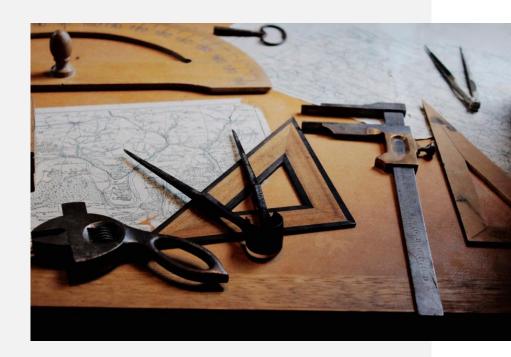


# CATALAN HIGHER EDUCATION QUALIFICATIONS FRAMEWORK

USING EX-ANTE ACCREDITATION TO ASSESS THE IMPLEMENTATION OF THE SPANISH NATIONAL QUALIFICATIONS FRAMEWORK (MECES)





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Barcelona, 2019





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## **ACRONYMS AND INITIALISMS**

**CHE-QF:** Catalan Higher Education Qualifications Framework

**CHES:** Catalan Higher Education System

CNCP: Catálogo Nacional de Cualificaciones Profesionales (National Catalogue for Professional

Qualifications)

**ECTS:** European Credit Transfer System

**EQF:** European Qualifications Framework

**EHEA:** European Higher Education Area

**HEI:** Higher Education Institution

**INCUAL:** Instituto Nacional de Cualificaciones (National Institute for Qualifications)

LOMLOU: Ley Orgánica de Modificación de la Ley Orgánica de Universidades (Organic Act

Amending the Organic Act on Universities)

LOU: Ley Orgánica de Universidades (Organic Act on Universities)

LUC: Llei d'Universitats de Catalunya (Act on Universities of Catalonia)

MECES: Marco Español de Cualificaciones para la Educación Superior (Spanish Higher

**Education Qualifications Framework)** 

**NFQ:** National Qualifications Framework

**PhD:** Doctor of Philosophy

**QA:** Quality Assurance

QF-EHEA: Qualifications Framework of the European Higher Education Area

**RPL:** Recognition of Prior Learning

SNCFP: Sistema Nacional de Cualificaciones y Formación Profesional (National System for

Qualifications and Vocational Training)

# 1. INTRODUCTION

This document is an initiative of AQU Catalunya derived from the experience acquired in the accreditation of university degrees. This experience has shown that the synoptic nature of the Spanish Higher Education Qualifications Framework (MECES) needs to be deployed to meet one of its objectives: to be adapted for curricula design and the subsequent process of accreditation thereof.

The MECES has been in place since 2011. MECES establishes descriptors for 3 different levels: Bachelor's, Master's and Doctorate. Additionally, in Spain proposals for degrees have to undergo an external assessment prior to their implementation (an ex-ante process called "verification"). This assessment must check the alignment between the programmes and 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 degrees offered. For example, the most commonly observed problems are related to: generic vs. specialist Bachelor's Degrees; 180 vs. 240 vs. 300 or more ECTS Bachelor's Degrees; non-specialist Master's Degrees; non-demanding admission criteria in university Master's Degrees; coexistence of different approaches in the same Master's Degree: academic, professional and research; recognition of credits between different educational levels; integrated Degrees; and recognised and non-recognised Degrees (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 promoting this proposal for a qualifications framework for higher education in Catalonia approached the development of it not with the intention of creating a completely novel proposal — which would have been very difficult since qualifications frameworks have been established in many countries for years with very similar structures and contents; but, rather with the aim of compiling the best experiences and definitions in a single document which could benefit the Catalan university system when it comes to the improvement of the design of skills in the higher education qualifications.

Moreover, this document is a purely academic exercise that has no legal validity outside Catalan higher education institutions. National qualification frameworks are built with the help of all the social agents involved in the training and job placement of students pursuing higher education studies: universities and other higher education institutions, governments through their

education, business and industrial strategy and work departments, associations of employers, unions, professional organisations, etc. In addition, the NFQ must be referenced to the EFQ through a report that demonstrates the alignment between both of them. 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.

The document has been prepared with the support of an INQAAHE grant.

### 1.1. WHAT ARE THE GOALS OF THIS DOCUMENT?

- To unfold the legal document of the Spanish Higher Education Qualifications Framework (MECES) to adapt it to the present needs of the Catalan Higher Education System (CHES). The result of this deployment is presented as the Catalan Higher Education Qualifications Framework. This deployment is compatible with the European and the Spanish Framework but has improved some aspects such as the structure, definitions, etc., in order to make it more useful to its end users. It also has the function of making the HE levels in Catalonia more understandable to society.
- 2. To propose a useful framework for design, verification and accreditation purposes, and one aligned with the European, Spanish and Catalan assessment criteria used for these purposes.

### 1.2. TO WHOM IS THIS DOCUMENT ADDRESSED?

This document is addressed to students, academics, employers and society in general. It must allow them to compare Catalan degrees with those delivered in other European countries. It must also inform them about what should be the expected profile of a student that has been awarded a specific academic degree.

It is also addressed to universities for design purposes, to organisations involved in verification and accreditation processes, and to employers to gain a better acquaintance of the educational objectives of a qualification and identify possible shortcomings.

### 1.3. WHAT ARE NATIONAL QUALIFICATIONS FRAMEWORKS?

National qualifications frameworks (NQFs) are structures for developing, describing and systematising the relationships between qualifications. An NQF takes all of a country's formally recognised qualifications and arranges them in a clearly defined structure. In this context, qualifications are understood as sets of certified or documented skills – with no regard given to the respective learning path.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> Excerpt from: <u>https://www.bibb.de/dokumente/pdf/a1\_bwp\_special-edition\_hanf\_hippach-schneider(1).pdf</u>

Qualifications frameworks describe the qualifications of an education system and how they interlink. National qualifications frameworks describe what learners should know, understand and be able to do on the basis of a given qualification. These frameworks also show how learners can move from one qualification, or qualification level, to another within a system. In others words:

A qualifications framework is an instrument for the development and classification of qualifications according to a set of criteria for each level/level descriptors based on knowledge, skills and competences, learning outcomes and credit ranges.

### Why are qualifications frameworks important?

Qualifications frameworks are important instruments in achieving comparability and transparency within the EHEA and facilitating the movement of learners within, as well as between, higher education systems. They should also help HEIs to develop modules and study programmes based on learning outcomes and credits, and improve the recognition of qualifications as well as all forms of prior learning. Qualifications frameworks may support the development and accreditation of study programmes and also facilitate the recognition of qualifications, as well as all forms of prior learning (London Communiqué, 2007).<sup>2</sup>

### Genesis of the European Qualifications Frameworks

The impetus for the work on the overarching framework was given through the Berlin Communiqué, adopted in 2003:<sup>3</sup>

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.

The first one, the Qualifications Framework of the European Higher Education Area<sup>4</sup> (May 2005) was adopted by Ministers for the Bologna Process in May 2005 and revised in the Ministerial Conference held in Paris in May 2018. It covers higher education qualifications and is valid for all 48 (initially 46) members of the European Higher Education Area, whether these are members of the European Union or not.

It provides the framework within which the national qualifications frameworks in these 48 countries will be developed as far as their higher education qualifications are concerned, and it represents the "face" of European higher education qualifications towards the rest of the world.

The other one, the European Qualifications Framework for Lifelong Learning (EQF)<sup>5</sup> has been developed by the European Commission. It was signed on 23 April 2008 by the Presidents of the

<sup>&</sup>lt;sup>2</sup> http://media.ehea.info/file/2007\_London/69/7/2007\_London\_Communique\_English\_588697.pdf

<sup>&</sup>lt;sup>3</sup> http://media.ehea.info/file/2003\_Berlin/28/4/2003\_Berlin\_Communique\_English\_577284.pdf

<sup>&</sup>lt;sup>4</sup> http://media.ehea.info/file/WG Frameworks qualification/85/2/Framework qualificationsforEHEA-May2005 587852.pdf

<sup>&</sup>lt;sup>5</sup> https://ec.europa.eu/ploteus/sites/eac-eqf/files/leaflet\_en.pdf

European Parliament and of the Council of the European Union and is therefore formally adopted. It covers all levels of education and is valid for EU countries, EU accession countries and countries in the European Economic Area.

One difficulty is that the EQF, which was developed after the EHEA Framework, does not use the same wording for the higher education qualifications in the framework. The EQF may therefore create the impression that there are two distinct overarching frameworks for higher education in Europe. It is therefore important to underline that while the wording of the EQF is not identical to that of the EHEA Framework, there are no major differences between the two, and that it is perfectly possible to develop national qualifications frameworks that are compatible with the EQF as well as with the EHEA Framework. This was recognised by Ministers in the London Communiqué (2007):

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

### The utility of NQFs

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 an entity 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.

All national qualifications frameworks target two common goals. These are to:

- Make qualifications transparent for users, learners and potential employers so that the former know what they have to learn and the latter know what they can expect;
- Enable flexibility and transferability between different educational and occupational fields and between learning venues and, in doing so, eliminate barriers that currently block horizontal and vertical education paths.

National qualifications frameworks can serve other purposes as well. They can:

- Foster the more rational design and development of qualifications;
- Make it easier for government to steer skills development;
- Foster educational mobility through the use of credit transfer systems;
- Enhance the marketability of education offerings at international level;
- Improve the representation of a country's qualification potential in international statistics.

### Spanish Qualifications Framework for Higher Education (MECES)<sup>6</sup>

The Framework was formally published in a Royal Decree on 3 August 2011. It is a legal document of mandatory compliance. It includes 4 levels, generic descriptors based on the Dublin Descriptors,<sup>7</sup> it refers to ECTS expectations and is focussed on learning outcomes and competence levels.

The MECES was used in the renewal of pre-Bologna programmes and in the design and development of new study programmes in universities and in their external evaluation by all the relevant QA agencies in Spain, including AQU Catalunya.

A more complete picture of MECES is given in section 2 of this document.

<sup>&</sup>lt;sup>6</sup> http://boe.es/boe/dias/2014/03/05/pdfs/BOE-A-2014-2359.pdf (in Spanish).

<sup>&</sup>lt;sup>7</sup> 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. http://www.ecahe.eu/w/index.php/Dublin Descriptors

# 2. CATALAN AND SPANISH HIGHER EDUCATION SYSTEM

### **Overall responsibility**

The educational competences are shared between the General State Administration (the Ministry for Higher Education) and the authorities of the Autonomous Communities (departments for education). The central education administration executes the general guidelines of the Government on education policy and regulates the basic elements or aspects of the system; whereas, the regional education authorities develop the State regulations and have executive and administrative authority for managing the education system in their own territory.

The Spanish university system is regulated by State Organic Act 4/2007 (LOMLOU), amending Organic Act 6/2001 (LOU) on Universities, and indeed the Spanish government is responsible for ensuring the consistency and uniformity of the education system as a whole. A series of royal decrees set out more detailed aspects on the responsibilities of the national 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 the Catalan Act on Universities (Act 1/2003, LUC).

The body in charge of assuring this functional coordination at the higher education level is the Conferencia General de Política Universitaria (General Conference for Higher Education Policy), made up of the autonomous communities' ministers for education and the minister of education of the central government.

The state government, through the Ministry for Higher Education, regulates the conditions for obtaining, issuing and recognising degrees including those leading to regulated professional occupation. In summary, the State issues the degrees and defines the conditions under which a university degree can lead to a regulated professional activity (e.g., medical doctor or civil engineer). Most regulated professions are linked to certain professions that require an academic degree on the part of those who wish to practice, although there are some regulated professions that do not require an academic degree. Spain is a signatory to the Lisbon Convention and enacts the European Directives concerning recognition of professional qualifications (see, for instance https://sede.education.gob.es/en/catalogo-tramites/gestiontitulos/

universitarios/titulos-obtenidos-fuera-de-espana/reconocimiento-titulosdirectiva-comunitaria.html).

According to State regulations, Catalonia is responsible for funding HEIs and AQU Catalunya is responsible for Quality Assurance of Higher Education in Catalonia including verification/accreditation.

### **Qualifications Framework (MECES)**

	LEVELS	QUALIFICATIONS
1	Advanced Technician	Advanced Technician in Vocational Training Advanced Technician in Plastic Arts and Design Advanced Technician in Sports Education
2	Bachelor's Degree	University Bachelor's Degree Bachelor's Degree in Arts
3	Master's Degree	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 level
4	Doctoral Degree	Doctoral Degree (PhD)

### 2.1. STRUCTURE OF HE IN CATALONIA

Higher education comprises university, art and professional studies. University education is provided in universities. Art studies and advanced vocational training are provided in the same institutions as those offering intermediate vocational training (secondary studies).

### Advanced vocational training

It comprises a series of 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 established by Act 2/2006 on Education and Act 8/2013 on Education Quality Improvement.

Advanced Vocational Training is organised in training cycles, which have a modular structure. It includes a vocational module, which requires the preparation of a project during the last stage of the training cycle. The different training cycles are related to any of the 26 professional families established in the National Catalogue for Professional Qualifications.<sup>8</sup>

The Autonomous Government of Catalonia (Generalitat) is responsible for the annual organisation of the academic year. Generally, the duration of the academic year comprises a

 $<sup>{\</sup>rm 8\ http://www.educacion.es/educa/incual/ice\_catalogoWeb\_ing.html}$ 

minimum of 175 days, distributed between the first fortnight of September and the end of June, grouped in trimesters.

Vocational training is provided both in public and private education institutions, authorised by the Catalan Government. Students having successfully completed advanced vocational training are awarded an **Advanced Technician** professional qualification within **EQF level 5** (short cycle in QF-EHEA). The same award applies to Sport and Plastic Arts and Design Education (considered specialist education; see the Arts Education section).

### **Vocational training qualifications**

The most significant professions in Spain are organised by professional families and levels as established by Royal Decree 1128/2003. The National Catalogue for Professional Qualifications (CNCP) describes the structure and subjects of professional qualifications that are subject to recognition and accreditation.

The catalogue is the responsibility of the National Institute for Qualifications (INCUAL) which was set up by Royal Decree 375/1999. This institute gives support to the General Council for Professional Training and has the mission to define, prepare and maintain the 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 needed to promote and develop the integration of the professional training offer, through the National Catalogue for Professional Qualifications, make up the National System of 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.

### **University education**

The adaptation of the structure of Spanish university education to the European Higher Education Area (EHEA) was completed in 2010 (2001 Act on Universities and several Royal Decrees, especially, RD 1393/2007 and RD 99/2011).

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. As a general rule, the university academic year has 220 teaching days and is divided into two semesters (30 ECTS each):

- First semester: it runs from the beginning of the academic year, mid-September, to the end of January or beginning of February, when students sit the final examinations for the subjects taken during the first semester and the partial examinations for annual subjects.
- Second semester: it extends from the beginning of February to the end of May. The examinations for this semester, as well as final examinations for annual subjects, are sat in June.

Universities allow for retake examination sessions, which can be held in July or September, to be decided by each university.

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

University education is organised into three cycles: **Bachelor** (level 2), **Master** (level 3) and **Doctorate** (level 4).

### **Art education**

Advanced Artistic Education includes Music, Dance, Performing Arts, Preservation and Restoration of Cultural Heritage, Plastic Arts and Design. They are considered specialist education. These study programmes are delivered by both public and private non-university institutions.

PROVISION	NAME	ADVANCED STUDIES DELIVERED	
Artistic Education	Higher conservatories or higher schools of Music and Dance	Music and Dance Education	
	Higher schools of Performing Arts	Performing Arts Education	
	Higher schools for the Preservation and Restoration of Cultural Assets	Preservation and Restoration of Cultural Assets Education	
	Higher schools of Design	Design Education	
	Higher schools of Plastic Arts	Plastic Arts and Design Education	

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 trimesters.

Advanced Artistic Education is organised into two cycles: **Higher Degree in Arts** (level 2) and **Master's Degree in Arts** (level 3): leading to the acquisition of advanced training focussed on academic or professional specialisation or an introduction to research-related tasks.

### 2.2. ACCESS TO HE IN CATALONIA

### **Advanced Technician Degree**

In order to access the qualification of Advanced Vocational Training (level 2), students must:

- Hold the Batxillerat certificate (upper secondary education certificate, EQF4); or
- Hold a **technician diploma** (intermediate vocational training certificate, EQF4) and have completed a **preparatory course** of 700 hours; or
- Have passed an entrance examination to Advanced Vocational Training Cycles or a university entrance examination for students over 25; or

■ Hold a university degree or equivalent (at least EQF6, QF-EHEA first cycle).

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

- Between 60% and 70% of places are set aside for students with a Batxillerat certificate;
- Between 20% and 30% of places are reserved for students who have passed the preparatory course;
- Between 10% and 20% of places are held in reserve for students applying for admission through other paths.

### Recognition of previous studies:

A minimum of 24 ECTS and a maximum of 72 ECTS of advanced vocational training courses will be recognised for students holding a Bachelor's Degree or a Higher Degree in Arts or having completed part of those programmes.

### Bachelor's Degree/Higher Degree in Arts

The Ministry for Higher Education regulates access to university studies, establishing the general conditions at national level. Regional education authorities adapt and develop them within the scope of their responsibilities.

University access is guaranteed through the observance of fundamental rights. Furthermore, admission to university is granted on the basis of equality, merit and ability. In addition, universal accessibility and design are also taken into consideration.

The body in charge of ensuring that students access official Bachelor programmes is the General Conference for University Policy. This body ensures that access to university is general, objective and universal, equally valid for all Spanish universities, and complies with the criteria established by the European Higher Education Area (EHEA).

Students holding any of the following certificates may have access to official Bachelor programmes:

- a. Batxillerat certificate or equivalent certificate (EQF4);
- b. European Baccalaureate Certificate, International Baccalaureate Diploma, or Batxillerat certificates, diplomas or studies from the education systems of the Member States of the European Union (EU) or from other States that have signed international agreements with Spain that are applicable in this regard on a basis of reciprocity. In this case, students have to meet the academic requirements established in their countries of origin in order to have access to their universities;
- Advanced Technician certificate (level 1, EQF5; QF-EHEA short cycle) in any specialisation, Plastic Arts and Design Advanced Technician certificate, or Sports Advanced Technician certificate or equivalent certificates;
- d. Certificates, diplomas or studies equivalent to the Batxillerat certificate from the education systems of the Member States of the EU or from other States that have

- signed international agreements with Spain that are applicable in this regard on a basis of reciprocity. In this case, students do not meet the academic requirements established in their countries of origin in order to have access to their universities;
- e. Certificates, diplomas or studies, recognised or equivalent to the Batxillerat certificate of the Spanish education system, obtained or completed in States that are not members of the EU and that have not signed international agreements for the recognition of the Batxillerat certificate on a basis of reciprocity;
- f. Official Bachelor (level 2, EQF6; QF-EHEA first cycle) or Master's Degree (level 3, EQF7; QF-EHEA second cycle) or equivalent degree;
- g. Official Graduate, Technical Architect, Technical Engineer, Bachelor, Architect, Engineer Degrees, corresponding to the previous organisation of university education or equivalent degree;
- h. Students with partial university studies followed in Spain or abroad, or students whose foreign degrees have not been recognised or declared equivalent in Spain but who want to continue studying in a Spanish university (in this case, students have to secure recognition of at least 30 ECTS credits from the relevant university);
- i. Students who were in a position to have access to university according to the organisation of the Spanish education system prior to the 2013 Act on the Quality Improvement of Education;
- j. Certificates, diplomas or studies, aside from those equivalent to the Batxillerat certificate, the Vocational Training Advanced Technician certificate, the Plastic Arts and Design Advanced Technician certificate, or the Sports Advanced Technician certificate of the Spanish education system, obtained or completed in Member States of the EU or in other States that have signed international agreements with Spain that are applicable in this regard on a basis of reciprocity. In this case, students have to meet the academic requirements established in their countries of origin in order to have access to their universities;
- *k.* People aged over 25, 40 and 45 who do not hold any qualification to gain access to university education by other means.

### Paths a, c, h, and k are the most common ones.

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:

- **1**. Candidates holding the certificates in sections *a* and *b*:
  - Universities may exclusively use the final grade obtained in Batxillerat 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 Batxillerat certificate (related to the university qualification chosen);
    - Grades obtained in specific subjects taken or in the final evaluation of the studies equivalent to the Spanish Batxillerat;

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- Additional academic or vocational training;
- Higher education previously pursued.

In addition, universities may exceptionally establish specific knowledge and/or skills assessments.

Both admission procedures have been implemented from the 2017/18 academic year in the case of students who have obtained the Batxillerat certificate established by the 2013 Act on the Quality Improvement of Education.

Until then, students had to pass the university entrance examination.

- **2**. Candidates holding the certificates in sections *c* to *j*:
  - Universities must establish admission procedures: *c*, *d* and *e*;
  - Universities may establish admission procedures: f, g, h, i and j;
  - In all cases, the admission procedures established by universities must use one or several of the following criteria:
    - Final grade obtained in the studies completed, and/or in specific modules or subjects;
    - Relationship between the curricula of the previous studies and the relevant university studies (in the cases of the Vocational Training Advanced Technician certificate, the Plastic Arts and Design Advanced Technician certificate or the Sports Advanced Technician certificate, the branch of knowledge established in Royal Decree 1618/2011, as well as the relationship between the studies mentioned and the Bachelor's Degrees, must be taken into account);
    - Additional academic or vocational training;
    - Higher education previously pursued.

Universities may exceptionally establish specific knowledge and/or skills assessments.

**3.** People aged over 25, 40 and 45 who do not hold any qualification to gain access to university education may have access if they pass a specific university entrance examination.

### Recognition of previous studies

The Spanish Ministry for Higher Education has regulated the recognition of studies among the different study programmes, establishing the relations between the different higher education diplomas, and for the validation of ECTS credits, including Bachelor's Degrees and the Advanced Technician of Advanced Vocational Training.

Universities are responsible for the recognition of official studies accrediting the Advanced Technician of Advanced Vocational Training, with the effects of allowing students into study programmes leading to university Bachelor's Degrees.

A minimum of 30 ECTS and a maximum of 60% of the total Bachelor ECTS will be recognised for students holding an Advanced Technician Degree (level 1) or having completed part of those studies.

A minimum of 36 ECTS and a maximum of 60% of the total Bachelor ECTS will be recognised for students holding a **Higher Degree in Arts** (level 2) or having completed part of those studies.

A minimum of 36 ECTS and a maximum of 60% of the total Higher Degree in Arts ECTS will be recognised for students holding a Bachelor's Degree (level 2) or having completed part of those studies.

The university can recognise an unlimited number of credits for students holding another Bachelor's Degree or having followed part of another study programme, though under no circumstances can the Bachelor's Degree final-year project (6-30 ECTS) be recognised.

Moreover, **15% of the total Bachelor's Degree credits** can be recognised by accrediting prior professional activity.

### Master's Degree/Master's Degree in Arts

In order to apply for admission to Master's programmes, candidates must hold an official university degree or Higher Degree in Arts (EQF6, QF-EHEA first cycle), issued by a Spanish university or by a higher education institution within the European Higher Education Area (EHEA), which qualifies for admission at this level.

Students who fulfil this prerequisite may be accepted into the programme on the basis of specific criteria regarding academic merit. These criteria may be related to the specific degree they are applying for or established by each university. In the later case, universities must include in the programme description a list of procedures and admission requirements, such as whether candidates need to have specific previous education in certain areas or subjects.

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

### Recognition of previous studies:

The education institutions can recognise an unlimited number of credits for students holding another Master's Degree or having followed part of such studies, though under no circumstances can the Master's thesis (6-30 ECTS) be recognised.

Moreover, **15% of the total Master's Degree credits** can be recognised by accrediting prior professional activity.

### PhD programmes

Candidates must hold a Bachelor's Degree, or equivalent, and a Master's Degree, or equivalent, provided they have completed at least 300 ECTS credits in the two types of programmes as a whole.

Candidates with a previous PhD may also apply.

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

- A diploma leading to admission into a Master's Degree programme, issued by a Spanish university or by a higher education institution within the European Higher Education Area (EHEA); or applicants who have completed at least 300 ECTS credits of official university education, 60 of which must belong to a Master's Degree programme;
- An official qualification of at least 300 ECTS credits, awarded by a Spanish university. The curriculum of these programmes must include training and research credits equivalent to the ones offered in Master's Degree programmes. If this requirement is met, applicants must compulsorily pass the specific training units and programme components required for admission into a PhD programme;
- A place in specialist health training after having completed a Bachelor's Degree by means of an entrance examination, provided that they have 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 from a foreign country, once the universities certify that the programme provides equivalent training to that offered in a Spanish university Master's Degree programme and that the degree is also a pre-requisite for PhD studies in the country issuing the diploma;
- An official university degree corresponding to level 3 of the Spanish Qualifications Framework for Higher Education (EQF7, QF-EHEA second cycle).

Universities are entitled to establish additional selection and admission criteria for applicants to specific PhD programmes.

PhD candidates must register each year in the university organising the programme, in the relevant doctoral college or in the institution responsible for the programme, and pay a fee for academic mentorship.

### Other qualifications

In addition, universities provide diplomas not considered in the MECES. They are programmes taught in the institutions or affiliated centres and, in general, refer to lifelong learning or permanent training. This situation does not exist in Catalonia's neighbouring countries. Thus, it can be considered an anomaly of the MECES if we consider that one of the objectives of qualification frameworks is to establish a framework for reporting equivalences between different types of training regardless of their formal recognition.

# 3. THE QUALIFICATIONS FRAMEWORK

CHE-QF LEVELS		QUALIFICATIONS			LEVELS MECES	LEVELS EQF	LEVELS QF-EHEA
	Upper Vocational Training	HE Study Programmes In Arts	Universit	:у			
4			PhD Diploma Not typically credit-rate 3 years	d	4	8	Third Cycle
3		Master's Degree in Arts 120 ECTS 2 years	Master's Degree 120 ECTS 2 years	Integrated Bachelor's Degree 360-ECTS 6 years	3	7	Second Cycle
		60-ECTS 1 years	60-ECTS 1 years				
2B			Advanced Bachelor's Degree 240 ECTS 4 years		2	6	First
2A		Bachelor's Degree in		300-ECTS 5 years	2	U	Cycle
1	Advanced Technician in Vocational Training, Advanced Technician in Plastic Arts and Design, Advanced Technician in Sports Education (Advanced Technician) 120 ECTS 2 years	Arts 240 ECTS 4 years	Bachelor's Degree 180 ECTS 3 years		1	5	Short Cycle

The **Qualifications Framework** is an instrument for the development and classification of qualifications according to a set of criteria for specific levels of achieved learning. It is based on knowledge, skills and competences, learning outcomes and credit ranges. Its aim is to integrate and coordinate national qualifications and improve transparency with regard to the labour market and civil society.

### **Proposed levels**

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 where level 1 is the lowest complexity in higher education and level 4 has the highest complexity. These levels are firstly defined by criteria expressed as learning outcomes.

Since the publication of the royal decree that made it possible to obtain the Bachelor's Degree with 180 or 240 credits – replacing the previous regulation where 240 credits were mandatory – universities have delivered Bachelor's degrees the academic level of which has differed substantially. Accordingly, this document proposes the classification of the level 2 Bachelor subdivided into two sub-levels for verification/accreditation purposes. These sub-levels relate respectively to the Bachelor's Degree with 180 credits and the Advanced Bachelor's Degree with 240.

The Spanish Government provided for an Integrated Bachelor's Degree with a total workload ranging from 300 ECTS to 360 ECTS within level 3. This level comprises Integrated Bachelor's Degrees, Master's Degrees and Master's Degrees in Arts. No further sub-division within this level is proposed.

### Description of criteria for level content: KSC type

The challenge is to develop a consistent and coherent system for level content description. In this document, the KSC type is adopted. This system is very useful in a context where even within countries there is apparent diversity in approaches. This approach has particular strengths and has been developed to suit the particular needs of the economy and VET in our context. The concepts underpinning the KSC category are related to learning outcomes or outputs, irrespective of the acquisition routes involved, rather than learning inputs.

### Knowledge (specialist knowledge)

Knowledge includes theory and concepts, as well as tacit knowledge gained as a result of the experience of performing certain tasks. Understanding refers to more holistic knowledge of processes and contexts and may be distinguished as "know-why", as opposed to "know-what".

Specialised knowledge is necessary for meeting specific demands in content and addressing content-specific tasks. In contrast to general intellectual abilities, one can consider arbitrary knowledge as a demand-specific competence (Weinert, 1999:24).

### Skills

Skills are usually used to refer to a level of performance, in the sense of accuracy and speed in performing particular tasks (skilled performance). Skilled performance has been a subject of psychological studies, which consider both physical psychomotor abilities and mental cognitive abilities. Recent skills research has included broader cognitive skills such as problem-solving and decision-making, demonstrating the difficulty in regarding such cognitive competences as

### **Catalan Higher Education Qualifications Framework**

### **Competence**

Competence is generally understood as the ability to demonstrate in a work context, the necessary skills (functional competences), usually with appropriate basic knowledge (cognitive competences). Since most definitions of KSCs are centred on the individual, they are viewed as independent of the social and task-specific context in which they are performed, but the level of skill is a characteristic not only of a person but also of a context; people do not have competences independent of context. In recognition of this, a constructivist approach to defining competence has arisen, where it is argued that competence is governed by the context in which it is applied (Weinert, 1999:8).

**Context of learning and/or work:** is the circumstance within which a graduate applies knowledge and skills. **Professional work setting and/or learning work setting**: are contexts requiring specialist knowledge, advanced learning, responsibility and autonomy, and require intensive preparation through learning.

### KSC Type of the Qualifications Framework

### 1. Knowledge

- a. Kind of knowledge
- b. Depth, breadth and range of knowledge

### 2. Skills

- a. Cognitive skills
- b. Creative skills
- c. Problem-solving
- d. Technical and practical skills
- e. Information/communication

### 3. Competences

- a. Learning work setting
- b. Professional work setting

### Glossary

### **Learning outcomes**

Statements about what a learner is expected to know, understand and is able to do after completion of a learning process which leads to a qualification. These are statements of holistic outcomes and not the sum of the outcomes of individual modules.

### Qualification

A degree, diploma or certificate awarded by a competent authority in recognition that particular programme or qualification outcomes have been achieved following the successful completion of a recognised higher education programme of study.

### Qualification descriptor

Generic statement of the results of study that describe the outcomes associated with a specific qualification. They provided clear points of reference that describe the main outcomes of a qualification in terms of knowledge, skills and competences.

### Level

Broadly, level descriptors are statements that provide a general indication of appropriate learning for attainment at a particular level, describing the characteristics and context of learning expected at that level. They are designed to support the review of specified learning outcomes and assessment criteria in order to develop particular modules and units and to assign credits at the appropriate level (Vlasceanu *et al.*, 2007). This understanding is carefully set out in detail in the research. Each of the 8 EQF levels is defined by a set of descriptors indicating the learning outcomes relevant to qualifications at that level in any system of qualifications.

### Knowledge

Knowledge is the body of facts, principles, theories and practices that are related to a field of work or study. Knowledge refers to what a graduate knows and understands and it can be described in terms of kinds of knowledge, breadth, depth and range:

- Theoretical knowledge and concepts are those knowledge requirements relating to or having the character of theory rather than practical application.
- Broad knowledge and/or skills describe a general or extensive area of learning or work.
- Depth of knowledge/skills indicates an advanced level of difficulty or complexity. It describes information, problems, situations and theories that are made up of complicated and inter-related parts.

### **Skills**

Skills refer to what a graduate can do. They can be described in terms of kinds and complexity and include cognitive skills, technical skills, communication skills, creative skills, interpersonal skills and generic skills:

Cognitive skills include the mental skills that are used in the process of acquiring and applying knowledge and include reasoning, perception and intuition.

### **Catalan Higher Education Qualifications Framework**

- Creative skills are those that may lead to innovative, imaginative and artistic outputs.
- Problem-solving is the process of recognising a problem, defining it, identifying alternative plans to resolve the problem, selecting a plan, organising steps of the plan, implementing the plan and evaluating the outcome.
- Practical knowledge and skills are concrete or hands-on knowledge and skills.
- Technical skills are the operational skills necessary to perform certain work and learning activities.
- Information skills constitute a set of abilities requiring individuals to recognise when information is needed and have the ability to locate, evaluate and effectively use the information needed.
- Communication skills are the skills that enable a person to convey information so that it is received and understood and include written and oral skills appropriate for the level of the qualification.

### Competence (also competency)

The ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development). Or, alternatively, the ability to use knowledge, skills and personal, social and/or methodological abilities in work or study situations and in professional and personal development. Competence is not limited to cognitive elements (involving the use of theory, concepts or tacit knowledge); it also encompasses functional aspects (including technical skills), as well as interpersonal attributes (e.g., social or organisational skills) and ethical values (source: CDEFOP, Terminology of European education and training policy <a href="https://www.cedefop.europa.eu/files/4117">https://www.cedefop.europa.eu/files/4117</a> en.pdf).

### **Volume of learning**

This is a dimension of the complexity of a qualification. It is used with the level criteria and qualification type descriptor to determine the depth and breadth of the learning outcomes of a qualification. The volume of learning identifies the notional duration of all activities required for the achievement of the learning outcomes specified for a particular qualification type. It is expressed in equivalent full-time years.

### Recognition of prior learning (RPL)

Recognition of prior learning is an assessment process that involves assessment of an individual's relevant prior learning (including formal, informal and non-formal learning) to determine the credit outcomes of an individual application.

### 3.1. CHE-QF SPECIFICATION FOR LEVEL 1

**Level 1 (Advanced Technician)** of the Spanish Qualifications Framework for Higher Education corresponds to **level 5** of the European Qualifications Framework (EQF) and to the short cycle level in the Qualifications Framework of the European Higher Education Area (QF-EHEA).

Advanced Technician Degree in Vocational Training, Advanced Technician Degree in Plastic Arts and Design and Advanced Technician Degree in Sports Education qualifications are at level 1 of the Catalan Higher Education Qualifications Framework.

Within this level the qualifications involve a volume of learning of 120 ECTS except for the Advanced Technician Degree in Sports Education (62-76 ECTS).

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

	CHE-QF LEVEL 1 CRITERIA FROM MECES (REORGANISED)		
Aim	Graduates at this level will have broad knowledge and skills for highly skilled work and/or further learning		
Knowledge	Graduates at this level will 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	Graduates at this level will  possess the ability to analyse information needed to evaluate 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.		
Competences	Graduates at this level will 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; possess the strategies necessary to advance their training independently with maturity to innovate in implementation and progress in learning and training to higher levels.		

	ADVANCED TECHNICIAN QUALIFICATION TYPE DESCRIPTOR
Aim	The Advanced Technician certificate qualifies individuals who apply specialist knowledge in a range of contexts to undertake advanced skilled work and as a pathway for further learning
	Kind of knowledge
	<ul> <li>Have knowledge and critical understanding of the underlying principles and concepts of an area of study;</li> </ul>
	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.
Knowledge	Depth, breadth and range of knowledge
	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.
	Cognitive skills
	<ul> <li>Can develop structured and coherent themes based on their knowledge and understanding;</li> </ul>
	Possess the ability to analyse information necessary to evaluate and respond to expected and unexpected situations, by seeking informed, creative and innovative solutions within a field of study or profession.
	Creative skills
Skills	<ul> <li>Have initiative and judgement in planning, problem-solving and decision- making in professional practice and/or scholarship;</li> </ul>
	■ 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.
	Problem-solving
	Have the ability to identify and use data to formulate responses to well-defined 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 skills

- 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.

### Information/communication

- 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.

### Learning work setting

- 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;
- 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;

### **Competences**

- 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.

### Professional work setting

Implement and integrate their artistic, technological or sports knowledge in the definition and development of working procedures in the artistic or other

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- 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.

### 3.2. CHE-QF SPECIFICATION FOR LEVEL 2 (A AND B)

**Level 2 (Bachelor's Degree)** of the Spanish Qualifications Framework for Higher Education corresponds to **level 6** of the European Qualifications Framework (EQF) and to the first cycle level in the Qualifications Framework of the European Higher Education Area (QF-EHEA).

Two qualifications are located at level 2 of the Catalan Higher Education Qualifications Framework: Bachelor's Degree (university) and Higher Degree in Arts (arts education).

Within this level, the Bachelor's Degree involves a volume of learning between 180 ECTS (level 2A) and 240 ECTS (level 2B) and the Higher Degree in Arts 240 ECTS (level 2B). As a consequence of this, there could be differences in the range and nature of intended programme learning outcomes.

Bachelor's Degree and Higher Degree in Arts qualifications must be designed and accredited to enable graduates to demonstrate the learning outcomes specified in the level 2 criteria and descriptors for these qualifications.

	CHE-QF LEVEL 2 CRITERIA FROM MECES (REORGANISED)		
Aim	Graduates at this level will have broad knowledge and skills for highly skilled work and/or further learning		
Knowledge	Graduates at this level will have acquired advanced knowledge and demonstrated an understanding of the theoretical and practical aspects and methodology of work in their field of study with a depth that reaches the forefront of knowledge.		
Skills	Graduates at this level will  be able through developed arguments or procedures and, supported by them, to apply their knowledge, understanding and skills in the troubleshooting of complex or professional and specialist work environments that require the use of creative and innovative ideas;  have the ability to gather and interpret data and information on which to base their conclusions including, where necessary and appropriate, the reflection on social, scientific or ethical issues within their field of study;  be able to cope in complex situations or those that require the development of new solutions in both the academic and occupational or professional aspects in their field of study.		
Competences	Graduates at this level will have the ability to communicate to all audiences (specialist or not) clearly and precisely, knowledge, methodologies, ideas, problems and solutions in the area of their field of study; be able to identify their own training 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 not).		

## **Bachelor's Degree**

Its aim is to provide students with **general education**, in one or several disciplines, intended to prepare them for carrying out professional activities. It leads to the obtaining of the Bachelor's Degree and it consists of 180 to 240 ECTS (3 to 4 years, **EQF 6; QF-EHEA first cycle**).

BACHEL	OR'S DEGREE (LEVEL 2A 180 ECTS) QUALIFICATION TYPE DESCRIPTOR		
Aim	The Bachelor's Degree (level 2A) qualifies individuals who apply a broad and coherent body of knowledge in a range of contexts to undertake professional work and as a pathway for further learning		
	Kind of knowledge		
	Have a systematic understanding of the theory, concepts and methods pertaining to a field (or fields) of learning and an understanding of different perspectives, approaches or schools of thought and the theories that underpin them;		
	<ul><li>Possess knowledge of the history, traditions, distinctive nature and place in society of the academic field.</li></ul>		
	Depth, breadth and range of knowledge		
Knowledge	Have 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;		
movieuge	Have an understanding of limitations of current knowledge and familiarity with sources of new knowledge; integration of concepts across a variety of areas;		
	<ul> <li>Have broad knowledge of important topics, theories, problems, processes, tools and methods in the subject area;</li> </ul>		
	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).		
	Cognitive skills		
	Review critically, analyse, consolidate and synthesise knowledge;		
	Exercise critical thinking and judgement in developing new understanding;		
Skills	<ul> <li>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;</li> </ul>		
	Recognise the limitations of existing knowledge in professional practice or in the knowledge domain and take action to address this.		
	Creative skills		
	<ul> <li>Have initiative and judgement in planning, problem-solving and decision- making in professional practice and/or scholarship;</li> </ul>		

- 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.

### **Problem-solving**

- 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:
- Have the ability 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.

### Technical and practical skills

- 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.

### Information/communication

- Apply communication skills to present a clear, coherent and independent presentation of knowledge and ideas;
- 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.

### Learning work setting

- 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;

### **Competences**

- 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;
- Learn to act in variable and unfamiliar learning contexts; learn to manage learning tasks independently, professionally and ethically;
- Take initiative to identify and address learning needs and interact effectively in a learning group;

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■ Have developed the learning skills that enable further study with greater autonomy.

### Professional work setting

- 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 non-specialists, 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 manifesting solidarity with others.

ADVANCED BACHELOR'S DEGREE (LEVEL 2B, 240 ECTS) QUALIFICATION TYPE DESCRIPTOR	
Aim	The Advanced Bachelor's Degree (level 2B) qualifies individuals who apply a body of knowledge in a specific context to undertake professional work and as a pathway for research and further learning
	Kind of 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;
	<ul> <li>Possess knowledge of research principles and methods and be familiar with research and development work in the field;</li> </ul>
	Possess knowledge of the history, traditions, distinctive nature and place in society of the academic field.
	Depth, breadth and range of knowledge
Knowledge	■ 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;
	<ul> <li>Have an understanding of limitations of current knowledge and familiarity with sources of new knowledge; integration of concepts across a variety of areas;</li> </ul>
	■ Be aware of 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).
	Cognitive skills
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;
	<ul> <li>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;</li> </ul>
	Recognise the limitations of existing knowledge in professional practice or in the knowledge domain and take action to address this.
	Creative skills

- 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.

#### **Problem-solving**

- 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.

#### Technical and practical skills

- 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;

#### *Information/communication*

- 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.

#### Learning work setting

- 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;

#### Competences

- 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;
- Learn to act in variable and unfamiliar learning contexts; learn 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.

#### Professional work setting

- 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 non-specialists, 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 manifesting solidarity with others.

### **Higher Degree in Arts**

Its aim is identical to the Advanced Bachelor's Degree; i.e., to provide students with general education, in one or several disciplines, intended to prepare them for carrying out professional activities in this case focussed on artistic disciplines such as music, performing arts, dance, design and conservation and restoration. Those studies are equivalent to the university Advanced Bachelor's Degree and consist of 240 ECTS (4 years, EQF 6, QF-EHEA first cycle).

HIGHER DEGREE IN ARTS (LEVEL 2B, 240 ECTS) QUALIFICATION TYPE DESCRIPTOR	
Aim	The Higher Degree in Arts qualifies individuals who apply a body of knowledge in a specific artistic context to undertake professional work and as a pathway for research and further learning
Knowledge	<ul> <li>Kind of knowledge</li> <li>Possess an advanced practical and/or embodied knowledge of the language and theories of a specific arts discipline;</li> <li>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.</li> <li>Depth, breadth and range of knowledge</li> <li>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;</li> <li>Benefit from a critical understanding of how methodology, materials and procedures influence a specific arts discipline;</li> <li>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.</li> </ul>
Skills	<ul> <li>Cognitive skills</li> <li>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 judgment and the ability to clearly articulate reasoned arguments through reflection, review and evaluation;</li> <li>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;</li> <li>Analyse, interpret and evaluate their own and others' work within the framework of existing theoretical knowledge.</li> <li>Creative skills</li> </ul>

- 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.

#### **Problem-solving**

- 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.

#### Technical and practical skills

- Possess a command of the skills techniques and methodologies of a specific arts discipline; and an ability to utilise interpretive, evaluative and analytical skills appropriately, along with an ability to 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.

#### Information/communication

- 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, cooperating with experts from different disciplines and show how to relate to audiences;
- Confidently articulate and communicate ideas and information through visual and/or oral and/or written form in a range of contexts;
- 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.

#### Learning work setting

- 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;
- Learn to act in variable and unfamiliar learning contexts; learn 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;

#### **Competences**

■ Be critically self-reflective and have the potential to work autonomously and to contribute as part of a team.

#### Professional work setting

- 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;
- Manage creative professional activities or projects. Taking responsibility:
  - For decision-making and problem-solving in diverse art discipline contexts:
  - To critically self-reflect on their own and others' aesthetic and ethical choices in diverse art disciplines;
  - For professional development and promotion of art;
  - To work autonomously and/or as part of a team.
- Have the qualities needed for employment in situations requiring the exercise of personal responsibility and decision-making in complex and unpredictable circumstances;
- Work with peers, specialists and non-specialists, supervisors and clients.

#### 3.3. CHE-QF SPECIFICATION FOR LEVEL 3

**Level 3 (Master's Degree)** of the Spanish Qualifications Framework for Higher Education corresponds to **level 7** of the European Qualifications Framework (EQF) and to the **second cycle level** in the Qualifications Framework of the European Higher Education Area (QF-EHEA).

Three qualifications are at level 3 of the Catalan Higher Education Qualifications Framework: Integrated Bachelor's Degree, Master's Degree and Master's Degree in Arts.

Within this level the Integrated Bachelor's Degree must involve a volume of learning between 300 and 360 ECTS and both the Master's Degrees between 60 and 120 ECTS. As a consequence of this, there could be differences in the range and nature of intended programme learning outcomes both within each qualification and between them.

Integrated Bachelor's Degree and Master's Degree qualifications must be designed and accredited to enable graduates to demonstrate the learning outcomes specified in the level 3 criteria and descriptors for these qualifications.

CHE-QF LEVEL 3 CRITERIA FROM MECES (REORGANISED)	
Aim	Graduates at this level will have specialist knowledge and skills for research and/or professional practice and/or further learning
Knowledge	Graduates at this level will 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	Graduates at this level will  be able to apply and integrate their knowledge and understanding of this 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.
Competences	Graduates at this level will
Competences	know how to clearly and unambiguously convey to a specialist or non- specialist 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.

#### Integrated Bachelor's Degree

Usually related to the health field, its aim is to help students become highly skilled, versatile, independent thinkers with the research experience, information literacy, communication and interpersonal skills necessary for an advanced professional career or further academic study at PhD level. They lead to the obtaining of the Bachelor's Degree and they consist of 300 to 360 ECTS (5 to 6 years, EQF 7), with at least 60 ECTS of introduction to 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.

#### Master's Degree

This degree is geared towards the acquisition of advanced education oriented to academic or professional specialisation or to an introduction in tasks related to research.

	MASTER'S DEGREE QUALIFICATION TYPE DESCRIPTOR	
Aim	The Master's Degree qualifies individuals who apply an advanced body of knowledge in a range of contexts for professional practice, research or scholarship and as a pathway for further learning	
	Kind of knowledge	
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 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, breadth and range of knowledge	
	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;	
	<ul> <li>Have extensive, detailed knowledge and critical understanding of some important current issues, topics and specialties related to the knowledge domain, field of science or professional field;</li> </ul>	

Have the conceptual understanding to critically evaluate current research/advances in their discipline, evaluating methodologies and, where appropriate, proposing new approaches/hypotheses.

#### Cognitive skills

- 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 judgments 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.

#### Creative skills

- 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.

#### Skills

#### **Problem-solving**

- 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.

#### Information/communication

- Communicate clearly and unambiguously their ideas and conclusions, and the underpinning knowledge and rationale, to specialist and non-specialist audiences in a way appropriately to the context using conventions that are relevant to the professional field;
- Be able to disseminate research results that make a contribution to knowledge to specialist and non-specialist audiences.

#### Learning work setting

#### **Competences**

- 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.

#### Professional work setting

- Be able to act autonomously in planning and implementing tasks at a professional or equivalent level, including originality in tackling and solving problems that may arise;
- Have the attributes needed to deal with circumstances requiring judgment, personal responsibility and initiative in complex and unpredictable professional level environments;
- Assume responsibility for the results of their own study or work and for the results of the study or work of others and the professional development of people and groups;
- Be able to work with specialists and non-specialists, supervisors and clients.

#### Master's Degree in Arts

This qualification is geared towards the acquisition of advanced education oriented to academic or professional specialisation or to an introduction in tasks related to research.

MASTER'S DEGREE IN ARTS QUALIFICATION TYPE DESCRIPTOR	
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 as a pathway for further learning
	Kind of knowledge
	Have an advanced knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialist knowledge in areas of the field as well as specialist insight into current research and development work;
	<ul> <li>Have an advanced knowledge of research principles and methods applicable to the field of work or learning or in the associated professional practice;</li> </ul>
Knowledge	Demonstrate familiarity with methods and processes for dealing with complex phenomena, issues and situations in the field.
Mowicage	Depth, breadth and range of knowledge
	<ul> <li>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;</li> </ul>
	<ul> <li>Demonstrate critical and creative awareness of interdisciplinary possibilities between differing fields and disciplines;</li> </ul>
	Demonstrate sound use of methodology, source materials and procedures needed to undertake practice-based and/or theoretically-oriented research.

#### Cognitive skills

- 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 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 judgments 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.

#### Creative skills

Demonstrate the ability to formulate new issues autonomously and creatively and contribute to the formation of knowledge; solve more advanced problems; develop new forms of personal expression as well as reflect critically on their artistic approach and that of others in the main field of study;

#### **Skills**

- Demonstrate the ability to create and execute their own ideas with their own personal expression; identify, formulate and solve artistic and creative problems autonomously and also plan and undertake advanced artistic tasks using appropriate methods within predetermined timeframes;
- Realise a body of work that is personally innovative and informed by advanced practice and knowledge within the field.

#### **Problem-solving**

- 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 skills

- Undertake primary and secondary research as a way of reflecting on ideas and aesthetics related to the body of work students are expected to produce;
- Show an ability to create a self-initiated body of work that demonstrates innovation and mastery of expressive, intellectual and technical skills.

#### Information/communication

- 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 research results that make a contribution to knowledge to specialist and non-specialist audiences.

#### **Learning work setting**

- Demonstrate the ability to identify the need for further knowledge and take responsibility for ongoing learning thereof;
- Demonstrate the competence and knowledge required to work autonomously in a professional capacity;
- 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;
- Be able to develop their activities with social responsibility, intellectual honesty and scientific integrity.

#### **Professional work setting**

#### **Competences**

- 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 their own study or work and for the results of the study or work of others and the professional development of people 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.

#### 3.4. CHE-QF SPECIFICATION FOR LEVEL 4

**Level 4 (Doctoral Degree)** of the Spanish Qualifications Framework for Higher Education corresponds to **level 8** of the European Qualifications Framework (EQF) and to the **third cycle level** in the Qualifications Framework of the European Higher Education Area (QF-EHEA).

There is only one qualification under level 4: Doctoral Degree. 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, doctoral studies may be carried out on a part-time basis, in which case the length of the programme extends to five years. Doctoral Degree qualifications must be designed and accredited to enable graduates to demonstrate the learning outcomes specified in the level 4 criteria and the Doctoral Degree.

CHE-QF LEVEL 4 CRITERIA FROM MECES (REORGANISED)	
Summary	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	Graduates at this level will 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	Graduates at this level will 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; 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.
Competences	Graduates at this level will 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.

#### **Doctorate**

This is aimed at acquiring advanced training and education in research techniques. To obtain a Doctoral Degree it is necessary to have passed a training and research period, named the PhD Programme. This programme includes the preparation and presentation of the doctoral thesis: an original research project.

DOCTORAL DEGREE QUALIFICATION TYPE DESCRIPTOR	
Aim	The Doctoral Degree 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
	Kind of knowledge
Knowledge	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, breadth and range of knowledge
	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	Cognitive 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.
	Creative skills

- 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.

#### **Problem-solving**

■ 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 skills

- 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;
- 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 judgment in complex areas of expertise, often in absence of complete data, but taking into account wider social (and ethical) responsibilities.

#### Information/communication

- 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.

#### Learning work setting

- 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:

#### Competences

Be able to develop research and academic work with social responsibility, intellectual honesty and scientific integrity.

#### Professional work setting

- 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;
- Take responsibility for the results of their own work or study and for the results of the work or study of others and the professional development of people and groups.

## 4. THE USE OF THE QUALIFICATIONS FRAMEWORK IN VERIFICATION AND ACCREDITATION

This document must prove useful for: *a*) university managers in the design, implementation and evaluation of their university degrees; *b*) the assessment committees of AQU Catalunya to verify that students' learning outcomes match the intended level of each of the study programmes to be assessed in the verification and accreditation processes; *c*) the various social agents to become familiar with the learning outcomes of people qualifying with higher education 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 competences; and it must adapt the intended learning outcomes to the discipline of the new programme.

For the definition of the competence profile, the HEI can also rely on the benchmarks prepared by AQU Catalunya for their discipline if they are available.

The assessment commissions and committees 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 verification, modification and accreditation processes.

# ANNEX 1. THE DISTINCTION BETWEEN 180 AND 240 ECTS BACHELOR'S DEGREES IN RELATION TO THE CHE-QF

Bachelor's Degrees leading to a qualification that covers a State regulated profession must have 240 ECTS. It is deduced that both the mandatory nature of external training placements and indeed the specificity and depth of the area of knowledge and its professional application constitute a criterion of distinction with respect to 180 ECTS Bachelor's Degrees.

The non-university Higher Degree in Arts with a legal equivalence to a Bachelor's Degree must also have 240 ECTS. It seems logical that a 180 ECTS university Bachelor's Degree should not be offered with an identical education profile, learning outcomes or denomination as the former.

The Bachelor's Degree final-year project is mandatory for any Bachelor's Degree (6 ECTS minimum). As a result, this cannot constitute a criterion of distinction unless the number of ECTS is maximised (up to 30 ECTS) and its focus and nature are clearly distinguished (a synthesis approach for 180 ECTS Degrees and an introduction to research approach for 240 ECTS Degrees).

For degrees with a clear professional orientation but which do not lead to a profession regulated by the State (e.g., Tourism, Social Education, etc.) it seems reasonable for their curricula to incorporate obligatory external training placements; therefore, the distinction between 180 and 240 ECTS Bachelor's Degrees should only be circumscribed to:

- The breadth of areas of knowledge associated with a "professional multifunction" or (and what appears to be more reasonable)...
- The inclusion of training for research and innovation in the professional activity.

On the other hand, **Bachelor's Degrees with a more academic focus** which may lead to both a later professional option (through a professional Master's Degree) and a clear focus on postgraduate studies (Master's/Doctorate) usually do not incorporate mandatory external training placements. In this case, the distinction between 180 and 240 ECTS Bachelor's Degrees could be established according to:

- Depth in the study of certain topics;
- The inclusion of training in the field of research.

In short, we would be in the process of establishing a distinction between a degree (180 ECTS) and a degree "with honours" (240 ECTS, typical in Anglo-Saxon systems). In brief, a Bachelor's Degree (levels 2A and 2B):

- Qualifies individuals who have demonstrated specialist knowledge in more than one
  area and the ability to collate, analyse and synthesise a wide range of technical
  information. It should be noted that level 2B graduates will have knowledge of
  research principles and methods, and problem-solving techniques of the recognised
  discipline.
- Qualifies individuals who have demonstrated an ability to apply specialist knowledge and skills in highly variable contexts and formulate responses to concrete and abstract problems. It should be noted that level 2B graduates will have cognitive skills to exercise critical thinking and judgment in developing new understanding and technical skills to design and use research in a project, and to plan and execute project work and/or a piece of research and scholarship with some independence.
- Qualifies individuals who have demonstrated responsibility and accountability for their own learning. It should be noted that level 2B graduates will have demonstrated responsibility and accountability for some incentive practice and in cooperation with others.

### ANNEX 2. SPANISH AND CATALAN HIGHER EDUCATION QUALIFICATIONS

CYCLE	QUALIFICATIONS
	GENERAL UNIVERSITY QUALIFICATIONS
	QUALIFICATIONS FROM STUDY PROGRAMMES IN ARTS
	PROFESSIONAL QUALIFICATIONS (120 ECTS, 2000 hours, 2 years):
	Advanced Technician in Sports
	Advanced Technician in Furniture and Wood Production
Short cycle	Advanced Technician in Furniture and Carpentry Product Development
-	Advanced Technician in Aquaculture
Level 1	Advanced Technician in Computer System Administration
EQF 5	Advanced Technician in Administration and Finance
	Advanced Technician in Travel Agencies and Events Management
	Advanced Technician in Pathological Anatomy and Cytology
	Advanced Technician in Physical and Sports Activity Animation
	Advanced Technician in Sociocultural Animation
	Advanced Technician in Tourist Animation
	Advanced Technician in 3D Animations, Games and Interactive Settings
	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 Development

Advanced Technician in Web Application Development

Advanced Technician in E-Product Development

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 Culinary 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 Technical Design in Leather and Textile

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 Healthcare Documentation

Advanced Technician in Childhood Education

Advanced Technician in Environmental Control and Education

Advanced Technician in Energy Efficiency and Thermal Solar Energy

Advanced Technician in Renewable Energies

Advanced Technician in Enamel Arts

Advanced Technician in Comprehensive Aesthetics and Wellbeing

Advanced Technician in Aesthetics

Advanced Technician in Hairdressing Management and Styling

Advanced Technician in Manufacture of Pharmaceutical and Similar Products

Advanced Technician in Manufacture and Transformation of Glass Products

Advanced Technician in Commercial Management and Marketing

Advanced Technician in Tourist Accommodation Management

Advanced Technician in Management of Commercial Premises and Sales

Advanced Technician in Transport Management

Advanced Technician in Forest Management and the Natural Environment

Advanced Technician in Management and Organisation of Agricultural Businesses

Advanced Technician in Management and Organisation of Natural Resources and Landscapes

Advanced Technician in Tourist Guidance, Information and Assistance

Advanced Technician in Dental Hygiene

Advanced Technician in Diagnostic Imaging

Advanced Technician in Imaging

Advanced Technician in Pulp and Paper Processing Industries

Advanced Technician in Social Integration

Advanced Technician in Sign Language Interpreting

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

Advanced Technician in Occupational Risk Prevention

Advanced Technician in Textile Wet Finishing Processes

Advanced Technician in Textile Weaving and Spinning Processes

Advanced Technician in Textile Knitting Processes

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

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

Advanced Technician in Wine Making

#### **GENERAL UNIVERSITY QUALIFICATIONS**

Graduate (180-240 ECTS, 3-4 years)

#### QUALIFICATIONS FROM STUDY PROGRAMMES IN ARTS (240 ECTS, 4 years):

Bachelor in Performing Arts

Bachelor in Plastic Arts

Bachelor in Preservation and Restoration of Cultural Heritage

Bachelor in Dance

Bachelor in Design

First cycle

Bachelor in Music

Level 2

EQF 6

#### **PROFESSIONAL QUALIFICATIONS**

#### Qualification of Bachelor leading to:

Architectural engineer (240 ECTS, 4 years)

Dietician-Nutritionist (240 ECTS, 4 years)

Nurse (240 ECTS, 4 years)

Physical therapist (240 ECTS, 4 years)

Aerospace engineer (240 ECTS, 4 years)

Agricultural engineer (240 ECTS, 4 years)

Forestry engineer (240 ECTS, 4 years)

Industrial engineer (240 ECTS, 4 years)

Mining engineer (240 ECTS, 4 years)

Maritime engineer (240 ECTS, 4 years)

Construction engineer (240 ECTS, 4 years)

Telecommunications engineer (240 ECTS, 4 years)

Topography engineer (240 ECTS, 4 years)

Speech therapist (240 ECTS, 4 years)

Pre-school education teacher (240 ECTS, 4 years)

Primary education teacher (240 ECTS, 4 years)

Merchant navy engineer (180-240 ECTS, 3-4 years)

First merchant navy chief engineer\* (180-240 ECTS, 3-4 years)

Second merchant navy chief engineer\* (180-240 ECTS, 3-4 years)

First merchant navy radio-electronics officer\*\* (180-240 ECTS, 3-4 years)

Second merchant navy radio-electronics officer\*\* (180-240 ECTS, 3-4 years)

Optician-optometrist (240 ECTS, 4 years)

First merchant navy officer\*\*\* (180-240 ECTS, 3-4 years)

Second merchant navy officer\*\*\* (180-240 ECTS, 3-4 years)

Podiatrist (240 ECTS, 4 years)

Occupational therapist (240 ECTS, 4 years)

\*Same university Bachelor's qualification

#### **GENERAL UNIVERSITY QUALIFICATIONS**

University Master's Degree (60-120 ECTS, 1-2 years)

#### **QUALIFICATIONS FROM STUDY PROGRAMMES IN ARTS**

Master's Degree in Arts (60-120 ECTS, 1-2 years)

Second cycle

PROFESSIONAL QUALIFICATIONS

EQF 7

MECES 3

#### Qualification of (integrated) Bachelor leading to:

Dentist (300 ECTS, 5 years)

Pharmacist (300 ECTS, 5 years)

Doctor (360 ECTS, 6 years)

Veterinarian (300 ECTS, 5 years)

<sup>\*\*</sup> Same university Bachelor's qualification

<sup>\*\*\*</sup> Same university Bachelor's qualification

	Qualification of University Master's Degree leading to:
	Lawyer (90 ECTS, 1.5 years)
	Merchant navy captain (60-120 ECTS, 1-2 years)
	Aerospace engineer (66-120 ECTS, 1-2 years)
	Agricultural engineer (66-120 ECTS, 1-2 years)
	Civil engineer (66-120 ECTS, 1-2 years)
	Industrial engineer (66-120 ECTS, 1-2 years)
	Mining engineer (66-120 ECTS, 1-2 years)
	Forestry engineer (66-120 ECTS, 1-2 years)
	Maritime and Ocean Engineer (66-120 ECTS, 1-2 years)
	Telecommunications engineer (66-120 ECTS, 1-2 years)
	Merchant navy engineer (60-120 ECTS, 1-2 years)
	Teacher of 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)
	Integrated qualification of Bachelor (300 ECTS, 5 years) and university
	Master's Degree (60 ECTS, 1 year)
	Architect
	GENERAL UNIVERSITY QUALIFICATIONS
	Doctor (3 years)
	Doctor (3 years)
Third cycle	QUALIFICATIONS FROM STUDY PROGRAMMES IN ARTS
MECES4	
EQF 8	
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	PROFESSIONAL QUALIFICATIONS

### ANNEX 3. CATALAN EDUCATION SYSTEM STRUCTURE

