Architecture, exceptionally and on a trial basis, the maximum limit is 30 ECTS credits, provided that the master's degree and the bachelor's degree form part of a sequential academic

programme (PARS) validated by AQU Catalunya.

Likewise, in both courses, students may be admitted on the basis of specific requirements and bridging courses established by the university (in the case of official university master's degree courses) or merit assessment criteria specific to the degree or established by the competent educational authority (in the case of official master's degrees in Arts).

The Spanish Government sets the entrance qualification(s) for official university master's degrees that provide qualifications for a regulated professional activity.

Each university decides on the number of students who may be admitted to a master's degree programme.

Access to PhDs

As a general rule, candidates looking to access PhD studies must have an **official bachelor's degree** or equivalent (EQF 6) and an **official master's degree** or equivalent (EQF 7), provided they have obtained a minimum of 300 ECTS credits in both courses overall. Access is also open to persons who already hold a **PhD**.

In addition, admission may also be granted to those holding:

- > An official university degree from Spain or another EHEA member country, which provides access to a university master's degree, with a minimum of 300 ECTS credits in official university studies, of which at least 60 must be at master's level (EQF 7).
- > An official Spanish bachelor's degree of at least 300 ECTS credits, whose study programme includes research training credits equivalent in value to the research credits of a master's degree. If the latter condition is not met, specific bridging courses must be taken in order to gain access to the PhD programme.
- A place in training in one of the Health Science specialisations (after having completed a bachelor's degree programme) by means of an entrance examination, provided the person has already passed at least two years of training in a programme leading to an official degree in any of the specialist branches of Health Sciences.
- A qualification obtained from foreign education systems, without the need for recognition, after the university has verified that the qualification accredits training equivalent to the official Spanish university master's degree, and that the degree provides access to doctoral studies in the issuing country.
- > An official university qualification corresponding to MECES level 3 (EQF 7).

Universities may establish additional admission and selection criteria for applicants.

Recognition of previous studies, credits and professional and work experience

Recognition of credits between different educational levels

In general, among the different educational levels, only bachelor's degrees (university and in Arts) and advanced technician qualifications may be subject to recognition of studies and credits.

Credit recognition must be carried out considering the match in learning outcomes between the subjects in both study programmes. The Catalan Government will be responsible for recognising qualifications and education periods in official university qualifications in advanced vocational training cycles (advanced technician) and HE study programmes in Arts (bachelor's degrees), and universities will be responsible for recognising qualifications and training periods in their bachelor's degrees. However, the Spanish Government has established general guidance criteria for the recognition of studies and credits.¹⁸

Where there is a direct link between claimed qualifications and those provided by the courses being applied for, the competent authorities will ensure recognition of a minimum number of ECTS credits, varying according to the duration of the curricula or study programmes, as set out in Table 3.

For university bachelor's degrees, the maximum number of credits recognised may not exceed 25% of those taken in advanced vocational training courses (qualification as an advanced technician).

Table 3. Minimum number of ECTS credits to be recognised between related qualifications

		Studies to be taken Advanced Advance				
Studies taken	University bachelor's degree	Bachelor's degree in Arts	Technicia n in Vocational Training	Advance Technicia n in Plastic Arts and Design	Advanced Technician in Sports Education	
University bachelor's degree	_	36	24	24	16	
Bachelor's degree in Arts	36	_	24	24	16	
Advanced Technician in Vocational Training	30	30	_	_	_	
Advance Technician in Plastic Arts and Design	30	30	_	_	_	
Advanced Technician in Sports Education	27	27	_	_	_	

¹⁸ Ministerio de Educación, «<u>Real Decreto 1618/2011, de 14 de noviembre, sobre reconocimiento de estudios en el ámbito de la Educación Superior</u>», Boletín Oficial del Estado (302), 2011, p. 137575-137588. BOE-A-2011-19597.

CATALAN AND SPANISH HIGHER EDUCATION SYSTEM • 23

Recognition of credits between study programmes at the same level of education and qualification

For the recognition of credits taken in other degree programmes in the same qualification and at the same educational level, the educational institutions themselves establish the criteria to be applied, always considering the match in the learning outcomes between the subjects already taken and those intended to be taken. Whatever the case, bachelor's and master's degree final-year projects, both in university and in HE study programmes in Arts, are excluded.

Recognition of credits for work and professional experience

For the recognition of professional and work experience, university and HE study programmes in Arts can recognise up to 15% of the ECTS credits of their study programmes (excluding bachelor's and master's degree final-year projects). The criterion for the recognition of professional and work experience will be the match between the knowledge, skills and competence acquired in the professional environment and those corresponding to the different subjects in the study programmes.

Workers can accredit their professional skills, acquired through professional and work experience or other non-formal or informal means, in accordance with the CNECP. After accrediting professional skills, the corresponding accreditation document can be issued along with, where appropriate, equivalent certificates or qualifications in the Vocational Training Course Catalogue.

3. THE QUALIFICATIONS FRAMEWORK

The CHE-QF covers four levels and nine qualifications.

The CHE-QF levels define the relative complexity and depth of achievement and the autonomy required from graduates to demonstrate that achievement. In the CHE-QF there are 4 levels: level 1 is the lowest complexity in HE and level 4 has the highest complexity. Table 4 shows the levels proposed for the CHE-QF and the qualifications each level encompasses.

Level 1 encompasses three **advanced technician** qualifications: Advanced Technician in Vocational Training, Advanced Technician in Plastic Arts and Design, Advanced Technician in Sports Education. All are qualifications that require 120 ECTS credits of training, with a duration of two academic years.

Level 2 encompasses two qualifications: the university **bachelor's degree** and the **bachelor's degree in Arts**, which are divided into six specialisations (see Table 2). Bachelor's degrees require completion of 240 ECTS credits and have a duration of 4 academic years.

Level 3 encompasses three qualifications: the university master's and level-7 bachelor's degrees and the master's degree in Arts. University master's degrees can be configured in three ways: 60, 90 or 120 ECTS credits, lasting 1, 1.5 or 2 academic years, respectively. Master's degrees in Arts may require between 60 and 120 ECTS, with a duration of between 1 and 2 academic years. The total workload of level-7 bachelor's degrees is a volume of 300 or 360 ECTS credits, with a duration of 5 or 6 academic years, respectively.

Level 4 contains only one university qualification: that of **PhD**. It is not structured into ECTS credits and normally lasts 3 years, although, depending on the extensions requested and the time available for the doctoral student, it can be extended up to 8 years.

Table 4. Catalan Higher Education Qualifications Framework (CHE-QF)

	Qualifications				
Level	Advanced vocational training programmes	HE study programmes in Arts	University studies		
4				ploma allocation, 3 years	
3		Master's degree in Arts 60-120 ECTS credits, 1-2 years	University master's degree 60 ECTS credits, 1 year 90 ECTS credits, 1.5 years 120 ECTS credits, 2 years		
2		Bachelor's degree in Arts	Bachelor's degree	Level-7 bachelor's degree 300 ECTS credits, 5 years 360 ECTS credits, 6 years	
1	Advanced Technician in Vocational Training Advanced Technician in Plastic Arts and Design Advanced Technician in Sports Education	240 ECTS credits, 4 years	240 ECTS credits, 4 years		

Relationship between the CHE-QF and Spanish and European qualifications frameworks

The EQF was established as a common reference framework for the European Union and acts as a translation grid for EU countries' qualifications. It has 8 levels and does not specify the qualifications at each level, as each country sets its own. National qualifications frameworks set the educational levels and qualifications in their territory and reference them to the EQF.

The following principles should be taken into account to fully understand each level of the EQF:

- > Level descriptors refer to both work and study contexts and reflect specialisations and generalisations.
- > In order to distinguish between levels and express the increasing complexity of learning outcomes, keywords are used as indicators of threshold levels. For example, at EQF level 1 the term "basic general knowledge" is used, and at level 7, "highly specialised knowledge"; EQF level 1 refers to "structured context" and level 5 to "context [...] where there is unpredictable change".
- > Each level builds on and subsumes the levels below.
- > Therefore, full comprehension of a particular level requires a "horizontal" reading of its learning outcomes (knowledge, skills and competences), and a "vertical" reading of the lower and higher levels.

The MECES differs significantly from the EQF in terms of definition and structure. Firstly, as already mentioned, it only covers HE levels. Secondly, its structure and definition is based on the QF-EHEA. For this reason:

- > Learning outcomes are not classified into knowledge, skills and competence.
- > It does not incorporate descriptors of HE qualifications in Spain.

In 2022 the Spanish Government approved the Spanish Qualifications Framework for Lifelong Learning (MECU),¹⁹ which includes all levels of education and is aligned with the EQF. The MECU integrates the MECES for HE levels. The EQF differentiates the expected learning outcomes for each level into knowledge, skills and autonomy and responsibility, but does not describe the expected learning outcomes in each of the qualifications in the education system.

The CHE-QF adopts the EQF, MECU and MECES levels, transposing their descriptions and learning objectives. But it goes further and, as more advanced countries do in establishing reference frameworks, includes descriptors for each of the official HE qualifications in Catalonia, i.e. the learning outcomes expected to have been achieved by graduates in each of the HE qualifications.

Table 5 shows how the CHE-QF levels and those of the MECES, QF-EHEA, MECU and EQF correspond to one another. The qualifications that make up each level of education are also identified.

¹⁹ Ministerio de la Presidencia, Relaciones con las Cortes y Memoria Democrática, "<u>Real Decreto 272/2022, de 12 de abril, por el que se establece el Marco Español de Cualificaciones para el Aprendizaje Permanente</u>", *Boletín Oficial del Estado* (109), 2022, pp. 64147-64158. BOE-A-2022-7490.

Table 5. Correspondence between CHE-QF levels and EQF, QF-EHEA, MECU and EQF

Qualifications	CHE-QF	MECES	QF- EHEA	MECU	EQF
PhD	4	4	Third cycle	8	8
University master's degree Master's degree in Arts Level-7 bachelor's degree	3	3	Second	7	7
Bachelor's degree in Arts	2	2	First cycle	6	6
Vocational training specialisation				5C	
Certificate of professional standards (level 3)				5B	5
Advanced Technician in Vocational Training Advanced Technician in Plastic Arts and Design Advanced Technician in Sports Education	1	1	Short cycle	5A	
Vocational training specialisation				4C	
Certificate of professional standards (level 2)				4B	
Upper secondary education certificate Technician in Vocational Training Technician in Professional Music Teaching Technician in Professional Dance Teaching Technician in Plastic Arts and Design Technician in Sports Education				4A	4
Certificate of professional standards (level 1)				3B	3
Compulsory secondary education (ESO) graduate Basic technician				3A	3
Certificate for passing the 2nd year of ESO Vocational training certificate for students with special educational needs				2	2
Primary education certificate				1	1

Note: Levels 3B, 4B and 5B include qualifications with professional validity but no academic value.

Description of HE levels: learning outcomes

As mentioned above, for the description of the educational levels in Catalan HE, the CHE-QF uses the learning outcomes that graduates are expected to have achieved in each qualification. It adopts the EQF classification of learning outcomes as knowledge, skills and competence (KSC). This classification is the most common one in our neighbouring countries.

The CHE-QF proposes the learning outcomes to be achieved without setting the routes by which they should be acquired, recognising that there is no single way in the teaching-learning process for the learner to achieve them. This approach has been developed to suit the particular needs of the economy and vocational training in our context.

Knowledge

This is the result of assimilating information through learning. Knowledge is the body of facts, principles, theories and practices related to a field of work or study. In the EQF, knowledge is described as theoretical or factual. In the CHE-QF, knowledge is classified according by typology, depth, breadth and complexity, as follows:

- > The **type** of knowledge refers to its degree of specificity or abstraction and its segmentation.
- > The **depth** of knowledge refers to its degree of specialisation.
- > The **breadth** of knowledge refers to the disciplines involved. It can be mono- or multidisciplinary.
- > The **complexity** of knowledge is the combination of type, depth and breadth of knowledge.

Skill

Skill is the ability to apply knowledge and use it to complete tasks and solve problems. The CHE-QF adopts the EQF approach in which skills are described as **cognitive** (involving the use of logical, intuitive and creative thinking) or **practical** (involving manual dexterity and the use of methods, materials, tools and instruments).

Competence 20

It is the proven ability to use knowledge and skills (also personal, social and/or

²⁰ In the 2018 <u>revision of the EQF</u>, the title of the third descriptor was changed from "competence" to "autonomy and responsibility", while maintaining the previous definition.

methodological skills) autonomously and responsibly in work or study situations and in professional and personal development.

The CHE-QF distinguishes between competence that can be acquired in the **learning** environment and that which has to be acquired in vocational and work environments.

4. SPECIFICATIONS OF QUALIFICATIONS

Specifications of level-1 qualifications

CHE-QF level 1 corresponds to level 1 of the EQF, level 5 of the EQF and the short cycle level of the QF-EHEA.

Descriptors for CHE-QF level 1

Aim	Graduates at this level will have broad knowledge and skills for highly skilled work and/or further learning.
Knowledge	At this level, graduates are required to: Have demonstrated expertise in a professional or study area with critical understanding for the integration and transfer of knowledge as well as the development of creativity, initiative and entrepreneurship.
Skills	 At this level, graduates are required to: Possess the ability to analyse the information needed to assess and respond to expected and unexpected situations, by seeking informed, creative and innovative solutions within a field of study or profession. Be able to communicate their knowledge, ideas, skills and activities in professional contexts to peers, supervisors, clients and persons under their responsibility.
Competence	At this level, graduates are required to: Implement and integrate their artistic, technological or sports knowledge in the definition and development of working procedures in the artistic or other workplace, independently and with responsibility for coordinating and supervising technical work.

The qualifications of Advanced Technician in Vocational Training, Advanced Technician in Plastic Arts and Design and Advanced Technician in Sports Education are at level 1 of the CHE-QF. The aim of qualifications at this level is for students to obtain specialised training that will enable them to exercise various professions. At this level the qualifications involve a learning volume of 120 ECTS credits, except for the Advanced Technician in Sports Education (62-76 ECTS credits).

Advanced Technician qualifications must be designed and accredited to enable graduates to demonstrate the learning outcomes specified in the level 1 criteria and the corresponding advanced technician qualification descriptors.

Specifications for the advanced technician qualification

The three CHE-QF level-1 advanced technician qualifications are awarded to persons who at the end of their training period are able to demonstrate the following.

Descriptors for the qualifications of Advanced Technician in Vocational Training, Advanced Technician in Plastic Arts and Design, Advanced Technician in Sports Education

Aim	The advanced technician certificates qualify individuals who apply specialist knowledge in a range of contexts to undertake advanced skilled work and as a pathway for further learning.
Knowledge	 Have knowledge and critical understanding of underlying principles and concepts of an area of study. Have demonstrated knowledge and understanding in the principal field (main field of study) of the programme, including awareness of the practical and disciplinary foundation of the field and knowledge and experience of some methods and processes in the field. Understand the organisation and characteristics of the relevant productive sector, the mechanisms for access to the labour market, the pertinent labour legislation and the rights and obligations arising from employment. Depth and breadth
	 Have demonstrated expertise in a professional or study area with critical understanding for the integration and transfer of knowledge as well as the development of creativity, initiative and entrepreneurship. Have knowledge of the main methods of working and what may (and may not) be gained from their application/practice. Include an understanding of the limits of their knowledge and how this influences its application. Define, plan and organise processes and work procedures with autonomy in their main professional field.

Descriptors for advanced technicians (cont.)

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- Can develop structured and coherent themes based on their knowledge and understanding.
- Possess the ability to analyse the information needed to assess and respond to expected and unexpected situations, by seeking informed, creative and innovative solutions within a field of study or profession.
- Have initiative and judgement in planning, problem-solving and decision-making in professional practice and/or scholarship.
- Be able to evaluate evidence, arguments and assumptions to reach sound judgements in creating and developing ideas and tangible products.
- Utilise diagnostic and creative skills in a range of functions in the main field of study.
- Have the ability to identify and use data to formulate responses to welldefined problems.
- Evaluate and solve problems and contingencies in various and generally unforeseeable contexts, with critical understanding, knowledge transfer and capacity for innovation and creativity.
- Be able to solve well-defined practical problems.

Technical and practical

- Supervise the objectives, techniques and results of personal work and team members, with leadership and spirit of improvement, guaranteeing the quality of the process and the product or service in the main field of study.
- Prevent occupational and environmental risks, and implement measures to work under conditions of health and safety.
- Be able to apply their knowledge and understanding in occupational contexts through established techniques.
- Apply and integrate advanced technologies or specialised knowledge in work processes.
- Be able to communicate the results of their study/work accurately and reliably.
- Use information and communication technologies, as well as the foreign languages required in their professional activity.
- Communicate effectively both at professional and personal levels.

Competence

Learning environment

- Consolidate the habits of discipline, individual and teamwork, as well as the ability for self-learning and critical analysis.
- Plan and carry out varied assignments and projects over time, alone or as part of a group, and in accordance with ethical requirements and principles.

Skills

Descriptors for advanced technicians (cont.)

Learning environment (cont.)

- Accept accountability for determining and achieving personal and/or group outcomes; take significant or supervisory responsibility for the work of others in defined areas of work.
- Possess the strategies necessary to advance their training independently with maturity to innovate in implementation and progress in learning and training to higher levels.
- Manage their professional careers, analysing the most suitable education pathway in order to improve employability and accountability.
- Manage their training and the existing resources in lifelong learning, especially using information and communication technologies.
- Develop a professional motivation for future learning, and be able to adapt to the evolution of production processes and to social changes.
- Adapt to new occupational situations, keeping up-to-date with the scientific, technical and technological knowledge related to their professional environment.

Competence

Professional environment

- Implement and integrate their artistic, technological or sports knowledge in the definition and development of working procedures in the artistic or other workplace, independently and with responsibility for coordinating and supervising technical work.
- Be able to communicate their knowledge, ideas, skills and activities in professional contexts to peers, supervisors, clients and persons under their responsibility.
- Generate safe environments in the development of their work and that of their team, supervising and applying the procedures for the prevention of occupational and environmental risks, in accordance with the provisions of the regulations and objectives of the company.
- Perform basic management for the creation and operation of a small company and show initiative in their professional activity with a sense of social responsibility.
- Exercise the rights and obligations arising from professional activity in accordance with the provisions of current legislation, actively participating in economic, social and cultural life.

Specifications of level-2 qualifications

CHE-QF **level 2** corresponds to MECES **level 2**, EQF **level 6** and the **first cycle level** of the QF-EHEA.

Descriptors for CHE-QF level 2

Aim	Graduates of this level should have sufficiently broad knowledge and skills to undertake highly skilled work and further learning.
Knowledge	At this level, graduates are required to: Have acquired advanced knowledge and demonstrated an understanding of the theoretical and practical aspects and methodology of work in their field of study in a depth that reaches the state-of-the-art in the field.
Skills	 At this level, graduates are required to: Be able to apply, by means of arguments or procedures they themselves develop and support, knowledge, understanding and problem-solving skills in complex or professional and specialised areas of work requiring the use of creative and innovative ideas. Have the ability to collect and interpret data and information on which to base conclusions, including, where necessary and relevant, reflection on social, scientific or ethical issues in their field of study. Be able to move in complex situations or ones that require the development of new solutions, at academic, work or professional level, within their field of study.
Competence	 At this level, graduates are required to: Know how to communicate knowledge, methodologies, ideas, problems and solutions in their field of study clearly and precisely to all types of audiences (specialised or otherwise). Be able to identify their own learning needs in their field of study and work or professional environment, and to organise their own learning with a high degree of autonomy in all kinds of contexts (structured or otherwise).

The university bachelor's degree and bachelor's degree in Arts are at level 2 of the CHE-QF. Both qualifications involve a learning volume of 240 ECTS credits.

The university bachelor's degree and bachelor's degree in Arts must be designed and accredited in such a way as to enable graduates to demonstrate they have achieved the learning outcomes specified in the descriptors for level 2 and in the specifications for both qualifications.

Specifications for the university bachelor's degree

The CHE-QF level 2 bachelor's degree is awarded to persons who, at the end of their education period, are able to demonstrate the following.

Descriptors for the university bachelor's degree

Aim	The university bachelor's degree qualifies individuals who apply a broad and coherent body of knowledge in a range of contexts to undertake professional work and provides a pathway for further learning.
Knowledge	Have a systematic understanding of the theory, concepts and methods pertaining to a field (or fields) of learning and understand different perspectives, approaches or schools of thought and the theories that underpin them. Possess knowledge of research principles and methods and be familiar with research and development work in the field. Possess knowledge of the history, traditions, distinctive nature and place in society of the academic field. Depth and breadth Have an advanced, specialist knowledge of and critical insight into, theories, principles, problems, processes, tools and methods of an occupation, knowledge domain or broad field of science. Have an understanding of limitations of current knowledge and familiarity with sources of new knowledge; integrate concepts across a variety of areas. Possess knowledge of the current developments in the area of study or work. Have broad knowledge of important topics and theories; have detailed knowledge and understanding in one or more specialist areas, some of it at the current boundaries of the field(s). Reproduce, analyse and apply the knowledge in different contexts in a way that demonstrates a professional and scientific approach to the occupation or knowledge domain. Have a critical understanding of material in advanced textbooks and be able to also make use of discipline-related scholarly reviews and primary sources (for example, refereed papers).
Skills	Review critically, analyse, consolidate and synthesise knowledge to identify and provide solutions to complex problems with intellectual independence. Exercise critical thinking and judgement in developing new understanding.

Descriptors for the university bachelor's degree (cont.)

Descriptors for the driversity buchelor's degree (cont.)		
	Cognitive (cont.)	
Skills	 Reproduce, analyse and apply the knowledge in different contexts in a way that demonstrates a professional and scientific approach to the occupation or knowledge domain. Recognise the limitations of existing knowledge in professional practice or in the knowledge domain and take action to address this. Have initiative and judgement in planning, problem-solving and decision-making in professional practice and/or scholarship. Be able to evaluate evidence, arguments and assumptions to reach sound judgements in creating and developing ideas and tangible products. Utilise diagnostic and creative skills in a range of functions in a wide variety of contexts. Identify and analyse complex problems in professional practice or in the knowledge domain and solve these problems in a tactical, strategic and creative way by selecting and using relevant data. Apply academic knowledge and relevant results of research and development work to practical and theoretical problems and make wellfounded choices. Be able to refine and use relevant understanding, methods and skills to address complex problems that have limited definition. Evaluate actions, methods and results and their implications. Be able to solve problems, some of which may be approaching or at the forefront of a discipline. 	
	 Be able to use established techniques of analysis and enquiry within a discipline and recognise their limitations in establishing outcomes and drawing conclusions. Have the ability to gather and interpret data within their field of study to inform judgements that may include reflection on relevant scientific social or ethical issues. Apply communication skills to present a clear, coherent and independent presentation of knowledge and ideas, problems and solutions to a variety of audiences. Use information and communication technologies, as well as the foreign languages required in their professional activity. Demonstrate the ability to search for, gather and critically interpret the relevant information in order to formulate answers to well-defined issues in the main field of study. 	
Competence	Reflect upon their own academic practice and adjust it under supervision.	
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Descriptors for the university bachelor's degree (cont.)

Learning environment (cont.)

- Find, evaluate and refer to information and scholarly subject matter and present it in a manner that sheds light on the problem.
- Plan and carry out varied assignments and projects over time, alone or as part of a group, and in accordance with ethical requirements and principles.
- Plan and execute project work and/or a piece of research and scholarship with some independence.
- Accept accountability for determining and achieving personal and/or group outcomes, take significant or supervisory responsibility for the work of others in defined areas of work.
- Act effectively under guidance in a peer relationship with qualified practitioners; lead multiple, complex and heterogeneous groups.
- Be able to work in variable and unfamiliar learning contexts and to manage learning tasks independently, professionally and ethically.
- Take initiative to identify and address learning needs and interact effectively in a learning group.
- Have developed the learning skills that enable further study with greater autonomy.

Competence

Professional environment

- Assume responsibility and accountability for their own learning and professional practice and in cooperation with others within broad parameters.
- Have the qualities needed for employment in situations requiring the exercise of personal responsibility and decision-making in complex and unpredictable circumstances.
- Analyse and carry out complex professional tasks.
- Communicate in a targeted way with peers, specialists and nonspecialists, supervisors and clients, appropriately to the context, using conventions that are relevant to professional practice.
- Work with peers, specialists and non-specialists, supervisors and clients.
- Be familiar with new thinking and innovation processes.
- Take shared responsibility for the management of processes and the professional development of people and groups.
- Express a comprehensive, internalised personal world view expressing solidarity with others.

SPECIFICATIONS OF THE QUALIFICATIONS • 38

Specifications for the bachelor's degree in Arts

The CHE-QF level 2 bachelor's degree in Arts is awarded to persons who, at the end of their education period, are able to demonstrate the following.

Descriptors for the bachelor's degree in Arts

Aim	The bachelor's degree in Arts qualifies individuals who apply a body of knowledge in a specific artistic context to undertake professional work and provides a pathway for further research and learning.	
	 Possess an advanced practical and/or embodied knowledge of the language and theories of a specific arts discipline. Have a critical understanding of the major reference points of that discipline and its history allied to knowledge of how to interrelate theory and practice constructively within the area of study (drama, dance, theatre, visual arts, design, media, material culture and related disciplines) and their interrelationship with other art forms within different cultural contexts. 	
Knowledge	Depth and breadth	
	 Have a critical understanding of the different genres of a specific arts discipline, the interplay of those disciplines and society and how to influence the cultural landscape and built environment. Benefit from a critical understanding of how methodology, materials and procedures influence a specific arts discipline. Possess an understanding of the critical and contextual dimensions within the artistic disciplines, such as cultural, economic, environmental, ethical, global, philosophical, historical, societal and/or theoretical contexts. 	
	Cognitive	
Skills	 Demonstrate an informed understanding of their own practice in relation to the work of other artists and developments within the context of fine art through the formulation of independent judgement and the ability to clearly articulate reasoned arguments through reflection, review and evaluation. Generate ideas, concepts, proposals, solutions or arguments independently and/or collaboratively through a self-directed programme of study that undertakes an investigation and analysis of visual experiences. Analyse, interpret and evaluate their own and others' work within the framework of existing theoretical knowledge. 	

Descriptors for the bachelor's degree in Arts (cont.)

Cognitive (cont.)

- Creatively employ appropriate working methods, choose materials, visual and tactile elements, techniques and tools for desired goals at a professional level.
- Explore the creative possibilities of both convergent and divergent thinking in the processes of observation, investigation, speculative enquiry, visualisation and making.
- Fully pursue artistic intentions and development of ideas through to material outcomes with skill and imagination whilst observing best working practices in the main field of study.
- Demonstrate the ability in the main field of study to create, realise and express their own ideas, identify, formulate and solve artistic and creative problems autonomously and undertake artistic tasks within predetermined timeframes.
- Be able to effectively articulate conceptual, creative and imaginative resources.
- Demonstrate the ability to make assessments in the main field of study informed by relevant artistic, social and ethical issues, demonstrate insight into the role of art in society and demonstrate the ability to identify the need for further knowledge and ongoing learning.

Skills

Technical and practical

- Possess a command of the skills techniques and methodologies of a specific arts discipline; know how to use interpretation, assessment and analytical skills appropriately; identify and understand audiences and how to communicate with them effectively.
- Demonstrate advanced practical knowledge and critical understanding in the synthesis of a body of artwork; select, test and make appropriate use of both established and new technologies, media, materials, processes and environments.
- Explore the potential for development of interdisciplinary approaches to contemporary artistic practice and for developments in current and emerging media technologies, such as ICTs and digital technology.
- Apply state-of-the-art technology.
- Demonstrate the ability to present and discuss their works and artistic issues in speech, writing or in other ways and in dialogue with different audiences, and demonstrate the competence and knowledge required to work autonomously in a professional capacity.
- Identify and understand different spaces and contexts in collaboration with experts from various disciplines; show how to engage with audiences.
- Confidently articulate and communicate ideas and information through visual and/or oral and/or written form in a range of contexts.

Descriptors for the bachelor's degree in Arts (cont.)	
Skills	 Manage, collate and synthesise information from a range of sources in order to realise a personal programme of study through the successful integration of practical and conceptual skills and management of their own workload to meet deadlines. Communicate in a targeted way with peers, specialists and non-specialists, supervisors and clients, appropriately to the context, using conventions that are relevant to professional practice.
Competence	 Reflect upon their own academic practice and adjust it under supervision. Find, evaluate and refer to information and scholarly subject matter and present it in a manner that sheds light on the problem. Plan and carry out varied assignments and projects over time, alone or as part of a group, and in accordance with ethical requirements and principles. Plan and execute project work and/or a piece of research and scholarship with some independence. Accept accountability for determining and achieving personal and/or group outcomes; take significant or supervisory responsibility for the work of others in defined areas of work. Act effectively under guidance in a peer relationship with qualified practitioners; lead multiple, complex and heterogeneous groups. Be able to work in variable and unfamiliar learning contexts and to manage learning tasks independently, professionally and ethically. Take initiative to identify and address learning needs and interact effectively in a learning group. Have developed the learning skills that enable further study with greater autonomy. Be critically self-reflective and have the potential to work autonomously and to contribute as part of a team.
	 Professional environment Possess a command of the theories, techniques and individual sensibilities needed to operate successfully within the professional arena; be critically self-reflective and have the potential to work autonomously and to contribute as part of a team. Apply resourcefulness and entrepreneurial skills to foster and support their own (including collaborative or collective) artistic practice and/or the practice of others. Have the qualities needed for employment in situations requiring the

Descriptors for the bachelor's degree in Arts (cont.)

unpredictable circumstances.

exercise of personal responsibility and decision-making in complex and

	Professional environment (cont.)
Competence	 Manage creative professional activities or projects. Taking responsibility: for decision-making and problem-solving in diverse art discipline contexts; for critical self-reflection on their own and others' aesthetic and ethical choices in diverse art disciplines; for professional development and promotion of art; for working both autonomously and as part of a team. Work with peers, specialists and non-specialists, supervisors and clients.

Specifications of level-3 qualifications

CHE-QF level 3 corresponds to MECES level 3, EQF level 7 and the second cycle level of the QF-EHEA.

Descriptors for CHE-QF level 3

Aim	Graduates at this level will have specialist knowledge and skills for research and/or professional practice and/or further learning.	
Knowledge	At this level, graduates are required to: Have acquired advanced knowledge and demonstrated, in the context of scientific and technological research or a highly specialist field, a detailed and informed understanding of the theoretical and practical aspects of the methodology and work in one or more fields of study.	
Skills	 At this level, graduates are required to: Be able to apply and integrate their knowledge, and understanding of this knowledge, with sound science and problem-solving abilities in new and imprecisely defined environments, including multidisciplinary contexts for both researchers and highly skilled professionals. Be able to evaluate and select appropriate scientific theory and the precise methodology from their fields of study to formulate judgements with incomplete or limited information including, where necessary and appropriate, a reflection on the social and ethical responsibilities linked to the solution proposed in each case. Be able to predict and control the evolution of complex situations by developing new and innovative working methodologies tailored to a specific scientific, technological or professional research field, usually multidisciplinary, in which the activity takes place. 	

Descriptors of CHE-QF level 3 (cont.)

At this level, graduates are required to:

Competence

- Know how to clearly and unambiguously convey to a specialist or nonspecialist audience results from science and technology or the scope of advanced innovation research and the most important results that are based on fundamentals.
- Have developed enough autonomy to participate in research projects and scientific and technological collaborations within their scope, in interdisciplinary contexts and, where appropriate, with a high component of knowledge transfer.
- Be able to take responsibility for their own professional development and specialisation in one or more fields of study.

The university master's degree, master's degree in Arts and level-7 bachelor's degree are at CHE-QF level 3. University master's degrees involve a learning volume of 60, 90 or 120 ECTS credits, while master's degrees in Arts can vary between 60 and 120 ECTS credits. The level-7 bachelor's degree involves a learning volume of 300 or 360 ECTS credits.

The level-7 bachelor's degrees and university master's degrees must be designed and accredited to enable graduates to demonstrate the learning outcomes specified in the level 3 criteria and descriptors for these qualifications.

Specifications for the university master's degree and the level-7 bachelor's degree

Level-7 bachelor's degrees at CHE-QF level 3 are normally related to the field of Health Sciences. Their aim is to help students become independent, versatile and highly qualified thinkers with the research experience, information competence and communication and interpersonal skills necessary for an advanced professional career or further academic study at PhD level.

Completion of level-7 studies leads to a bachelor's degree qualification and consists of 300 or 360 ECTS credits (5 or 6 years, EQF 7), with a minimum of 60 ECTS credits for initiation into research. Only five bachelor's degrees can qualify for this level (Architecture, Medicine, Pharmacy, Dentistry and Veterinary Medicine). They are covered together with master's degrees in the qualification type descriptor.

University master's degrees and level-7 bachelor's degrees at CHE-QF level 3 are awarded to persons who, at the end of their education period, are able to demonstrate the following.

Descriptors for the university	master's degree and the leve	el-7 bachelor's degree
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Aim	The university master's and level-7 bachelor's degrees qualify persons to apply an advanced body of knowledge in a range of contexts for professional practice, research or scholarship and provides a pathway for further learning.
Knowledge	 Have (highly) specialist, advanced knowledge in one or more disciplines or areas of practice, including those recently developed, extending/enhancing knowledge associated with the bachelor's degree level. Have an advanced knowledge of research principles and methods applicable to the field of work or learning or in the associated professional practice. Depth and breadth
Kilowiedge	 Have a critical understanding of a range of theories, principles and concepts, including the most important relating to the knowledge domain, field of science or professional field. Have extensive, detailed knowledge and critical understanding of some important current issues, topics and specialisations related to the knowledge domain, field of science or professional field. Have the conceptual understanding to critically evaluate current research/advances in their discipline, evaluating methodologies and, where appropriate, proposing new approaches/hypotheses.
Skills	 Cognitive Have demonstrated a command of theoretical knowledge and reflect critically on theory, its applications or professional practice. Analyse and deal critically with various sources of information and use them to structure and formulate scholarly arguments. Generate and evaluate complex ideas and concepts at an abstract level applying acquired cognitive, technical and creative skills. Be able to integrate knowledge and handle complexity in formulating judgements often with incomplete or limited information including, where necessary and appropriate, a reflection on the social and ethical responsibilities linked to the solution proposed in each case. Demonstrate originality in developing and/or applying ideas often within academic, professional, technological and/or artistic contexts. Be able to critically analyse, interpret and evaluate complex information, concepts and theories to produce modified conceptions.

Descriptors for the university master's degree and level-7 bachelor's degree (cont.)

Cognitive (cont.)

- Identify and analyse complex problems in the knowledge domain or field of science or in professional practice and solve the problems in a tactical, strategic and creative way.
- Have problem-solving abilities in new and imprecisely defined environments, including multidisciplinary contexts related to their field of study.

Technical and practical

Skills

- Have a comprehensive understanding of techniques applicable to their own work, involving any research/advanced scholarship and including recognition of the limitations of such techniques.
- Be able to plan and execute a substantial piece of research or innovation.
- Communicate clearly and unambiguously their ideas and conclusions, and the underpinning knowledge and rationale, to specialist and nonspecialist audiences in a way suitable to the context using conventions that are relevant to the professional field.
- Be able to disseminate, to specialised and non-specialised audiences, research results that contribute knowledge.

Learning environment

- Have the abilities and skills to support continuing development in a manner that may be largely self-directed or autonomous.
- Be able to work as a team with peers.
- Be able to develop their activities with social responsibility, intellectual honesty and scientific integrity.

Competence

Professional environment

- Be able to act autonomously in planning and carrying out tasks in the professional or equivalent field, including showing originality in tackling and solving potential problems.
- Have the attributes needed to deal with circumstances requiring judgement, personal responsibility and initiative in complex and unpredictable professional level environments.
- Assume responsibility for the results of one's own or other people's study or work, and for the professional development of individuals and groups.
- Work with specialists and non-specialists, supervisors and clients.

SPECIFICATIONS OF THE QUALIFICATIONS • 45

Specifications for the master's degree in Arts

The CHE-QF level 3 master's degree in Arts is awarded to persons who, at the end of their education period, are able to demonstrate the following.

Descriptors for the master's degree in Arts

Aim	The master's degree in Arts qualifies individuals who apply an advanced body of knowledge in a range of artistic contexts for professional practice, research or scholarship and provides a pathway for further learning.
Knowledge	Possess highly specialist knowledge and critical understanding, some of which is at the forefront of the respective artistic disciplines and their main fields of study. Possess critical and creative awareness of interdisciplinary possibilities between differing fields and disciplines. Demonstrate sound use of methodology, source materials and procedures needed to undertake practice-based and/or theoretically-oriented research.
Skills	 Cognitive Have an advanced, specialist ability to interrelate theory and practice in the creation of a body of work that is personally innovative and informed by advanced practice and knowledge within the field. Possess critical and creative awareness of interdisciplinary possibilities between differing fields and disciplines. Analyse and deal critically with various sources of information and use them to structure and formulate scholarly arguments. Generate and assess complex ideas and concepts on an abstract level. Be able to integrate knowledge and handle complexity in formulating judgements often with incomplete or limited information including, where necessary and appropriate, a reflection on the social and ethical responsibilities linked to the solution proposed in each case. Integrate research methodology, advanced tools and experience.

Descriptors for the master's degree in Arts (cont.)

Cognitive (cont.)

- Demonstrate the ability to formulate new topics autonomously and creatively and contribute to knowledge production, in order to solve more advanced problems, develop new forms of personal expression and reflect critically on one's own and others' artistic approach in the main field of study.
- Demonstrate the ability to create and execute one's own ideas with a personal expression, to identify, formulate and solve artistic and creative problems autonomously, and to plan and carry out advanced artistic tasks using appropriate methods and within predetermined deadlines.
- Realise a body of work that is personally innovative and informed by advanced practice and knowledge within the field.
- Identify and analyse complex problems in the knowledge domain or field of science or in professional practice and solve the problems in a tactical, strategic and creative way.
- Have problem-solving abilities in new and imprecisely defined environments, including multidisciplinary contexts related to their field of study.
- Demonstrate the ability to make assessments in the main field of study informed by relevant artistic, social and ethical issues and demonstrate insight into the role of art in society.

Technical and practical

- Carry out primary and secondary research as a way of reflecting on ideas and aesthetics related to the body of student work.
- Show an ability to create a self-initiated body of work that demonstrates innovation and mastery of expressive, intellectual and technical skills.
- Demonstrate the ability both nationally and internationally to clearly present and discuss their works and artistic issues in speech, writing or in other ways and in dialogue with different audiences.
- Be able to disseminate, to specialised and non-specialised audiences, research results that contribute knowledge.

Learning environment

Demonstrate the ability to identify the need for further knowledge and take responsibility for ongoing learning thereof.

- Demonstrate the ability to work autonomously and for professional purposes.
- Have the ability to analyse and develop working processes, and plan and manage their own projects.
- Be able to work as a team with peers.

Skills

Competence

Descriptors for the master's degree in Arts (cont.)

	Learning environment (cont.)
	Be able to develop their activities with social responsibility, intellectual honesty and scientific integrity.
	Professional environment
Competence	 Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches. Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams. Manage projects and/or teams, acting with individual autonomy and/or leadership where appropriate. Assume responsibility for the results of one's own or other people's study or work, and for the professional development of individuals and groups. Apply ethical principles from the discipline and act with awareness of their role in wider society. Produce work that responds to complex situations, requires new strategic approaches and contributes to professional knowledge and practice.

Specifications of level-4 qualifications

CHE-QF **level 4** corresponds to MECES **level 4**, EQF **level 8** and the **third cycle level** of the QF-EHEA.

Descriptors for CHE-QF level 4

Aim	Graduates at this level will have systematic and critical understanding of a complex field of learning and specialist research skills for the advancement of learning and/or for professional practice.
Knowledge	At this level, graduates are required to: Have acquired advanced knowledge in the frontiers of information and, in the context of internationally recognised scientific research, have demonstrated a thorough, detailed understanding based on the theoretical and practical aspects of scientific methodology in one or more areas of research.
Skills	At this level, graduates are required to: Have shown that they are able to design a research project with which to carry out a critical analysis and evaluation of imprecise situations where they apply their contributions, knowledge and methodology in a synthesis of new and complex ideas that produce a deeper understanding of the research context in which they work.

Descriptors of CHE-QF level 4 (cont.)

Skills	 At this level, graduates are required to: (cont.) Have made an original and significant contribution to scientific research in their field of knowledge and this contribution has been recognised as such by the international scientific community. Have demonstrated in their specific scientific context that they are able to make progress in cultural, social and technological aspects, as well as to encourage innovation in all areas in a knowledge-based society.
Competence	 At this level, graduates are required to: Have shown that they are able to develop their research activities with social responsibility and scientific integrity. Have developed sufficient autonomy to manage and lead teams and innovative research projects and scientific, national or international collaborations within their scope, in multidisciplinary contexts and, where appropriate, with a high component of knowledge transfer. Have justified their ability to participate in scientific discussions that take place internationally in the field of knowledge and to disseminate the results of their research to all kinds of audiences.

There is only one qualification under level 4: the PhD. PhD programmes have a maximum duration of three years of full-time study (from admission to the programme until the doctoral thesis is submitted). The Academic Commission in charge of the programme may authorise an extension of two additional years. However, PhD studies can be done part-time; in this case, the normal duration of the programme increases to 5 years, which the Academic Commission of the programme may extend for a further 3 years, up to a total of 8 years.

PhD qualifications must be designed and accredited to enable graduates to demonstrate the learning outcomes specified in the level 4 criteria and the doctoral programme.

Specifications for the PhD qualification

PhDs at CHE-QF level 4 are awarded to persons who, at the end of their education period, are able to demonstrate the following.

Descriptors for the PhD

Aim	The PhD qualifies individuals who apply a substantial body of knowledge to research, investigate and develop new knowledge in one or more fields of research, scholarship or professional practice.	
Knowledge	 Type Have acquired an understanding of a substantial body of knowledge that is at the forefront of an academic discipline or a professional field and/or at the interface between the different knowledge domains, fields of science or professional fields. Possess knowledge acquired by personal research or work, leading to an important contribution to development in a vocational and scientific field. Depth and breadth Have demonstrated a detailed understanding of the complexities of a field of study including the requirements to make further advancements. Have demonstrated an appreciation of boundaries of knowledge and the ability to extend these in an/(several) academic discipline(s) or a professional context. 	
Skills	 Possess a critical insight into a scientific or vocational field, including a critical understanding of the most important and current theories, principles and concepts. Have cognitive skills and use of intellectual independence to think critically, evaluate existing knowledge and ideas, undertake systematic investigation and reflect on theory and practice to generate original knowledge. Be capable of critical analysis, evaluation and synthesis in the creation of new and complex ideas and tangible outcomes. Be able to generate original knowledge and understanding to make a substantial contribution to a discipline, area or professional field. Be able to identify, analyse and contribute to solving complex problems in professional practice or in the knowledge domain or field of science and solve the problems in a tactical, strategic and creative way. Technical and practical Have the ability to conceive, design, implement and adapt a substantial process of research/development with scholarly integrity. Be able to develop, adapt, and implement research methodologies to extend and redefine existing knowledge or professional practice. 	

Descriptors for the PhD (cont.)

Descriptors for the PhD (cont.)		
	Technical and practical (cont.)	
Skills	 Recognise the limitations of existing knowledge in professional practice or in the knowledge domain or field of science at the interface between the different professions or knowledge domains and take action to address this. Be able to demonstrate judgement in complex areas of expertise, often in absence of complete data, but taking into account wider social (and ethical) responsibilities. Be able to participate in scientific discussions in the field of knowledge and disseminate the results of their research to all kinds of audiences. Be able to use information from specialist and unique documentation sources, not only from scientific journals but also from corporate publications and national and international bodies. 	
Competence	 Learning environment Have the ability to conceive, design, implement and adapt a substantial process of research/development with scholarly integrity. Have the skills and attributes to continue developments at the forefront of their area of expertise in a self-directed and autonomous manner. Be able to promote, within academic and professional contexts, technological, cultural or social advancement in a knowledge-based society. Be able to work in a research team with peers. Be able to develop research and academic work with social responsibility, intellectual honesty and scientific integrity. 	
	Professional environment	
	 Communicate in a targeted way with peers, specialists and non-specialists, supervisors and clients, the wider scientific community and society as a whole, appropriately to the context, using conventions that are relevant to the professional field. Act autonomously in complex and unpredictable situations in professional or similar environments, developing and implementing their work in ways that are ethically responsible. Work with specialists and non-specialists, supervisors and clients. Assume responsibility for the results of one's own or other people's study or work, and for the professional development of individuals and groups. 	

5. THE USE OF THE QUALIFICATIONS FRAMEWORK IN VALIDATION AND **ACCREDITATION**

This document must prove useful for:

- a) University managers, to design, implement and assesses their university qualifications.
- b) AQU Catalunya assessment committees, to verify that students' learning outcomes match the intended level of each of the degree programmes assessed in validation and accreditation processes.
- c) Different social agents, to gain familiarity with the learning outcomes of persons obtaining HE degrees in Catalonia.

In the case of higher education institutions that submit new programmes for evaluation, their intended competence profile must adopt the structure established in this document for each level: knowledge, skills and competence; and it must adapt the intended learning outcomes to the discipline of the new programme.

In order to define the competence profile, the educational institution may use the benchmarks (if available) drawn up by AQU Catalunya for its field of knowledge or discipline as their basis.

The assessment committees and commissions of AQU Catalunya will use this document and the corresponding benchmarks, if they are available for the discipline of the programme, to verify that both the learning outcomes and the level of the programme are as expected. This will be carried out in the validation, modification and accreditation processes.

ANNEX 1. OFFICIAL HIGHER EDUCATION QUALIFICATIONS IN CATALONIA AND SPAIN

Official higher education qualifications in Catalonia and Spain

CYCLE	QUALIFICATIONS
	GENERAL UNIVERSITY QUALIFICATIONS
	Do not exist
	26 Hot skiet
	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS
	Do not exist
	PROFESSIONAL QUALIFICATIONS (120 ECTS credits, 2000 hours, 2 years)
	Advanced Technician in Sports Education
	Advanced Technician in Furniture and Wood Production
	Advanced Technician in Furniture and Carpentry Product Development
	Advanced Technician in Aquaculture
	Advanced Technician in Computer System Administration
	Advanced Technician in Administration and Finance
	Advanced Technician in Travel Agencies and Events Management
	Advanced Technician in Pathological Anatomy and Cytology
Level 1	Advanced Technician in Physical and Sports Activity Animation
EQF 5	Advanced Technician in Sociocultural Animation
	Advanced Technician in Tourist Animation
Short	Advanced Technician in 3D Animations, Games and Interactive Settings
cycle	Advanced Technician in Floral Art
	Advanced Technician in Arts Applied to Clothing
	Advanced Technician in Applied Book Arts
	Advanced Technician in Applied Mural Art
	Advanced Technician in Arts Applied to Sculpture
	Advanced Technician in Personal Image Consultancy
	Advanced Technician in Management Assistance
	Advanced Technician in Prosthetic Audiology
	Advanced Technician in Automation and Industrial Robotics
	Advanced Technician in the Automotive Sector
	Advanced Technician in Power Plants
	Advanced Technician in Ceramic Arts
	Advanced Technician in International Trade
	Advanced Technician in Metal Constructions
	Advanced Technician in Tanning
	Advanced Technician in Multi-Platform Application
	Advanced Technician in Web Application
	Advanced Technician in E-Product Development

CYCLE	QUALIFICATIONS
	PROFESSIONAL QUALIFICATIONS (cont.)
Level 1 EQF 5 Short cycle	PROFESSIONAL QUALIFICATIONS (cont.) Advanced Technician in Project Development for Thermal and Liquid Installations Advanced Technician in Topographic Operation and Urban Project Development Advanced Technician in Construction Project Development and Application Advanced Technician in Ceramic Product Manufacture and Development Advanced Technician in Dietetics Advanced Technician in Cutiering Management Advanced Technician in Catering Service Management Advanced Technician in Interior Design Advanced Technician in Mechanical Production Design Advanced Technician in Graphic Design Advanced Technician in Industrial Design Advanced Technician in Industrial Design Advanced Technician in Design and Furnishing Advanced Technician in Design and Production of Footwear and Accessories Advanced Technician in Editorial Production and Design Advanced Technician in Editorial Production and Design Advanced Technician in Editorial Production and Design Advanced Technician in Editorial Production and Education Advanced Technician in Environmental Control and Education Advanced Technician in Environmental Control and Education Advanced Technician in Environmental Control and Education Advanced Technician in Enamel Arts Advanced Technician in Enamel Arts Advanced Technician in Enamel Arts Advanced Technician in Hairdressing Management and Styling Advanced Technician in Hairdressing Management and Styling Advanced Technician in Manufacture and Transformation of Glass Products Advanced Technician in Manufacture and Transformation of Glass Products Advanced Technician in Manufacture and Transformation of Glass Products Advanced Technician in Management and Norgement Advanced Technician in Tourist Accommodation Management Advanced Technician in Tourist Accommodation Management Advanced Technician in Management and Organisation of Natural Resources and Landscapes Advanced Technician in Indangement and Organisation of Natural Resources and Landscapes Advanced Technician in Indangement and Organisat

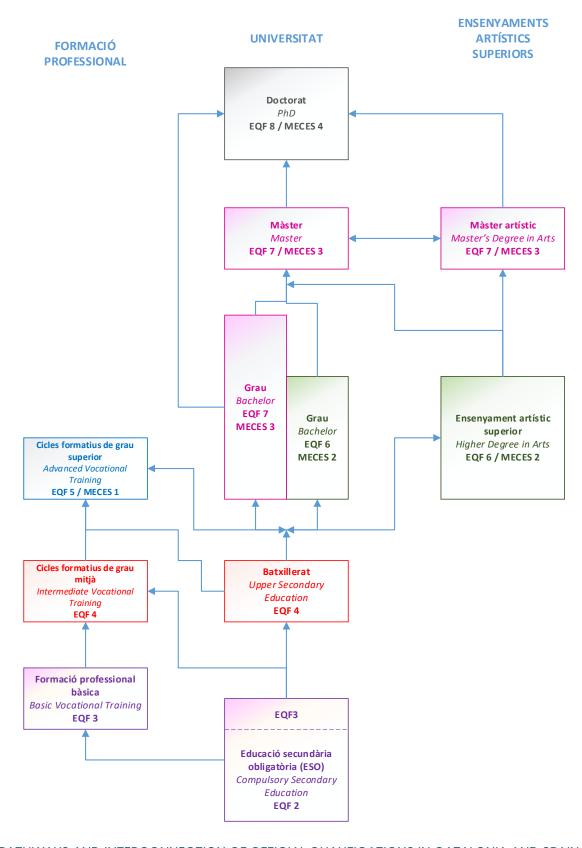
CYCLE	QUALIFICATIONS
	PROFESSIONAL QUALIFICATIONS (cont.)
	Advanced Technician in Jewellery Art
	Advanced Technician in Laboratory Quality Control and Analysis
	Advanced Technician in Laboratory Clinical Diagnosis
	Advanced Technician in Aeromechanical Maintenance
	Advanced Technician in Aircraft Maintenance
	Advanced Technician in Industrial Equipment Maintenance
	Advanced Technician in Maintenance of Thermal and Liquid Installations
	Advanced Technician in Electronic Maintenance
	Advanced Technician in Marketing and Advertising
	Advanced Technician in Industrial Mechatronics
	Advanced Technician in Maritime Transport, Fishing and Navigation
	Advanced Technician in Optical Clinics
	Advanced Technician in Organisation of Ship and Vessel Machine Maintenance
	Advanced Technician in Orthoprosthetics
	Advanced Technician in Landscaping and the Rural Environment
	Advanced Technician in Pattern Making and Fashion
	Advanced Technician in Plastics and Rubber
evel 1	Advanced Technician in Occupational Risk Prevention
QF 5	Advanced Technician in Textile Wet Finishing Processes
	Advanced Technician in Textile Weaving and Spinning Processes
hort	Advanced Technician in Textile Knitting Processes
ycle	Advanced Technician in Food Industry Quality and Processes
	Advanced Technician in Aquaculture Production
	Advanced Technician in Production of Audiovisuals, Radio and Shows
	Advanced Technician in Graphic Arts Industry Production
	Advanced Technician in Smelting and Powder Metallurgy Production
	Advanced Technician in Planning of Mechanical Manufacture Production
	Advanced Technician in Planning of Polymer and Metal Moulding Production
	Advanced Technician in Dental Prostheses
	Advanced Technician in Building Projects
	Advanced Technician in Civil Engineering Projects
	Advanced Technician in Environmental Chemistry
	Advanced Technician in Industrial Chemistry
	Advanced Technician in Radiotherapy
	Advanced Technician in Audiovisual and Show Production
	Advanced Technician in Works Schemes and Executions
	Advanced Technician in Environmental Health
	Advanced Technician in Secretarial Work
	Advanced Technician in Consumer Services
	Advanced Technician in Automatic Control and Regulation Systems
	Advanced Technician in Computer and Telecommunications Systems
	Advanced Technician in Automated and Electrotechnical Systems

CYCLE	QUALIFICATIONS
Level 1 EQF 5 Short cycle	 PROFESSIONAL QUALIFICATIONS (cont.) Advanced Technician in Sound Advanced Technician in Ship Installation and Machine Control and Supervision Advanced Technician in Artistic Textiles Advanced Technician in Maritime Transport and Deep-sea Fishing Advanced Technician in Transport and Logistics Advanced Technician in Tailored and Entertainment Costumes Advanced Technician in Art Glass
Level 2 EQF 6 Ist cycle	Advanced Technician in Wine Making GENERAL UNIVERSITY QUALIFICATIONS (240 ECTS credits, 4 years) Bachelor's degree QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (240 ECTS, credits, 4 years) Bachelor's Degree in Dramatic Art Bachelor's Degree in Plastic Arts Bachelor's Degree in Conservation and Restoration of Cultural Heritage Bachelor's Degree in Dance Bachelor's Degree in Design Bachelor's Degree in Music PROFESSIONAL UNIVERSITY QUALIFICATIONS (240 ECTS credits, 4 years) Technical Architect Dietician-Nutritionist Nurse Physiotherapist Aeronautical Technical Engineer Agricultural Engineer Forestry Technical Engineer Mining Technical Engineer Naval Technical Engineer Naval Technical Engineer Public Works Technical Engineer Telecommunications Technical Engineer Topography Technical Engineer Topography Technical Engineer Speech Therapist Pre-School Education Teacher Primary Education Teacher Optician - Optometrist

CYCLE	QUALIFICATIONS
	PROFESSIONAL MERCHANT NAVY QUALIFICATIONS (240 ECTS credits, 4 years)*
	Merchant Navy First Engineering Officer** Mayabayah Navy Consum d Familia and Officer** Mayabayah Navy Consum d Familia and Officer** Mayabayah Navy Consum d Familia and Officer**
	Merchant Navy Second Engineer Officer** Marchant Navy Floatro Tochnical Officer*** Marchant Navy Floatro Tochnical Officer***
	 Merchant Navy Electro-Technical Officer*** Merchant Navy Second Class Radioelectronics Officer****
	Merchant Navy First-Class Pilot****
	Merchant Navy Second-Class Pilot*****
Level 2	Morenant Navy observa Glaser net
EQF 6	* Other requirements in addition to the corresponding bachelor's degree need to be met
Ist cycle	to obtain the professional qualification.
	** You must have a bachelor's degree that qualifies you for the profession (in Catalonia, the Bachelor's Degree in Marine Technologies).
	*** You must have a bachelor's degree that qualifies you for the profession (in Catalonia, the Bachelor's Degree in Marine Technologies, with a specialisation in Marine Electrical
	Engineering, from the UPC) **** You must have a bachelor's degree that qualifies you for the profession (in
	Catalonia, there is currently no bachelor's degree or specialisation in Radioelectronics for
	the Merchant Navy).
	***** You must have a bachelor's degree that qualifies you for the profession (in
	Catalonia, the Bachelor's Degree in Nautical and Maritime Transport from the UPC).
	GENERAL UNIVERSITY QUALIFICATIONS (60, 90 or 120 ECTS credits; 1, 1.5 or 2 years)
	University master's degree
	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years)
	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years)
	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits,
	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years)
Level 3	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits,
Level 3 EQF 7	 QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) Dentist (300 ECTS credits, 5 years)
	 QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) Dentist (300 ECTS credits, 5 years) Pharmacist (300 ECTS credits, 5 years)
EQF 7	 QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) Dentist (300 ECTS credits, 5 years) Pharmacist (300 ECTS credits, 5 years) Doctor (360 ECTS credits, 6 years)
EQF 7	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) • Dentist (300 ECTS credits, 5 years) • Pharmacist (300 ECTS credits, 5 years) • Doctor (360 ECTS credits, 6 years) • Veterinarian (300 ECTS credits, 5 years) PROFESSIONAL UNIVERSITY QUALIFICATIONS
EQF 7	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) • Dentist (300 ECTS credits, 5 years) • Pharmacist (300 ECTS credits, 5 years) • Doctor (360 ECTS credits, 6 years) • Veterinarian (300 ECTS credits, 5 years) PROFESSIONAL UNIVERSITY QUALIFICATIONS • Lawyer (90 ECTS credits, 1.5 years)
EQF 7	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) • Dentist (300 ECTS credits, 5 years) • Pharmacist (300 ECTS credits, 5 years) • Doctor (360 ECTS credits, 6 years) • Veterinarian (300 ECTS credits, 5 years) PROFESSIONAL UNIVERSITY QUALIFICATIONS • Lawyer (90 ECTS credits, 1.5 years) • Aeronautical Engineer (90 or 120 ECTS credits, 1.5 or 2 years)
EQF 7	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) • Dentist (300 ECTS credits, 5 years) • Pharmacist (300 ECTS credits, 5 years) • Doctor (360 ECTS credits, 6 years) • Veterinarian (300 ECTS credits, 5 years) PROFESSIONAL UNIVERSITY QUALIFICATIONS • Lawyer (90 ECTS credits, 1.5 years)
EQF 7	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) • Dentist (300 ECTS credits, 5 years) • Pharmacist (300 ECTS credits, 5 years) • Doctor (360 ECTS credits, 6 years) • Veterinarian (300 ECTS credits, 5 years) PROFESSIONAL UNIVERSITY QUALIFICATIONS • Lawyer (90 ECTS credits, 1.5 years) • Aeronautical Engineer (90 or 120 ECTS credits, 1.5 or 2 years) • Agronomist (90 or 120 ECTS credits, 1.5 or 2 years)
EQF 7	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) • Dentist (300 ECTS credits, 5 years) • Pharmacist (300 ECTS credits, 5 years) • Doctor (360 ECTS credits, 6 years) • Veterinarian (300 ECTS credits, 5 years) PROFESSIONAL UNIVERSITY QUALIFICATIONS • Lawyer (90 ECTS credits, 1.5 years) • Aeronautical Engineer (90 or 120 ECTS credits, 1.5 or 2 years) • Agronomist (90 or 120 ECTS credits, 1.5 or 2 years) • Civil Engineer (120 ECTS credits, 2 years)
EQF 7	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) • Dentist (300 ECTS credits, 5 years) • Pharmacist (300 ECTS credits, 5 years) • Doctor (360 ECTS credits, 6 years) • Veterinarian (300 ECTS credits, 5 years) PROFESSIONAL UNIVERSITY QUALIFICATIONS • Lawyer (90 ECTS credits, 1.5 years) • Aeronautical Engineer (90 or 120 ECTS credits, 1.5 or 2 years) • Agronomist (90 or 120 ECTS credits, 2 years) • Civil Engineer (120 ECTS credits, 2 years) • Industrial Engineer (90 or 120 ECTS credits, 1.5 or 2 years)
EQF 7	QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS (60-120 ECTS credits, 1-2 years) • Master's degree in Arts UNIVERSITY LEVEL-7 BACHELOR'S DEGREES PROVIDING PROFESSIONAL QUALIFICATIONS • Architect (300 bachelor's degree ECTS credits, 60 master's degree ECTS credits, 6 years) • Dentist (300 ECTS credits, 5 years) • Pharmacist (300 ECTS credits, 5 years) • Doctor (360 ECTS credits, 6 years) • Veterinarian (300 ECTS credits, 5 years) PROFESSIONAL UNIVERSITY QUALIFICATIONS • Lawyer (90 ECTS credits, 1.5 years) • Aeronautical Engineer (90 or 120 ECTS credits, 1.5 or 2 years) • Civil Engineer (120 ECTS credits, 2 years) • Industrial Engineer (90 or 120 ECTS credits, 1.5 or 2 years) • Mining Engineer (90 or 120 ECTS credits, 1.5 or 2 years)

CYCLE	QUALIFICATIONS
Level 3 EQF 7 2nd cycle	PROFESSIONAL UNIVERSITY QUALIFICATIONS (cont.) Teacher Training in Secondary and Upper Secondary School Education, Vocational Training and Language Education* (60 ECTS, 1 year) General Health Psychologist (90 ECTS, 1.5 years) Court Representative (90 ECTS, 1.5 years) PROFESSIONAL MERCHANT NAVY QUALIFICATIONS* Merchant Navy Chief Engineer** Merchant Navy First Class Radioelectronics Officer**** * Merchant Navy First Class Radioelectronics Officer**** * Further requirements other than the corresponding university master's degree must be met in order to obtain the professional qualification. ** It is necessary to have a university master's degree that provides qualifications for the profession (in Catalonia, the University Master's Degree in Management and Operation of Maritime Energy Installations from the UPC) *** You must have a university master's degree that qualifies you for the profession (in Catalonia, the University Master's Degree in Nautical and Maritime Transport Management from the UPC). **** You must have a university master's degree that qualifies you for the profession (in Catalonia, there is currently no qualification for this profession).
Level 4 EQF 8 3rd cycle	GENERAL UNIVERSITY QUALIFICATIONS PhD QUALIFICATIONS FROM HE STUDY PROGRAMMES IN ARTS Do not exist PROFESSIONAL UNIVERSITY QUALIFICATIONS Do not exist

ANNEX 2. PATHWAYS AND INTERCONNECTION OF OFFICIAL HIGHER EDUCATION DEGREES IN CATALONIA AND SPAIN



Agència per a la Qualitat del Sistema Universitari de Catalunya

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