AQU CATALUNYA

GUIDE TO THE DESIGN, VALIDATION AND MODIFICATION OF RECOGNISED PHD PROGRAMMES

This document complements the *Standards and Criteria for the Quality Assessment of University PhD Degrees*. It is intended to guide teaching centres in the internal process of drafting, reviewing and modifying validation reports, and to assist the commissions responsible for assessing compliance with the established standards and criteria.

Generalitat de Catalunya

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AQU CATALUNYA

GUIDE TO THE DESIGN, VALIDATION AND MODIFICATION OFRECOGNISED PhD PROGRAMMES

This guide has been prepared in accordance with the precepts of Royal Decree 576/2023, of 4 July, which amends Royal Decree 99/2011, of 28 January, regulating recognised PhD studies, and Royal Decree 822/2021, of 28 September, which sets out how university studies and the procedure for quality assurance are to be organised.

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TABLE OF CONTENTS

INTRODUCTION

The purpose of this guide is to assist university officials in the process of drafting proposals for new PhD programmes, as well as the review and modification by the institution itself of the degree programme that has been validated. In addition, this guide is intended to serve as the main external and independent assessment tool for these proposals, which is carried out by AQU Catalunya.

As an assessment model, validation involves the *ex ante* accreditation of degree programmes and serves the dual purpose of accountability and continuous improvement. Therefore, on the one hand, it aims to ensure the quality of the proposed PhD programmes, so that they are suitable in terms of content and format, both for assessment and for the generation of the public information associated with recognised degrees. On the other hand, it aims to generate an ongoing improvement process by detecting strengths and weaknesses and, if necessary, making suggestions for improvement that should be considered throughout the course of the degree programme.

Since the implementation of the assessment processes for degree programmes adapted to the European Higher Education Area (EHEA), AQU Catalunya's role in this assessment process has comprised the following specific actions:

a) Quality assurance in the design, drafting and review of PhD programmes.
b) Linking the validation process with the modification, monitoring and accreditation processes in accordance with AQU Catalunya's VSMA Framework.[1]
c) Assessing proposals from an international perspective, giving priority to ensuring that teaching approaches have been correctly designed in accordance with the criteria set out in the EHEA.[2]
d) Identifying the proposals with an *ex novo* approach, in order to assess more thoroughly the grounds for their creation and the human and material resources required to make them viable and sustainable over time.
e) Studying the administrative components involved in the scheduling and organisation of officially recognised degree programmes in Catalonia.

By producing a single guide, we ensure that the people drafting and/or reviewing PhD degree proposals, the internal university bodies overseeing the process and the members of assessment commissions all work from the same source of information.

Framework of reference and regulations

Below are the main sources used in the preparation of this guide:

> **Standards and Guidelines for Quality Assurance in the European Higher Education Area**

[1] AQU Catalunya. Framework for the validation, monitoring, modification and accreditation of recognised university degrees (MVSMA) (Barcelona, 2016).

[2] Ministerial declarations and communiqués.

(ESG).[3] This is a benchmark document for quality assurance institutions and agencies involved in the design, implementation and assessment of internal and external higher education quality assurance systems.

- **Framework for the validation, monitoring, modification and accreditation of recognised university degrees.**[1] The VSMA Framework sets out AQU Catalunya's position on the different processes for assessing recognised study programmes and establishes a common framework connecting the processes of validation, monitoring, modification and accreditation.
- **Salzburg Principles**, revised in 2010,[4] and **European Charter for Researchers and Code of Conduct for the Recruitment of PhD Researchers**[5] (European Commission, 2005).

From a regulatory standpoint, this guide meets the requirements of Royal Decree **99/2011, of 28 January,[6] regulating recognised PhD study programmes, as amended by Royal Decree 576/2023, of 4 July**,[7] and **Royal Decree 822/2021, of 28 September**,[8] establishing the organisation of university education and the procedure for quality assurance, which redefines the organisation and structures of recognised university study programmes. In this respect, the universities must draw up and approve the study programmes of recognised university programmes in accordance with the regulations in force. Proposals for PhD programmes must be included in the report to be submitted by the universities for validation by the Council of Universities (CU). This is a prerequisite for their implementation to be authorised by the Generalitat de Catalunya, in accordance with Article 35.2 of Organic Law 6/2001, as amended by Organic Law 4/2007, on Universities. The degrees to which they lead must be registered in the Register of Universities, Higher Education Centres and Degree Programmes (RUCT), in accordance with Royal Decree 1509/2008, of 12 September.

Throughout this document, references to Royal Decree 99/2011, of 28 January, regulating recognised PhD study programmes, shall be understood to refer to the consolidated text after the amendments introduced by Royal Decree 576/2023, of 4 July.

The assessment process for proposals for new officially recognised degree programmes has been designed by AQU Catalunya to provide the necessary information for their validation and for the

[3] European Ministerial Conference on Higher Education. Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) (Brussels: ENQA, 2015).

[4] Salzburg II Recommendations.

[5] European Charter for Researchers and Code of Conduct for the Recruitment of Researchers.

[6] Ministry of Universities. Royal Decree 99/2011, of 28 January, regulating recognised PhD study programmes (BOE no. 35, of 11/02/2011).

[7] Ministry of Universities. Royal Decree 576/2023, of 4 July, amending Royal Decree 99/2011, of 28 January, regulating recognised PhD study programmes; Royal Decree 1002/2010, of 5 August, on the issuing of recognised university degrees; and Royal Decree 641/2021, of 27 July, regulating the direct granting of subsidies to Spanish public universities for the modernisation and digitalisation of the Spanish university system within the framework of the Recovery, Transformation and Resilience Plan (BOE no. 170, of 18/07/2023).

[8] Ministry of Universities. Royal Decree 822/2021, of 28 September, establishing the organisation of university education and the procedure for quality assurance (BOE no. 233, of 20/09/2021).

Government of Catalonia to approve their roll-out.

It is also necessary to bear in mind **Royal Decree 640/2021, of 27 July, on the creation, recognition and authorisation of universities and university centres, and institutional accreditation of university centres**.[9]

Lastly, the PhD programmes' study activities should be guided by democratic principles and values and be aligned with the **Sustainable Development Goals (SDGs)**[10] to contribute to achieving the 2030 Agenda. In this context:

- HEIs must ensure respect for human and fundamental rights; democratic values; the freedom of thought and academic freedom; tolerance and recognition of and respect for diversity; equity for all; the elimination of discriminatory content and practices; and a culture of peace and participation.
- They must also ensure gender mainstreaming in all university teaching in accordance with article 28 of Law 17/2015, of 21 July, on the effective equality of women and men. Additionally, they must include specific educational content on gender-based violence, especially those programmes that may have a greater impact on compliance with the aforementioned law, in accordance with Article 17 of Law 5/2008, of 21 April, on the right of women to eradicate gender-based violence, as amended by Law 17/2020, of 22 December.
- HEIs must have measures in place to promote universally accessible curricula designed for all that guarantee the rights of people with disabilities, in accordance with the second final provision of the revised text of the General Law on the Rights of People with Disabilities and their Social Inclusion, approved by Royal Legislative Decree 1/2013, of 29 November.
- Lastly, pursuant to the provisions of Article 35.2 of Law 7/2021 of 20 May on climate change and energy transition, study programmes must address the issue of climate change.

Structure of the guide

The *Guide to the design, validation and modification of recognised PhD programmes* is divided into two main sections: a first section containing all the information required for degree programme validation and a second section setting out the criteria for requesting modifications.

The first section covers the assessment areas in the same order as they appear in the model report for requesting the validation of recognised PhD programmes (Annex II of Royal Decree 99/2011). The following information is provided for each of the eight assessment areas:

- Quality standards applicable to the area.
- Criteria that will be taken into account when assessing the level of achievement of the area.

[9] Ministry of Universities. Royal Decree 640/2021, of 27 July, on the creation, recognition and authorisation of universities and university centres, and institutional accreditation of university centres (BOE no. 179, of 28/07/2021).

[10] United Nations. Sustainable Development Goals (2015).

The second section of the guide focuses on curriculum modifications. In this sense, guidelines are provided on the types of changes that can be made to reports through the modification process as a result of curriculum monitoring and review. According to this type of modification, changes will be considered either substantial or non-substantial. If the changes are very significant, the Specific commission may consider whether it is appropriate to re-validate the degree programme.

Relationship between the areas of the guide and the corresponding ESG 2015 standards

VALIDATION ASSESSMENT AREAS	ESG 2015
1. Description of PhD programme	1.2. Design and approval of programmes
2. Competences	1.2. Design and approval of programmes
3. Student access and admission	1.4. Admission, progression, recognition and certification of students
4. Training activities	1.3. Student-centred teaching, learning and assessment
5. Programme organisation	1.3. Student-centred teaching, learning and assessment
6. Human resources	1.5. Teaching staff
7. Physical resources and available support for students	1.6. Learning resources and support for students
8. Programme review, improvement and results	1.1. Policy for quality assurance 1.9. Ongoing monitoring and periodic review of programmes
	1.7. Management of the information 1.8. Public information

VALIDATION OF PHD PROGRAMMES

1. DESCRIPTION OF PHD PROGRAMME

This chapter provides information that both identifies and justifies the degree. This basic information has important implications. It corresponds to a part of the information that the institution will make public and available to PhD students, PhD candidates and society at large.

The following standards apply to this area:

- **The name of the degree corresponds to its content and level.**
- **The applicant university, the centre responsible for the degree programme and the collaborating entities are identified.**
- **The number of places available for new students is suitable to the human and material resources.**
- **The rules governing the duration of studies are in force and in accordance with legal regulations.**
- **The PhD degree is adequately justified.**

1.1. Name of the degree

The name of the degree **must correspond to its content**, **be coherent within its discipline** and **not give rise to misleading information about its level or its academic impact**, nor to confusion about its content.

In all cases, the name of the recognised PhD programme must be coherent with the research lines included and with the existing names in the national and international context.

The Council of Universities is responsible for determining the appropriateness of the name of the new programme.

The material issue of the degree must include information on the PhD programme studied, in accordance with the provisions of Royal Decree 1002/2010, of 5 August, on the issue of recognised university degrees. The most important information may include inscribing the words "International PhD" on the cover of the degree, provided that the regulations established for this purpose are complied with.

The applicant university must indicate the appropriate UNESCO, ISCED1 and ISCED2 (International Standard Classification of Education) classification.

1.2. Applicant and collaborating entities' identification

The proposal must specify the applicant university and the centre(s) responsible for the teaching leading to the degree or, where applicable, the department or institute.

One of the centres that can provide recognised PhD programmes are the **PhD schools**, which are

regulated by article 9 of Royal Decree 99/2011. Like all other centres, they must be registered in the RUCT. PhD schools can be created by a single university or jointly with other universities, organisations, centres, HEIs or entities with R&D&I activities, be they public or private, state or foreign.

The institution must indicate whether the programme is **jointly run with other institutions**. If this is the case, the participation agreement of the different institutions in the programme must be attached. This agreement must contain, as a minimum, the university responsible for the degree programme:

- the safekeeping of student records;
- the issuing and registration of the degree, and
- the procedure for modification or termination of the programme.

1.3. New intake places

The number of places made available on the programme must be **suitable** to the human and material resources available to the institution.

The institution is required to make an estimate of the number of places available for new students for the first two years of programme implementation. This indicative information is particularly interesting for prospective students considering enrolment on a PhD programme.

The number of places available will be taken into account when assessing human and material resources (teaching staff, infrastructures). **This information is particularly important for newly launched programmes.**

1.4. Duration rules

The rules of study duration must be in force and in line with the applicable regulations.

A link to the institution's website should be included in the report, where the applicable regulations for the PhD programme are made public.

A minimum regulatory framework related to enrolment and duration processes is a best practice that allows dealing with these processes with clear and transparent criteria and objective rules of action, in order to avoid arbitrariness. In line with the General framework for dealing with student suggestions, complaints and claims, the minimum standards that should be included in these regulations are:

- Application for enrolment and modifications
    - Description of the procedure: enrolment periods, route(s), etc.
    - Economic regime: price regulations, surcharges, forms of payment, bonuses,

instalments, conditions for grants, etc. The consequences of non-payment must be explicitly stated, as well as the compulsory or voluntary nature of other services or concepts and the procedure for cancellation of enrolment.

- Academic regime: enrolment obligations (minimum and maximum, if any, incompatibilities, etc.).

> Enrolment cancellation

- Enrolment cancellation procedure.
- Economic regime: indicate whether or not the enrolment fee is refunded and, if it is refunded, specify the conditions and the amount to be refunded.
- Academic regime: indicate whether there are academic consequences, especially in terms of duration or not (as if the student had not enrolled).

> Duration of study

- Scope of application (when it applies). Performance criteria. Progression criteria. Exception consideration mechanisms.

1.5. Rationale

The PhD programme must be justified in terms of context, tradition, the overall availability of degrees and the prospective potential of the proposing institution(s). The subject of the programme must be supported by similar programmes abroad. Furthermore, the PhD programme must be coherent and integrated into the institution's R&D&I strategy.

Firstly, the institution must indicate the **training objective** of the proposed PhD programme. The focus and objective of the programme should be reflected upon in a brief statement, or if desired as a presentation, to guide potential students on the educational profile and the results to be achieved.

The **programme rationale** should consider the following aspects:

1. **The relevance of the programme in relation to the scheduling needs within the framework of the Catalan Higher Education System**, as specified in the link between the proposal and the priority policies and strategic lines of research, and the need for highly qualified people in R&D&I for Catalonia's industrial sector.
2. **The internal potential of the institution to deliver the programme.** The institution must prove that it has research staff with experience and accredited quality results, stable and consolidated lines of research, national and international competitive research projects, participation in research networks and sufficient physical resources to implement the programme. The institution must explain what its R&D&I strategy or policy is and how the proposed PhD programme falls within it, so that its coherence can be assessed.

3. **The programme's endorsement through external references.** The institution must provide a comparison with other national and foreign PhD programmes with similar characteristics that can serve as an endorsement. If available, external researchers and professors, other research institutions, reference documents, etc., may also be consulted.
4. **Outcomes.** The most relevant outcomes of existing PhD programmes should be provided: enrolment/placement ratio, dissertations accepted, scholarships obtained, graduation rate (dissertations accepted/thesis registered), average duration, etc.

If the centre responsible for the PhD programme is a **PhD school**, the report must contain a specific sub-section dedicated to this organisation. This sub-section must contain the following information as a minimum:

1. **Its R&D&I strategy**, which must be aligned with the university or HEIs involved.
2. Its field of knowledge and the university degrees it offers.
3. **The human resources for administration and services** that accredit a suitable programme management capacity.
4. **The academic and research human resources** that make it possible to assess the leadership and sufficient critical mass in its field of knowledge.

Furthermore, a link must be provided to the website where the following information is made public:

- The steering committee, with its members and functions.
- The school's internal regulations, which must establish, among other aspects, the rights and duties of PhD students, tutors and thesis supervisors, as well as the membership and functions of the programmes' academic committees.
- The code of best practices adopted by the school, which must be signed by all its members.

2. COMPETENCES

The degree granted by the university constitutes a certificate of achievement for the studies completed. The list of competences (the training profile) must consider questions of format (language and structure) and also of content (relevance or academic entity and level of the proposal). In fact, this is where the proposal is developed, both in terms of academic planning and human and material resources required to attain the degree.[11]

The thesis defence implies that researchers in training:

a) **Have created and interpreted novel knowledge through original research** that is of sufficient quality to satisfy peer review, placing it at the forefront of the discipline and worthy of publication.

b) **Have acquired and understood a corpus of knowledge that is at the forefront of their academic discipline.**

c) **Are able to conceptualise, design and implement a project to generate novel knowledge, applications or understanding of a discipline**, adapting their design in the light of unforeseen issues.

d) **Have attained a detailed understanding of applicable techniques for research.**

e) **Have promoted open science and citizen science** as a way to contribute to considering scientific knowledge as a common good.

Therefore, they will be able to **make informed judgements on complex issues in specialised fields**, especially in the absence of comprehensive data, and to **communicate their ideas and conclusions clearly and effectively** to specialist and non-specialist audiences. They should also **be able to pursue pure and/or applied research at an advanced level**, contributing to the development of new techniques, ideas or approaches.

New PhDs will have the **qualities and skills necessary for work** requiring the exercise of **personal responsibility and initiative**, in a largely **autonomous fashion, under complex and unpredictable** professional situations.

The following standards apply to this area:

> **The institution has clearly and suitably stated the competences in terms of the language and structure used.**

> **The competences are suitable to the programme's disciplinary content and correspond to those established by the Catalan Higher Education Qualifications Framework (CHE-QF) for the educational level of the degree.**

[11] The official nomenclature of *competences* or *competences profile* is used in this section, although in academic circles the nomenclature *training profile* is more traditional. Competences are combinations of acquired knowledge, skills and attitudes that are embedded in the course of action.

2.1. Formulation of competences

The competences proposed in the PhD programme must be **clearly and precisely** formulated, they must be **assessable** and their **acquisition must be guaranteed for all PhD students**.

A list of competences to be achieved (competences profile) must be drawn up in accordance with the following guidelines:

a) It must include an active verb that identifies an action that generates a result that can be visualised and assessed. Therefore, the use of verbs such as "know" and "understand" should be avoided and other verbs such as "describe", "identify", "recognise", "classify", "compare", "evaluate", "assess", "formulate", "argue", "calculate", "plan", etc. should be used.

b) A description of the purpose of the action and the context in which it is applied should be included. The competence should refer to the disciplinary field in which it is fundamental.

The list of competences should have a coherent structure and avoid long or non-structured lists. In this respect, it may be useful to bear in mind that the list of competences should serve to guide all PhD students as to the competences that will be acquired during the course of their studies and that they should have attained by the time they complete their studies.

2.2. Adequacy and level of competences

The competences to be acquired by PhD students must be **in line with those required for the granting of the PhD degree** and with the qualifications established by the CHE-QF for level 4. Furthermore, they must be **coherent with the disciplinary field** of the PhD programme.

The competences profile must be relevant within the disciplinary field. The proposed competences must correspond to national or international networks or entities. Furthermore, the profile of competences must correspond to the training level of the proposal in accordance with the Spanish Higher Education Qualifications Framework[12] (MECES), the Catalan Higher Education Qualifications Framework[13] (CHE-QF) and Royal Decree 99/2011. These competences are the following:

a) To have acquired advanced knowledge at the forefront of knowledge and to have demonstrated, in the context of internationally recognised scientific research, a thorough, detailed and well-founded understanding of the theoretical and practical aspects of scientific methodology, in one or more research areas.

b) To have carried out a significant original contribution to scientific research in their area of knowledge having been recognised as such by the international scientific community.

c) To have demonstrated the ability to design a research project in order to critically analyse

[12] Ministry of Universities. Royal Decree 1027/2011, of 15 July, establishing the Spanish Higher Education Qualifications Framework (BOE no. 185, of 03/08/2011).

[13] AQU Catalunya. Catalan Higher Education Qualifications Framework [EN] (Barcelona: AQU Catalunya, 2023).

and evaluate imprecise situations in which to apply their contributions and their knowledge and working methodology, so as to synthesise new and complex ideas that produce a deeper understanding of their research context.

d) To have developed sufficient autonomy to initiate, manage and lead innovative research teams and projects and national or international scientific collaborations, within their subject area, in multidisciplinary contexts and, where appropriate, with a high knowledge transfer component.

e) To have demonstrated their ability to carry out their research activity with social responsibility and scientific integrity.

f) To have proven their ability to participate in international scientific discussions in their field of knowledge, and to disseminate the results of their research activity to all kinds of audiences.

g) To have demonstrated the ability to advance cultural, social or technological aspects within their specific scientific context, as well as to promote innovation in all areas of a knowledge-based society.

h) To have acquired knowledge and applied tools that promote open science and citizen science as a way of contributing to the perception of scientific knowledge as a common good.

Moreover, pursuant to the provisions of Royal Decree 99/2011, obtaining a PhD degree should provide a high level of professional training in various fields, especially in those requiring creativity and innovation. Once the training period is over, PhD graduates must have acquired, at least, the suitable personal skills and abilities to:

a) Operate in situations where specific information is scarce.

b) Find the key questions that need to be answered to solve a complex problem.

c) Design, create, carry out and undertake new and innovative projects in their area of knowledge.

d) Work, both in a team and autonomously, in an international or multidisciplinary context.

e) Integrate knowledge, deal with complexity and formulate judgements with scarce information.

f) Critique and defend solutions intellectually.

3. STUDENT ACCESS AND ADMISSION

PhD programmes should devise student acquisition strategies that correspond to their objectives and training profile. These acquisition strategies need to be linked to explicit outcomes, which clearly identify the desired candidate profile. This profile should be based on equal opportunities and a balanced consideration of the desired spectrum of qualities. As such, acquisition policies may take into account, but are not limited to, criteria such as international acquisition, gender equality, social background, age, etc.

The acquisition process should suitably assess candidates' research potential according to their previous experience and training and, above all, their potential to succeed in the PhD programme to which they will be admitted.

Admission to a PhD programme is an institutional responsibility that must entail a high level of involvement by research staff. Admission policies must be transparent, accountable and auditable, and must reflect the research, monitoring and funding capabilities of the institution. Admission policies should also provide appropriate flexibility in the choice of director by the student body. Transparency, accountability and auditability of these policies are enhanced by establishing a single place and administrative process for admissions applications.

In this respect, admissions should be conducted on the basis of a well-defined and publicly available set of criteria. HEIs should be willing to accept risk in admitting applicants and allow them to demonstrate their potential through a process of suitable mentoring, supervision and monitoring. This process should include suitable mechanisms to identify problems quickly and to implement corrective actions.

PhD candidates should be recognised as junior researchers with a set of reasonable rights and duties and, irrespective of their legal status, should be treated as professionals.

The following standards apply to this area:

- **The proposal envisages suitable and accessible mechanisms for information prior to enrolment and procedures for welcoming and inducting PhD candidates.**
- **Access and admission pathways, requirements and criteria have been correctly defined.**
- **Students enrolled on the programme are in proportion to the human and material resources available, and an appropriate critical mass is ensured.**
- **Bridging courses are coherent and suitable to the admission profile.**

3.1. Information prior to enrolment and admission and induction procedures

The PhD programme must have accessible and suitable mechanisms for prior information on the different access and admission pathways and requirements, on the characteristics and organisation of the programme and on the necessary administrative procedures. In addition, it must have suitable procedures for the induction and reception of new PhD students.

The new degree programme proposal must suitably describe the dissemination channels that will be used to inform prospective PhD students about the programme and about the access and admission procedures.

Information must be sufficient to enable students to plan their access to the degree programme and their training.

Furthermore, the reception and induction procedures for new PhD students must be specified to facilitate their incorporation into the degree programme and, where appropriate, into the university. The induction procedures should include as a minimum:

- The main actions to be carried out, which must be suitably described;
- An indicative timetable;
- The bodies or departments responsible for carrying them out.

3.2 Pathways, access and admission criteria and requirements

The PhD programme must clearly define the pathways, criteria and requirements for access and admission, which must not lead to confusion and must be coherent with the scientific scope of the programme.

Requirements for access to PhD programmes are set out in Royal Decree 576/2023 of 4 July, which establishes that, in order to be admitted, students must hold a recognised Spanish Bachelor's degree, or equivalent, and a Master's degree.

Admission to PhD programmes is also possible if one of the following conditions is met:

a) To hold recognised Spanish university degrees or equivalent Spanish degrees, provided that at least 300 ECTS credits have been passed in the totality of these studies, and to accredit a level 3 of the Spanish Higher Education Qualifications Framework.

b) To hold a degree obtained in accordance with foreign education systems belonging to the European Higher Education Area (EHEA), without the need for official validation, which accredits a level 7 of the European Qualifications Framework (EQF), as long as this degree entitles access to PhD studies in the country of issue. Admission will not imply recognition of the applicant's previous degree, under any circumstances, or its recognition for purposes other than access to PhD courses.

c) To hold a degree obtained in accordance with foreign education systems outside the EHEA, without the need for its official validation, after verification by the university that this accredits a level of training equivalent to that of the official Spanish university Master's degree and that it entitles the holder to access PhD studies in the country in which the degree was issued. Admission will not imply recognition of the applicant's previous degree, under any circumstances, or its recognition for purposes other than access to PhD courses.

d) To hold another PhD degree.

e) University graduates who, having obtained a place in training in the corresponding entrance exam for specialised health training places, have passed successfully at least two years of training in a programme leading to a recognised qualification in one of the specialities in health sciences, may also be admitted.

Beyond the regulatory pathways for access to PhD programmes, HEIs may establish **additional requirements and criteria to select and admit students** to a specific PhD programme. These requirements and criteria should be publicly available, clear, compliant with regulations, coherent and relevant, and sufficient to ensure the attainment of the training profile. The endorsement of a researcher as a possible supervisor may in particular be established for the PhD thesis.

Admission criteria can clearly not be set without having previously established the student's **admission profile**. Moreover, a careful definition of the admission profile makes it possible to better assess the relevance of bridging courses and also facilitates the subsequent reception and induction activities.

Any proposal should include a well-defined admission profile. The admission profile is a brief description of the set of personal, academic and research characteristics that are generally considered adequate or suitable for undertaking the PhD programme and that provide reasonable evidence of being able to achieve satisfactory results.

The following should be considered when establishing and drafting the admission profile in the proposal:

- The characteristics of the incoming student pool associated with the achievement of the training profile in the expected time frame must be identified.
- In line with the previous point, the heterogeneity of the intake (multiplicity of access pathways or restriction, etc.) must be clearly identified.
- The characteristics of the admission profile must be clearly identifiable (type of qualifications, languages, specific knowledge, previous experience, etc.), in order to be able to carry out a rapid initial diagnosis of the difference between the admission profile and the "real" profile and take the relevant actions (training supplements, reception activities, etc.).

As for the procedures for student access and admission, the **admissions body** must be identified and its functions and membership specified (it cannot be a one-person body and at least one of its members must hold a management position).

The admission systems and procedures established by universities must include, in the case of students with special educational needs arising from a disability, the suitable support and counselling services, which must assess the need for possible curricular adaptations, pathways or alternative studies.

3.3. Number of people enrolled

The PhD programme must have a **critical mass of enrolled students** to ensure its continuity and the optimal use of the available resources.

The institution must indicate, for each of the last five years, the total number of people enrolled and how many of them are non-Spanish nationals for PhD programmes that originate from or are linked to a previous programme.

The total number of students and foreign nationals forecast to enrol in each academic year must be indicated in the case of PhD programmes that are completely new at the respective institution.

3.4. Bridging courses

Bridging courses must be **suitable, adjusted to the admission profile** of the PhD students and **coherent with the scientific scope** of the PhD programme. The inclusion of bridging courses must be **coherent with the admission criteria**.

Bridging courses must be linked to **research credits**. Inclusion is mandatory for students entering the programme **with only a Bachelor's degree of 300 ECTS or more that does not include research credits** in its curriculum. PhD programmes should avoid including bridging courses for other students, since the activities that would correspond to them fit perfectly within the rest of the programme's training activities.

If the PhD programme includes **bridging courses** in its requirements and access criteria, the institution has to provide its **design and characteristics** (target students, credits or equivalence in working hours, training activities, operational planning, supervision, etc.). In all cases, bridging courses must be **suitable and coherent with the admission profile, the scientific scope and the programme's objectives**.

4. TRAINING ACTIVITIES

PhD training in Spain is peculiar because it has not formalised the training period for PhDs. Nevertheless, current legislation stipulates that PhD programmes must include organised aspects of research training for those enrolled in them. Moreover, these activities must include both interdisciplinary training and training specific to the scope of each programme. This chapter will therefore assess the organisation of the training provided to PhD students and its coherence with the training profile, in particular with regard to disciplinary and methodological knowledge (seminars, courses, workshops, etc.), the competences to be attained,[14] the training experiences (PhD students' conferences, congresses, etc.) and their planning over the course of the programme.

The competences described in the second section have to be attained through the training activities and the research work leading to the PhD thesis defence. Therefore, the competences to be attained through the training activities and the means by which these learning outcomes are to be achieved and demonstrated must be described.

The description and contents of the activities, their sequence and the assessment activities have to be included within the planning. Furthermore, the estimated human and material resources necessary for their delivery must be indicated.

The use of the credit system used for Bachelor's and Master's degrees is not a guarantee for a good PhD programme. In fact, the ECTS credit structuring of training activities is not a legal requirement. However, institutions may find it useful to allocate ECTS credits to training activities which are mainly academic in nature, especially in joint programmes, since ECTS credit is used to compute the overall time or effort devoted to a training activity. However, the credit system is meaningless when the research component or the component associated with the dissemination of results is to be measured. A rigid credit system, if wrongly applied, can be detrimental to the professional and independent researcher's development. High quality PhD education needs a stimulating research environment based on research enthusiasm, curiosity and creativity, and not motivated by collecting or surpassing credits.

The following standards apply to this area:

- **The training activities that make up the PhD programme are coherent with the training profile.**
- **Schedule planning is suitable for the training activities and coherent with the envisaged student dedication.**
- **Assessment procedures are suitable.**
- **Mobility actions are suitable and coherent with the proposal's objectives.**

[14] The module or subject competences are specified in terms of learning outcomes. Learning outcomes refer to statements about what a PhD student is expected to know, understand and be able to demonstrate at the end of the training activity.

4.1. Training activities

The training activities included in the PhD programme must constitute a coherent training proposal designed in a coordinated manner and must be coherent with the training and access profiles.

All training activities included in the PhD programme must be described by the institution. Firstly, the **type** and **content** of the activity must be described:

- Theoretical and scientific training.
- Methodological training (scientific method, experimental, statistical, qualitative analysis, etc.).
- Applied, practical, technological and procedural training.

Likewise, information on the teaching method and the **duration in hours** of the activity should be included. As already mentioned, it does not make much sense in the case of PhD programmes to quantify the training activities in ECTS. However, both Royal Decree 99/2011 and the software application for the purposes of verification make it necessary to estimate them in hours. The training activities must be ordered according to the sequence envisaged in the PhD programme's implementation.

The training activities must demonstrate that the disciplinary aspects involved in training and competence development are suitable or, to put it another way, that the **design of these activities allows for the acquisition of the competences described in the training profile, together with the student's own research activities**. In addition, all activities must provide **up-to-date disciplinary content and respond to international benchmarks**.

All the student's training activities must be recorded in the **PhD student's activities document (DAD)**, which is an individualised record of the control of these activities. The DAD is set out in the corresponding document, which must be **regularly reviewed by the tutors and thesis supervisors and evaluated by the academic committee responsible for the PhD programme**.

4.2. Scheduling

In line with the above, the **scheduling** and **sequence of the training activities** must enable the student to achieve the training objectives. The PhD programme must be planned for both **full-time and part-time students** to ensure the acquisition of the envisaged competences.

4.3. Assessment procedures

Procedures for monitoring and assessing the achievement of competences must be suitable and coherent with the training profile and the activity planning.

A certain type of learning outcomes requires certain activities for their achievement. At the same time, these learning outcomes are not assessable without a specific type of assessment or monitoring strategy.

The absence of a sequenced and articulated curricular structure in PhD programmes in terms of subjects raises questions about how to deal with the assessment of the training plan for this period. This absence also makes **individualised enrolment for the different activities unnecessary**, which is replaced, as mentioned above, by the DAD. However, there is a distinction to be drawn between training activities and bridging courses (section 3.4). In the latter case, this training can be interpreted as a **prerequisite**, and it would therefore seem logical that the bridging courses should have their curricular content and their form of assessment clearly defined independently, even though they are an obligatory part of the information to be contained in the DAD.

Two key actions are carried out by the student during the training period:

- the submission and eventual defence of **their annual research plan**, and
- the submission and defence of **the PhD thesis**.

As a minimum, the research plan must include the methodology to be used, the objectives to be achieved, the means to be used and the scheduling of the research period. This plan **can be updated throughout the training period**. In this sense, the degree to which the objectives have been achieved should also be included in the plan. The research plan must be **favourably** assessed annually by the academic committee, together with the DAD, considering the reports to be issued by both the tutor and the thesis supervisor.

All assessments derived from the monitoring of the DAD and the research plan and PhD thesis must be included in a **PhD student's assessment report (IAD)**. Naturally, the obligatory reference point for assessment is the competences profile established as a "product" of the PhD programme's training plan. As a result, the set of training activities must be oriented towards the acquisition and development of the training profile, and the two aforementioned activities are the determining indicators of its progress and achievement.

As stated in Royal Decree 99/2011, assessment must be carried out **every year**. In view of the above, it seems logical that assessment should not be carried out for each individual training activity, but should focus on **how much development has been achieved for each of the**

competences included in the training profile.

Therefore, an operational way to formalise the assessment may be to adopt a strategy such as a **rubric**, with an explicit reference to, for example, three levels of development (low, medium and high) and with the research plan and the thesis as reference deliverables.

Ultimately, the assessment scope of the training activities to be included in the **IAD** should cover:

- the delivery, as established, of the training activities included in the DAD;
- where applicable, the specific bridging courses;
- the research plan;
- the annual development stage of the competences profile established according to the use of the DAD and the research plan; and
- the PhD thesis.

4.5. Mobility actions

Mobility actions must be supported by suitable planning, monitoring and assessment mechanisms, while maintaining coherence with the programme's objectives and planning.

The Ministry's software application makes it compulsory to specify the mobility actions for each training activity. However, AQU Catalunya believes that mobility actions should be planned at the programme level and not at the level of each of the activities that make up the programme. Therefore, a training activity entitled "Mobility" should be registered and the information on the **actions, criteria and procedures** for carrying it out, if applicable, should be described in such a way as to ensure the attainment of competences.

5. PROGRAMME ORGANISATION[15]

Beyond the existing figure of the thesis supervisor, Royal Decree 99/2011 introduces the obligation to assign a **tutor** to the student. As stated in the Salzburg Principles, the supervision of PhD students has a crucial role to play. **Supervision should be a collective effort** which involves not only the supervisor, but also the thesis supervisor, the academic committee, the PhD student, the research group and the institution (PhD school, faculty, university, etc.). These bodies' responsibilities must be written down and clearly detailed.

Professional development of tutors is an institutional responsibility, either by providing formal training or through the exchange of experiences with other tutors. It should be one of the priorities of the institutions responsible for PhD programmes to develop a culture of shared supervision among supervisors, thesis supervisors and PhD candidates.

After admitting the student, the academic committee of the PhD programme must assign him/her **a PhD tutor, with accredited research experience, who is active and linked to the institution running the programme**. In addition to supervising the correct training and professional development of the student, this person acts as a liaison between the academic committee and the student. The number of supervisors may never be more than three.

The academic committee must assign a **thesis supervisor** within a maximum period of six months after admission. This person may or may not be the same as the tutor. Any **Spanish or foreign PhD candidate with accredited research experience may be thesis supervisor, without necessarily having to be linked to the institution responsible for the programme**. The supervisor of the PhD thesis will be responsible for the coherence and suitability of the training activities, the impact and novelty of the subject matter of the PhD thesis in his or her field and for the planning guide, as well as its suitability, if applicable, for other projects and activities in which the student is enrolled.

The institution running the programme must have approved the procedures for assigning tutors and thesis supervisors. It must also have approved the general administrative procedure that includes, inter alia, the PhD student's activity document (DAD), the preparation and presentation of the research plan, the commitment to supervision, conflict resolution and intellectual and industrial property.

The following standards apply to this area:

- **Envisaged actions to promote thesis supervision and the incorporation of international experts are suitable.**
- **Student monitoring procedures are suitable.**

[15] Although Royal Decree 99/2011 entitles this chapter "Programme organisation", the information required is not related to the planning and academic organisation of the programme, but to the supervision and monitoring of PhD students. The organisational aspects of the programme have been dealt with in section 4, "Training activities".

- **Regulations for the submission and reading of PhD theses are publicly available and in accordance with current legislation.**

5.1. Actions to encourage thesis supervision[16]

The PhD programme has the suitable actions in place to encourage thesis supervision and the incorporation of academic staff and international PhDs in the monitoring committees and thesis tribunals.

This section must state the activities that the institution running the PhD programme has envisaged or is carrying out to **encourage the supervision of PhD theses**. Where academically justified, the institution must also list the actions envisaged or underway to encourage the **supervision of multiple PhD theses**. This may be the case for theses with interdisciplinary topics or which are part of programmes developed in collaboration with other national and foreign HEIs, as well as the co-direction of theses by an **experienced supervisor and a new supervisor**.

The PhD programme should have a **best practice guide** for the supervision and monitoring of training activities and the PhD thesis. This guide should be made **public** and, if it exists, it should include the web link where it can be found, as a minimum.

For PhD programmes that are a continuation of other programmes implemented under the previous academic system, the institution must provide evidence of international experts sitting on thesis committees, who have issued reports prior to thesis presentations or who have been members of PhD committees. For new programmes, the institution has to indicate how these people will be involved in these activities.

5.2. Monitoring procedures

Procedures for monitoring PhD students must be in line with the objectives of the programme, in accordance with current legislation and ensure that the PhD student acquires the competences defined in the PhD programme.

The PhD programme must have approved, updated and published all procedures that relate to the supervision of the student's activity. These procedures must be suitable and provide adequate supervision of the PhD student so that he/she can attain the competences defined in the programme. As a minimum, the institution must provide the web link where they have been made public.

The programme must have approved, as a minimum:

- The procedure used by the academic committee to assign the persons entrusted with

[16] This section appears in Royal Decree 99/2011 under the name "Thesis supervision". So as to avoid confusion with the supervision of PhD students, which is dealt with in section 5.2, reference will be made here exclusively to the term *thesis supervision*.

tutoring and the student's thesis supervisor.

- The procedure for registration and control of the DAD and the authentication of its data.
- The procedure for drawing up the DAD.

Universities must establish the duties involved in supervising PhD students by means of a written commitment signed by the university, the student, the tutor and the supervisor, as specified therein. This commitment must be signed at the earliest possible time after admission and must include, in addition to the reference to the above procedures, a conflict resolution procedure, as well as making provision for aspects relating to intellectual or industrial property rights that may be generated in the scope of the PhD programmes. HEIs must provide the web link where the commitment template is made public.

The PhD programme must also include forecasts in this section for PhD students' stays in other national or foreign training centres, co-supervision and European honours.

5.3. Regulations for submitting and reading PhD theses

The university's regulations for the submission and reading of PhD theses must be publicly available, up-to-date and conform to current legislation.

The institution running the PhD programme must provide information on these regulations.

6. HUMAN RESOURCES

There must be sufficient teaching staff to meet the objectives of the PhD programme, the competences to be attained and the number of PhD students. Therefore, they must have the suitable experience and training to meet the objectives of the degree, and be a sufficient number of teachers with a suitable number of teaching hours in order to cover the main academic tasks: tutoring and thesis supervision, delivery and assessment of the different training activities, programme management, etc.

The following aspects will be considered when assessing the human resources available to the programme:

- The accredited experience of the teaching and research staff.
- The quality of scientific contributions.
- The number of active competitive research projects.
- The internationalisation of teaching staff.

A PhD programme requires human resources planning throughout the entire training process.

The following standards apply to this area:

- **The research lines, teaching staff and research teams are in sufficient number and suitable to ensure the programme's viability and the attainment of the envisaged competences.**
- **Mechanisms for calculating PhD thesis tutoring and supervision are in place, and they are clear and suitable.**

6.1. Research lines, research teams and teaching staff

The academic staff involved in the PhD programme must be suitable to ensure the attainment of the envisaged competences. Therefore, the number of academic staff involved must be sufficient, whose qualifications and experience must be suitable to carry out the PhD programme.

The PhD programme must be supported by a pool of research staff that a priori ensures the programme's viability in terms of new PhD training.

This section requires the institution running the PhD programme to provide a rationale as to the adequacy of the human resources available to achieve the objectives. The research activity of the different research teams or, failing that, of the people involved in the programme should be described. For new PhD programmes, which do not stem from an existing programme, the information should include the research teams or individuals who will be part of them.

The institution may choose to fill in this information directly in the software application designed by the Ministry of Education to validate PhD programmes, or to incorporate it through the Ministry of Education's Curricular Information System (SICEDU).

Alternatively, the institution may attach a document containing a detailed description of the

research lines and teams linked to the PhD programme. The information to be provided is as follows:

1. Identification of the research groups linked to the PhD programme. The name and surname of the teaching staff linked to the PhD programme for each group, their respective **research lines**, the **number of theses supervised and defended in the last five years** and **the year in which the last six-year period of research activity** was awarded (in accordance with the provisions of Royal Decree 1325/2002, of 13 December, which amends and completes Royal Decree 1086/1989, of 28 August, on the remuneration of university lecturers, and Decree 405/2006, of 24 October, which establishes the additional remuneration of civil servant and contracted teaching and research staff at the public universities in Catalonia). If you are not in a position to accredit the possession of a six-year period in this way, you must show comparable research merits. It should be stated whether the research team is **consolidated or recognised by the Generalitat de Catalunya (SGR-DGR, 2009)** or recognised by the institution running the programme.
2. The full details of a **competitive research project in progress** for each of the research teams. The project must be related to the scope of the PhD programme and must indicate, as a minimum, the **title** and **project reference**, the **funding body**, the **type of call** and the **participating HEIs and research staff.** The PI of this project must be a lecturer on the programme.
3. A complete list of **the 25 most relevant scientific contributions** of the **last five years** (articles in scientific journals, books or book chapters, patents, artistic works, contributions to conferences, etc.) of the research staff participating in the programme, indicating their objective impact (impact index, position of the journal within its field, relevance of the book publisher, number of citations, etc.).
4. The complete reference of **10 PhD theses defended** as part of the programme **in the last 5 years** and supervised by the teaching staff in point 1. The title, the name and surname(s) of the PhD student, the name(s) of the supervisors of the thesis, the defence date, the qualification and the university must be stated. For new PhD programmes, these 10 theses will correspond to those supervised by the staff who are linked to the programme when it is introduced. The **most relevant scientific contribution derived from each of the theses** must be indicated (only one), with information on its objective impact (see point 3).

This section will assess whether:

a) At least **60 % of the PhD research staff** participating in the programme (point 1) have accredited experience (six years of active service). This excludes guest and visiting lecturers.

b) Each research team has a **competitive research project in progress** related to the scope of the PhD programme and the principal investigator on the project is a lecturer from the programme.

c) The programme is supported by a number of **relevant scientific contributions** in the last 5

years of **at least 25**.

d) The programme is supported by the **proven experience of its research staff in thesis supervision** (a minimum of **10 theses in the last 5 years**).

e) The programme demonstrates a **balance between the different research teams and researchers** in terms of scientific contributions, competitive research projects and PhD theses.

f) Relevant **foreign teaching staff** are involved in the programme.

6.2. Mechanisms for calculating PhD thesis tutoring and supervision

The institution running the programme must have clear and approved mechanisms for recognising tutoring and thesis supervision.

This section must include the mechanisms in place at the institution to calculate the tutoring and thesis supervision task as part of the teaching and research work carried out by the teaching staff linked to the PhD programme.

7. PHYSICAL RESOURCES AND AVAILABLE SUPPORT FOR STUDENTS

The physical resources and available support services must be suited to the training objectives and the type of research to be carried out by the student. The available facilities at the corresponding HEIs must consider universal accessibility criteria for people with disabilities.

A special emphasis will be placed on those cases in which, due to the nature of the PhD programme, **highly specialised and costly services, equipment and facilities** are required.

The following standards apply to this area:

- **The available physical resources at the university or institution are sufficient in number and suitable for the number of students and the characteristics of the programme.**
- **The available support services at the university or institution are sufficient in number and suitable for the number of students and the characteristics of the programme.**

7.1. Physical resources

The physical resources needed to deliver the activities envisaged in the PhD programme and for the training of students must be **sufficient and suitable in accordance with the number of PhD students and the characteristics of the programme** in such a way as **to enable the attainment of the envisaged competences**.

The available physical resources and other means have to be suitable in order to ensure that research which should be conducted by students is carried out. In particular, the necessary resources must be guaranteed to enable PhD students to attend conferences, spend time abroad or finance seminars, conferences and other training activities. These resources may often be dependent on other HEIs (mobility grants, travel grants, etc.). However, the institution running the programme must indicate how these resources are forecast to be obtained.

The corresponding institution must include the following information in this section:

- The physical resources available. These physical resources can be very diverse, depending on the type of programme. The institution must essentially provide information on:
  - spaces for the placement and work of PhD students;
  - laboratories, specific equipment and major scientific and technical equipment;
  - infrastructure related to documentation and access to information (library, databases, etc.); and
  - network connectivity infrastructure.
- The forecast of travel grants and external resources for attending conferences and stays abroad to help students in their training.

- The forecast of funding for seminars, conferences and other training activities.
- The forecast for the percentage of students out of the total who would obtain the aforementioned grants.
- The percentage of students who have obtained postdoctoral grants or contracts in the last five years.

7.2. Support services

The services required for student induction must be sufficient and suitable for the number of PhD students and the programme's characteristics, so as to enable students to pursue the programme correctly.

The question of the services that the institution makes available to students is included in Royal Decree 99/2011 in the previous point. However, this guide has sought to separate it due to its significance and importance. However, the institution must complete the information in the same section, separating the information on infrastructures and physical resources from that on services within the text.

The institution should indicate the services it has at its disposal with regard to:

- reception and other logistical services (housing, advice on legal questions about residence, etc.);
- information on mobility, grants, projects, etc., and
- vocational guidance and job placement.

8. PROGRAMME REVIEW, IMPROVEMENT AND RESULTS

The purpose of this chapter is to ensure that the HEIs proposing the degree establish objectives related to the efficiency of the delivery of the training programme and the procedures to ensure the academic quality of the results.

The institution should have an internal quality assurance system (IQAS) that includes PhD programmes. It would be best if the procedures related to PhD programmes were integrated into an IQAS that has been implemented at the institution/university for Bachelor's and Master's programmes. However, PhD programmes have not been part of IQAS up to now. Therefore, the HEI's running PhD programmes must have an IQAS in place that includes the processes required by the current legal regulations for PhD programmes, as a minimum.

HEI's are also required to have procedures in place to verify and demonstrate that the competences described in the training profile (chapter 2 of the report) have been delivered throughout the programme and have been attained by the time the degree is granted.

Efficiency-related objectives have to be specified through the following indicators as a minimum:

- success rate;
- number of theses written;
- number of relevant scientific contributions, and
- number of theses with a *cum laude* qualification.

The efficiency indicators aim to establish a reference value from which to assess the results obtained once the PhD programme has been implemented. Moreover, programme monitoring must consider the evolution of these indicators and their proximity to the expected values.

The following standards apply to this area:

- **Internal quality assurance system is suitable for the PhD programme.**
- **Procedure for the follow-up of PhD students is suitable.**
- **The results and their forecast are justified and suitable.**

8.1. Internal quality assurance system

The PhD programme must have mechanisms in place to analyse its development and results, and to ensure its review and ongoing improvement.

This section should describe the following aspects:

1. The academic committee, which is in charge of the organisation, design and coordination of the PhD programme and is in charge of its training and research activities. The institution must have approved the academic committee **regulations**, including at least the composition and appointment of its members, its operation and all other aspects indicated in Law 30/1992, of 26 November, on the Legal Regime of Public Administrations and Common Administrative Procedure with regard to collegiate bodies.
2. The procedure through which the **participation of the different stakeholders** involved in the PhD programme is organised: tutors, thesis supervisors, PhD students, other teaching and research staff, support staff, etc.
3. **The procedures for monitoring, assessing and improving the quality** of the development of the PhD programme. These procedures must establish who, how and when the activities related to the **improvement of the programme** will be carried out. These procedures should respond to previously established quality objectives. The institution's general procedure for **assessing student progress and learning outcomes** should also be described.
4. It is essential to specify both the mechanisms for collecting information on academic outcomes and those that will be used to review and improve them.
5. The procedure for analysing the **satisfaction of the different groups involved in the programme**, especially PhD students, graduates and teaching staff. The method of collection envisaged, the frequency with which it will be carried out and other relevant technical aspects should be defined.
6. Complaints and suggestions are another source of information on satisfaction. The system for collecting, processing and analysing the **suggestions and complaints** that students as a whole may make about the quality of the programme, training activities, supervision, facilities, services, etc. should be established.
7. The way in which the results obtained will be used to review and improve the PhD programme.
8. The procedure to ensure the **quality of the mobility programme and its outcomes**, specifying the procedures foreseen for evaluation, monitoring and improvement, as well as the persons responsible and the planning of the procedures. Specification of how the information generated in the review and improvement of the PhD programme will be used is recommended.
9. For programmes involving more than one institution, the procedure to ensure **suitable coordination between the different HEIs** should be included.
10. The procedure by which the institution will publish regularly **updated, impartial and objective information, both quantitative and qualitative, on the PhD programme**.

8.2. Graduate monitoring

The PhD programme must have mechanisms in place to analyse the employability results of PhD graduates.

This procedure should form part of the institution's IQAS. However, this guide includes it in a separate section, because Royal Decree 99/2011 makes special mention of it and because it is included in the software application for the submission of PhD programme proposals in a specific section separate from the previous one.

This section should describe the procedure for measuring and analysing the employability of PhD graduates. Every three years AQU Catalunya carries out a survey on the labour market outcomes of PhD graduates in collaboration with the social councils of the universities. The data and indicators resulting from the survey, as well as the subsequent reports and analyses that are generated, are made available to the participating universities and centres.

Universities that do not participate in the survey must define the planned collection method, the frequency with which it is carried out and other technical aspects that are considered relevant. The AQU Catalunya survey also obtains information on the satisfaction of the new PhD students with the training received.

All proposals for PhD programmes should detail how the results obtained from job placement and satisfaction with the training received will be used for the review and improvement of the programme.

This is partly in line with the European standard for internal quality assurance in higher education institutions number 1.6 (information systems).

8.3. Results

Quantitative values of the indicators are suitable and their forecast, for newly created programmes, is suitably justified.

The proposal has to indicate an estimated value and its rationale for each indicator. The suitability of the rationale will be assessed.

Estimates should be based on historical data for programmes originating from **previously established degrees**. In particular, the PhD programme will have to provide at least the following data for the **last five years**:

- **Three-year success rate:** percentage of students out of the total number of people graduating from the programme (defending and passing the PhD thesis) in three years.
- **Four-year success rate:** percentage of PhD students out of the total number of people graduating from the programme (defending and passing the PhD thesis) in four years.
- **Theses written:** number of theses defended and approved.
- ***Cum laude* theses:** number of theses with a *cum laude* qualification.

- **Relevant scientific contributions:** number of relevant scientific contributions deriving directly from the theses defended.

For **newly created PhD programmes**, the institution must present the estimate of the above indicators for the **six years following** the programme's implementation. The values from similar PhD programmes at the same or other institutions may be used in this case, being corrected to reflect the characteristics and research activity of the individuals and research teams that will make up the programme.

The institution may also consider it useful to include other indicators to allow suitable monitoring of the programme and to provide evidence of its quality.

MODIFICATION OF PHD PROGRAMMES

TYPE AND PRESENTATION OF MODIFICATIONS

Modifications to validated reports of recognised degree programmes are assessed against the same standards and criteria set out in the first part of this guide for the assessment of validation proposals. Under Royal Decree 822/2021, modifications are classified by type as follows:

1. **Non-substantial modifications**: minor changes that improve the degree programme and are the result of the monitoring that each centre carries out with the periodicity specified in its IQAS.
2. **Substantial modifications**: changes that improve the degree programme and are also the result of monitoring or requirements arising from previous assessment processes, but which go beyond the scope of non-substantial modification because they alter aspects of the structure, nature and/or objectives of the degree programme or other aspects of the report.

There is also a third category, a subset of substantial modifications:

3. **Substantial modifications requiring revalidation**: changes that significantly affect the structure, nature and/or objectives of the validated degree programme and cannot be requested through the modification process. These changes can only be made by requesting validation of a new degree programme and phasing out the existing one.

The assessment commission will assess whether the submitted modifications represent a significant change to the degree programme and, if this is the case, will propose revalidation.

The institution should only modify its recognised degree programmes as a result of the analysis and conclusions of the monitoring process carried out by the centres offering them, i.e. approximately every three years.

In exceptional and duly justified cases, a centre can submit urgent and necessary modifications that are not the result of a monitoring process. In such cases, the centre should present all substantial and non-substantial modifications, distinguished as such, with the appropriate justification. In this regard, all requests for substantial and non-substantial degree programme modifications, whether from institutionally accredited centres or not, have to be accompanied by the mandatory reports from their IQAS justifying the need for the proposed modification.

The table below lists, by area, all the possible changes that can be made to a degree programme and the process by which such a change must be requested or notified.

Description of PhD programme

Area	Type of notification
1.1. Name	**Substantial modification.** A partial change in the name of the programme must go through the substantial modification process. **Validation.** A significant or total change in the name of the degree programme will require it to be phased out and revalidated.
1.1. University (the	**Non-substantial modification.** A change of coordinating university must be reported

Area	Type of notification
university responsible for the degree and other participating universities)	as part of the substantial modification process. **Validation.** If the university responsible for the degree programme or the universities participating in a joint degree programme change, the old degree programme will be discontinued and the new one will be validated. Therefore, if a degree programme is no longer to be offered jointly (or is now to be offered jointly), it must go through a new validation process.
1.1. University (centres)	**Substantial modification.** A change in the centre or locations where the programme is being delivered must be reported as part of the substantial modification process.
1.2. Context	**Non-substantial modification.** Changes in the wording of the context are reported as part of the non-substantial modification process.
1.3. Collaborations	**Non-substantial modification.** Changes in the programme's collaborations with HEIs and/or companies are reported as part of the non-substantial modification process.
1.4. New intake places	**Substantial modification.** The change in the number of places on offer must go through the substantial modification process.
1.4. Duration rules	**Non-substantial modification**. Changes to the university's approved study duration regulations are reported as part of the non-substantial modification process.
1.4. Languages of instruction	**Non-substantial modification**. Changes in the languages of instruction are reported as part of the non-substantial modification process. **Substantial modification.** If the degree programme changes language and is now to be taught in a single foreign language, it must go through the substantial modification
1.5. Persons associated to the application	**Non-substantial modification.** Changes in the persons associated with the degree are reported as part of the non-substantial modification process.

Competences

Area	Type of notification
2. Competences	**Substantial modification.** Any changes in this area which affect the nature, objectives and characteristics of the programme are considered to be substantial modifications. Changes in competences additional to those established in article 5 of Royal Decree 99/2011 (consolidated) that have been included in the verified report must go through the substantial modification process.

Access and admission

Area	Type of notification
3.1. Pre-information systems	**Non-substantial modification.** Changes in the pre-student information systems available to the university. are reported as part of the non-substantial modification process.
3.2. Access requirements and admission criteria	**Substantial modification.** Changes to the student access requirements and admission criteria of the degree programme must go through the substantial modification process.
3.4. Bridging courses	**Substantial modification.** The addition or changes related to bridging courses must go through the substantial modification process.

Training activities

Area	Type of notification
4. Compulsory activities	**Substantial modification.** Significant changes to the overall structure and design of the compulsory training activities that form part of the programme must go through the substantial modification process.
4. Optional activities	**Non-substantial modification.** Changes to optional training activities are communicated in the non-substantial modification process.

Organisation

Area	Type of notification
5.1. Thesis supervision	**Non-substantial modification.** Minor changes to thesis supervision procedures are reported in the non-substantive modification process. **Substantial modification.** Significant changes to the regulation of supervision of PhD students must go through the substantial modification process.
5.2. PhD student monitoring	**Non-substantial modification.** Minor changes to PhD student monitoring procedures are reported in the non-substantive modification process. **Substantial modification.** Significant changes to the monitoring procedure of PhD students must go through the substantial modification process.
5.3. Thesis reading regulations	**Non-substantial modification.** Minor changes to the regulations concerning the reading of PhD theses are communicated in the non-substantial modification process. **Substantial modification.** Significant changes in the regulation of deadlines, writing, defence and assessment of the PhD thesis must go through the substantial modification process.

Academic staff

Area	Type of notification
6.1. Research lines and teams	**Non-substantial modification.** Minor changes in the assignment and membership of research lines and groups in the PhD programme are communicated in the non-substantial modification process. **Substantial modification.** Changes in the programme's research lines must go through the substantial modification process. **Substantial modification.** Significant changes in the core research staff of the programme (when changes in the teaching staff lead to more than 40% modification of the staff reported in the consolidated report) must go through the substantial modification process.
6.2. Mechanisms for calculating PhD thesis tutorials and supervision	**Non-substantial modification.** Changes in the mechanisms for calculating tutorial work and thesis supervision are communicated in the non-substantial modification process.

Physical resources and services

Area	Type of notification
7.1. Justification of material resources	**Non-substantial modification.** Changes in the provision or typology of physical resources and/or services that do not significantly affect the delivery of the PhD programme are communicated in the non-substantial modification process. **Substantial modification.** Significant changes in infrastructure and/or available support resources that may affect the delivery of the PhD programme must go through the substantial modification process.

PhD programme review, improvement and results

Area	Type of notification

8.1. Internal quality assurance system and estimating quantitative values	**Non-substantial modification.** Changes that do not affect the IQAS model or structure are communicated in the non-substantial modification process. **Substantial modification.** Changes affecting the IQAS model or structure must go through the substantial modification process.
8.2. General procedure for assessing process and outcomes	**Non-substantial modification.** Changes to the procedure for monitoring PhD graduates are communicated in the non-substantial modification process.
8.3. Programme performance forecast	**Non-substantial modification.** Changes to the programme's forecast of results are communicated in the non-substantial modification process.

ANNEX I. CHANGE LOG

The Guide to the design and validation of proposals for recognised PhD programmes (first edition, December 2011), until the third edition (July 2019), included the assessment procedure.

This new revised methodology, following the publication of Royal Decree 576/2023, of 4 July, which amends Royal Decree 99/2011, of 28 January, regulating recognised PhD programmes (among others), introduces the following changes:

- The content relating to the assessment procedure, which constitutes a separate document to the guide, has been removed.
- Legislative references have been updated:
- The new competences that PhD students must attain, as established in Royal Decree 576/2023, are explicitly identified.
- A section on the types of modifications to the verified report is included.

Agència per a la Qualitat del Sistema Universitari de Catalunya

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