

ACCREDITATION CRITERIA FOR ASSOCIATE PROFESSORS AND FULL PROFESSORS



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ACRONYMS

ANECA: National Agency for Quality Assessment and Accreditation (Agencia Nacional de Evaluación de la Calidad y Acreditación) **AQU:** Catalan University Quality Assurance Agency **CAR:** Research Assessment Commission CMC: common minimum criteria to assess the activity of people applying for permanent teaching staff accreditation agreed between the quality agencies of the REACU network **CoARA:** Coalition for Advancing Research Assessment FP: full professors (public sector) **DORA:** San Francisco Declaration on Research Assessment ENCA: National Open Science Strategy (Estratègia Nacional de Ciència Oberta) ERC: European Research Council ESG: Standards and Guidelines for Quality Assurance in the European Higher Education Area **FPI:** grants for research staff training FPU: grants for university professors training LR: lead researcher LOSU: Organic Act 2/2023, of 22 March, on the University System LOU: Organic Act 6/2001, of 21 December, on Universities LOMLOU: Organic Act 4/2007, of 12 April, amending Organic Act 6/2001, of 21 December, on Universities LUC: Act 1/2003 of 19 February on Catalan Universities. **RD:** Resident doctor TRS: teaching and research staff **PTS:** Permanent Teaching Staff (private sector) **UP:** University professor (public sector) REACU: Spanish Network of University Quality Agencies [Red Española de Agencias de Calidad Universitaria] **SUC:** Catalan Higher Education System **TFG:** end-of-degree dissertation **TFM:** master's thesis

INTRODUCTION

Background and context

Establishing professor accreditation

Since 2001, as a result of the passing of Organic Act 6/2001, of 21 December, on Universities (LOU), it has become a requirement to accredit teaching activity prior to access to certain teaching categories.¹ As stated in the preamble, its objectives included making conditions more flexible so that universities could establish their own teaching policies and adequately plan their teaching and research needs. As a result, permission was granted to contract up to 49% of private sector teaching staff and three new types of university teaching staff were created: contract lecturer, post-doctoral assistant lecturer and post-doctoral lecturer. However, to hire these professionals, they must have passed an assessment of their activity by the National Agency for Quality Assessment and Accreditation (ANECA) or by the regional quality assessment agencies.

Catalan universities began hiring professors in these categories following the approval of the Act 1/2003, of 19 February, on Universities of Catalonia (LUC),² which transposed the LOU to the Catalan Higher Education System (SUC). One of the most innovative aspects of the Catalan Law is that it equated private sector positions with those of public sector teaching and research staff (PDI), thus creating two categories for private sector post-doctoral lecturers: associate professors and full professors. The figures for private sector university teaching staff proposed by the LUC in its first draft were the following:

- > Temporary contract
 - Temporary contract lecturer
 - Tenure-eligible lecturer (post-doctoral assistant lecturer according to LOU)
- > Permanent contract
 - Contract lecturer
 - Associate professors (post-doctoral lecturer (contract) according to LOU)
 - Full professors (post-doctoral lecturer according to LOU)

Tenure-eligible lecturers, who started out at the beginning of their academic careers, were initially employed on temporary four-year contracts, which were later extended to five years

¹. Prefecture, <u>Organic Law 6/2001, of 21 December on universities</u>, *Spanish Official State Gazette*, no. 58, 2002, pp. 49400-49425. BOE-A-2001-24515.

². Presidency of the Government of Catalonia, <u>Law 1/2003 of 19 February on Catalan universities</u>, *Official Gazette of the Generalitat de Catalunya*, no. 3826, 2003, pp. 3326-3345.

by means of an amendment to the LOU (LOMLOU).³ This modification led to the decision to abolish the category of contract lecturer.

The LUC delegates the accreditation of private sector lecturers to the Catalan University Quality Assurance Agency (AQU Catalunya), for the purpose of assessing the activity of these lecturers as established by the LOU. For associate professors and full professors, candidates must have research or advanced research accreditation, respectively, in order to be admitted to the selection processes of Catalan universities (article 47.1.d). Tenure-eligible lecturers must have a positive report on their activity (article 49.3.c).

University teaching staff accreditation in Catalonia

AQU Catalunya initiated the programme for the assessment of tenure-eligible lecturers on 16 April 2003, by publishing the assessment procedure and criteria. The criteria provided for three assessment dimensions: research experience, academic training and teaching experience. Scientific publications within the research experience were the merits that were valued as a priority.

The procedure for issuing research and advanced research accreditations was published a few months later, on 12 December 2003. Only research merits are valued: scientific publications in specialised high-impact journals, in books and in book chapters; research grants obtained competitively or as compensation for research; direction of and participation in research, innovation or development activities; technology or knowledge transfer; awards and other honourable mentions; research fellowships, and other relevant research merits. Applicants could provide evaluation reports issued by prestigious academics on their research activity.

Over twenty years (2003-2023), the accreditation results for private sector lecturers employed in Catalonia have been as follows:

	Positive		Negative		Desisted		Total	
	Name	%	Name	%	Name	%	Name	
Report on tenure-eligible lecturers	10388	58.2	5551	31.1	1917	10.7	17856	
Accreditation of research (associate professor)	5892	55.9	3858	36.6	790	7.5	10541	
Accreditation of advanced research (full professor)	2304	59.5	1378	35.6	190	4.9	3872	

³. Prefecture, <u>Organic Law 4/2007, of April 12, amending Organic Law 6/2001, of 21 December, on universities</u>, *Spanish Official State Gazette,* no. 89, 2007, pp. 16241-16260. BOE-A-2007-7786.

The Organic Act on the University System (LOSU)

On 23 March 2023, the new Organic Act 2/2023, of 22 March, on the University System,⁴ was published, which, with regard to university teaching staff, among many other aspects, establishes that it is made up of both public and private sector staff (article 64). The most relevant LOSU news regarding recruiting teaching staff and their accreditation are the following:

- > Tenure-eligible lecturers (post-doctoral assistant lecturer according to LOSU) have a maximum contract of six years and 180 teaching hours per year and an evaluation report is no longer required before they are hired. After three years, however, the university must assess the progress and quality of teaching and research activity. By agreement between the university and AQU Catalunya, this assessment may be carried out by the Agency (article 78).
- > LOU's private sector post-doctoral lecturer has been renamed permanent teaching staff. These professors must have prior accreditation of their activity, issued by the quality assurance agencies registered with EQAR, in order to be employed by universities. The contract is open-ended and full-time, with academic rights and obligations and comparable to those of a public-sector teaching and research staff member (article 82). Therefore, Autonomous Communities can regulate up to two categories of public sector employees, one equivalent to professors and another equivalent to full professors (FP). Article 46 of Act 1/2003 of 19 February on Universities in Catalonia categorises the teaching staff as associate professors and full professors.
- > Autonomous Communities must regulate the accreditation procedure and the State's higher education quality assurance agencies must agree on common minimum criteria (CMC) to assess the activity of those applying for the corresponding accreditation.
- > Article 85.3 of the LOSU equates most of the assessment criteria for public sector teaching staff with those for private sector teaching staff. Key aspects include:
 - Research or teaching activities must have been carried out in universities and/or research centres other than the institution where the doctoral thesis was submitted, according to the criteria established by the regulations (article 69.1).
 - Accreditation shall be issued following qualitative and quantitative assessment of teaching and research merits, in addition to knowledge transfer, supported by a wide range of scientific relevance and social impact indicators (article 69.2.c).
 - This assessment must consider the specificity of the area or field of knowledge, considering, among other criteria, professional experience (especially for

⁴. Prefecture, <u>Organic Law 2/2023, of 22 March, on the University System</u>, *Spanish Official State Gazette*, no. 70, 2023, pp. 43267-43339. BOE-A-2023-7500.

- regulated healthcare professions), local relevance, linguistic pluralism and open access to scientific data and publications (article 69.2.d).
- The required merits must be appropriate given the length of the initial stage of the academic career (tenure-eligible lecturers) (article 69.2.e).

The process must also be streamlined, and the request for documentation must be accessible, open, concise and relevant, using institutional databases. Assessment commissions must guarantee the principles of equality, merit and ability, as well as the publicity, transparency and impartiality of their members. Accordingly, the commissions should be made up of university teaching staff (both public and private sector) and recognised experts of national and international standing.

Previous research and advanced research accreditations issued by the CAR continue to be valid to access the positions of associate professor and full professor (third additional provision).

Common minimum criteria (CMC) to accredit permanent teaching staff (PTS)

As established by the LOSU, AQU Catalunya and the other agencies that make up REACU agreed on the CMC for the initial FTS category on 20 February 2024. Accreditation requires a minimum of 50% of the total possible score for the set of activities and merits assessed. Furthermore, in the criteria established by each agency, at least 50% of the weight must correspond to research assessment, and at least 25% to teaching assessment.

Assessed activity	Weight in the set of assessed merits
Research	≥ 50%
Teaching	≥ 25%

These minimums must be respected when establishing the accreditation criteria of quality assurance agencies exclusively for the initial FTS category, which in Catalonia corresponds to associate professors.

Objectives

This document has the following two main objectives:

- > To establish the requirements and general assessment criteria for issuing accreditations for university teaching staff hired with a permanent employment contract, in accordance with Act 1/2003, on universities in Catalonia, which are the following:
 - Accreditation for associate professors (accreditation of research under Act 1/2003)

- Accreditation for full professors (accreditation of advanced research under Act 1/2003)
- > To establish specific assessment criteria by areas of knowledge.

GENERAL CONSIDERATIONS

The assessment carried out by the Research Assessment Commission (CAR), through specific commissions made up of academics and expert academics in the respective sectors (public or private), aims to accredit that applicants meet a minimum quality and experience threshold in research, knowledge transfer, teaching and, if applicable, scientific leadership and management activities. Among other things, this accreditation allows them to apply for positions as teaching staff on contract as associate professors and full professors at universities belonging to the Catalan University System (SUC). Accreditations in no way fulfil the function of evaluating the activity of teaching staff through a peer review process. Furthermore, they are not decisive in obtaining an academic post in university selection processes, do not establish rankings or classifications of individuals, nor are they used to award scholarships or research grants. All these tasks are the responsibility of the universities themselves or other institutions through the mechanisms they establish within the current legal framework.

The activities of the teaching staff subject to assessment

Both for access to and promotion within the profession, teacher assessment in the countries around us has focused mainly on the quality of research activity. The existence of bibliometric indicators and the homogeneity of university systems have favoured the preeminence of this assessment. This has brought obvious and important benefits in advancing the quality of research in Catalonia. The evolution of higher education systems, with the entry of new operators and credential formats, student and faculty mobility, or joint and transnational programs, have opened up the debate on the dimensions of faculty activity in recent years that must be considered when hiring and promoting them.

There has been a discussion, which was initially academic, about the best way to evaluate the research carried out by teaching and research staff in recent years. Initiatives such as the San Francisco Declaration on Research Assessment (DORA)⁵, the Leiden Manifesto or the Coalition for Advancing Research Assessment (CoARA)⁶ Agreement for Research Assessment Reform⁷ are the most important. Some of the most relevant in our environment are the Responsible Research and Innovation⁸ initiative, which emerges alongside the European

⁵. <u>San Francisco Declaration on Research Assessment (DORA)</u>. San Francisco, DORA Organization, 2013.

⁶. Diana HICKS et al., «<u>Bibliometrics: The Leiden Manifesto for Research Metrics</u>», Nature 520, no. 7548 (23 April 2015), page. 429-431.

⁷. Coalition for Advancing Research Assessment (CoARA), <u>The Agreement on Reforming Research Assessment</u>, 19 July 2022.

⁸. Responsible Research & Innovation, <u>RRI Tools</u>. Viewed: 25 October 2024.

Union's Horizon 2020 programme⁹, the National Open Science Strategy (ENCA, using its Spanish acronym)¹⁰ and the Catalan Open Science Strategy¹¹.

The debate has also broadened to include the need to place more emphasis in the assessment on the rest of the tasks and previous experiences of the teaching and research staff, such as knowledge transfer, professional experience and, particularly, teaching. The European Commission has included these considerations in the 2024 package of initiatives for higher education. Under the Recommendation of the European Council on attractive and sustainable careers in higher education,¹² of 27 March 2024, the Commission urges the member states of the European Union to recognise and reward all the functions of academic staff in the human resources policies of their higher education institutions, such as teaching, research, entrepreneurship and innovation, knowledge transfer, transnational cooperation, business and community participation, regional and local development, mentoring, administration and management, and participation in institutional governance. These policies should include various itineraries linked to these functions, considering professional interruptions in a transparent manner. Additionally, teacher assessment processes must consider these aspects and integrate indicators that can assess the degree of innovation and the quality of teaching and learning.

Many of these approaches have been incorporated into recent Spanish legislation, particularly in the aforementioned Organic Act on the University System⁴, in Royal Decree 678/2023¹³ and in the minimum assessment criteria for the accreditation of public sector teaching staff that derive from it, and which equate the roles of public sector teaching and research staff with those of non-public sector teaching and research staff. There have also been major influences on different approaches and strategies for the promotion and strengthening of science, technology and innovation such as the Spanish Strategy for Science, Technology and Innovation (EECTI 2021-2027)¹⁴ launched by the Spanish Government and the Strategic Plan for Innovation and Knowledge Transfer¹⁵ promoted by the Government of Catalonia. Likewise, it is necessary to include the United Nations

⁹. European Commission, <u>Horizon 2020</u>. Viewed: 25 October 2024.

¹⁰. General Technical Secretariat of the Ministry of Science and Innovation, <u>National open science strategy</u>. Ministry of Science and Innovation, Spanish government, 1 June 2023.

¹¹. Government of Catalonia. Department of Research and Universities, <u>Catalan Open Science Strategy</u>. Viewed: 25 October 2024.

¹². European Commission, <u>Proposal for a Council Recommendation on Attractive and Sustainable Careers in</u> <u>Higher Education</u>, COM (2024) 145 final.

¹³. Ministry of Universities, <u>Royal Decree 678/2023</u>, of 18 July, which regulates state accreditation for access to university teaching staff and the system of competitions for access to places in these staff, *Spanish Official State Gazette*, no. 213, 2023, pp. 122924-122953. BOE-A-2023-19027.

¹⁴. Ministry of Science and Innovation. Spanish government, <u>Spanish strategy for science, technology and</u> <u>innovation 2021-2027</u>. General Technical Secretariat of the Ministry of Science and Innovation, 28 October, 2020. e-NIPO: 83120021X.

¹⁵. Government of Catalonia. Department of Research and Universities, <u>Strategic plan for innovation and</u> <u>knowledge transfer</u>. Viewed: 25 December 2024.

Sustainable Development Goals (SDGs) in the approach to the activity of teaching and research staff, and therefore in their assessment.¹⁶

The CAR also agrees with the view that a different approach should be taken to assessing the activity of teaching and research staff. For this reason, in line with all these initiatives, in addition to research activities, teaching, knowledge transfer and professional experience outside academic institutions are incorporated into lecturer accreditation. The criteria and typology used and the types of contributions to be evaluated are expanded and made more plural, and are contextualised in each field of knowledge. Elements of qualitative assessment of teaching and research merits, and where appropriate, knowledge transfer of teaching introduced. And finally, the Research Assessment explicitly recognises local relevance, linguistic pluralism, open access to data and scientific publications, and interdisciplinarity.

Regarding linguistic pluralism, AQU Catalunya is committed to excellence in research, regardless of the language in which it is conducted, as established in the Leiden Manifesto⁶ (protection of excellence in research of local relevance), CoARA⁷ (recognising the contribution of researchers to science regardless of the language in which it is communicated) and, especially, the Helsinki Initiative on multilingualism in academic communication¹⁷ (promoting linguistic diversity in research evaluation and funding systems). As an institution that has participated in the drafting of the Plan for Strengthening the Catalan Language in the University and Research System of Catalonia¹⁸, AQU Catalunya stands by the fact that the teacher accreditation system cannot penalise any research initiative carried out in the Catalan language, without prejudice to the other assessment criteria applied in each area of knowledge. This is valid for all areas, but it is especially significant in the case of disciplines that focus research on the Catalan area and mostly disseminate the results through publications written in Catalan or edited in Catalan-speaking territories.

Account of the activity carried out and its quality

The introduction of the account of the activity carried out is one of the elements that contributes to making the assessment process more plural and contextualised. Applicants for accreditation have the option of including a description of the activity they have carried out and the quality of the results obtained in their CV. The account provides teaching staff with the opportunity to give context to the contributions they make in the different dimensions of assessment, namely research and knowledge transfer, teaching, leadership and, where appropriate, previous professional activity. Under no circumstances does the

¹⁶. United Nations. Department of Economic and Social Affairs, <u>Transforming Our World: The 2030 Agenda for</u> <u>Sustainable Development</u>. Viewed: 25 October 2024.

¹⁷. Federation of Finnish Learned Societies et al., <u>Helsinki Initiative on Multilingualism in Scholarly</u> <u>Communication</u>. Figshare, 2019.

¹⁸. Department of Research and Universities, <u>Plan to strengthen the use of the Catalan language in the Catalan</u> <u>university research system</u>, 1st edition. Barcelona, Government of Catalonia, 2022.

account replace the CV or the assessment of the quality of the contributions made by the applicant through objective and verifiable parameters.

The account complements and shapes the assessment of the contributions and the activity carried out, especially when the quality of the person's contribution cannot be directly demonstrated or the number of contributions is below the minimum thresholds established to obtain sufficiency in the dimensions that form part of the assessment. For example, the account may be important to describe the person's contribution to publications involving multiple authors, to defend the scientific and/or social impact of publications and projects when it is not evident (through the citations received, international or national projection, etc.), awards received, translations of the work into different languages, the impact of the artistic or architectural work, exhibitions, the development of teaching materials, contributions to innovation in teaching, etc. Accounts can also be very relevant when it comes to justifying the contribution and impact of the activity carried out in citizen science, contributions of local relevance and in the Catalan language, as well as open access to scientific and teaching contributions and interdisciplinarity.

Different professional paths

By virtue of what is established in the LOSU, the assessment criteria guarantee equality between people and consider the diverse professional trajectories resulting from a work-life balance. Therefore, when assessing merits, special situations must be taken into account, such as maternity and paternity leave, sick leave or other justified personal circumstances (disability, leave to care for family members and leave and permits for gender-based violence and terrorism) that have resulted in an irregular research and teaching career.

Merit assessment will bear these circumstances in mind, which must be adequately justified and included in the account of the academic activity of the teaching staff mentioned in the previous point.

Key principles of accreditation assessment

CAR's assessment activities and its specific commissions are guided by the following general principles:

- > Apply the approved assessment criteria and act with objectivity, independence and academic and professional integrity.
- > Non-discrimination of any person on the basis of birth, race, sex, religion, opinion or any other personal or social condition or circumstance.¹⁹

¹⁹. Corts Generals, <u>Spanish Constitution</u>, *Spanish Official State Gazett*, no. 311, 1978, pp. 29313-29424. BOE-A-1978-31229.

- > Act in accordance with international standards for the assessment of teaching and research quality, in particular, with the Standards and guidelines established for quality assurance in the European Higher Education Area (ESG).²⁰
- > Ensure that accreditation processes operate in a transparent, accountable, efficient, effective and fair manner.
- > Maintain the secrecy of the commission's deliberations.
- > Avoid conflicts of interest.
- > Respect the confidentiality of the personal data of those applying for accreditation.
- > Comply with all current regulations and policies regarding the accreditation of university teaching staff, the CAR's internal operating regulations²¹ and the AQU Catalunya's Code of Ethics.²²

Specifically regarding the assessment of the research activity of teaching and research staff, the activities carried out by the CAR are aligned with the position statement and recommendations on research assessment processes made by Science Europe.²³ This position is perfectly applicable to the rest of the teaching and research staff activities that are assessed for accreditation, such as teaching, leadership and knowledge transfer. Therefore, in addition to the previous guiding principles, the CAR is committed to:

- > Regularly monitor and evaluate the robustness of their assessment processes and share best practices to foster mutual learning.
- > Analyse whether bias, discrimination or unfair treatment occurs in assessment processes, and develop updated guidelines and provide updated training to avoid them.

²⁰. EHEA Ministerial Conference, <u>Standards and Guidelines for Quality Assurance in the European Higher</u> <u>Education Area (EHEA)</u>. ENQA, 15 May 2015.

²¹. Research Assessment Commission, <u>Internal operating regulations of the Research Assessment Commission</u> <u>of the Catalan University Quality Assurance Agency and its specific committees</u>. AQU Catalunya, 14 December 2015.

²². Catalan University Quality Assurance Agency, <u>Ethical code</u>. Barcelona, AQU Catalunya, May 2019.

²³. Science Europe, <u>Position Statement and Recommendations on Research Assessment Processes</u>, 9 July 2020.

REQUIREMENTS

To obtain the corresponding accreditation for the positions of associate professor and full professor, the following requirements must be met in advance:

- 1. To hold the title of doctor (Ph.D.).
- 2. Have carried out research or teaching activities and, where applicable, knowledge transfer and exchange, for a cumulative period of at least nine months, at universities or research centres other than the institution to which the doctoral thesis was submitted.²⁴ Mobility can be carried out in Catalan, state and foreign institutions as long as effective research, teaching and/or transfer activity is demonstrated in the host institution or institutions. Mere participation in joint research projects is expressly excluded. Activities carried out exclusively during the post-doctoral training period are considered. To meet the requirement, several mobility periods of at least one month can be provided. Contractual disassociation from the institution of origin is not a requirement. However, the type of activity, the relationship with the host institution or institutions and the duration of the activities carried out must be accredited.

Those who can prove prolonged situations that have prevented them from fulfilling the requirement due to disability, illness, work-life balance or care for minors, family members or dependants, and leave to care for a daughter or son or a family member or due to gender-based violence or terrorist violence may be exempted from the mobility requirement.

3. Regarding teaching activity, applicants must simultaneously accredit a minimum track record and teaching experience, which are specified for each of the possible accreditations as follows:

Accreditation for associate professors

- Minimum four years of full-time teaching experience, or its part-time equivalent.

²⁴. Those applying for accreditation as an associate professor and who at the time of the the LOSU coming into effect (12 April 2023) have or have had a contract as a tenure-eligible lecturer (post-doctoral assistant lecturer) or contract lecturer on a permanent basis or have accreditation for these roles are deemed to have met the mobility requirement (trans. provision 5a, 3rd point of the LOSU). This provision is also applicable to the aforementioned figures of teaching staff hired on an interim basis.

Those applying for accreditation as a full professor and who at the time of the the LOSU coming into effect (12 April 2023) have or have had a contract as a professor, associate professor, tenure-eligible lecturer (post-doctoral assistant lecturer) or contract lecturer on a permanent basis or have accreditation for these roles are deemed to have met the mobility requirement (trans. provision 5a, 3rd point of the LOSU). This provision is also applicable to the aforementioned figures of teaching staff hired on a temporary basis.

In general, a minimum of 30 ECTS credits or 300 taught hours during this period.
 Exceptionally, three-year teaching careers may be considered provided that a minimum of 30 ECTS credits have been taught.²⁵

Depending on the case, the following exceptions are established:

- Regarding the teaching load: in the case of applicants with predoctoral and/or post-doctoral contracts other than those of tenure-eligible lecturers (hired as post-doctoral assistant lecturers), part-time faculty positions or other teaching staff with teaching capacity, the minimum required is 15 ECTS credits or 150 hours taught.
- Regarding teaching dedication: in the case of post-doctoral contracts, the dedication is considered to be full-time. In the case of predoctoral grants, they are considered part-time, and as long as the supervised teaching capacity possible for the type of grant is fully covered.

Accreditation for full professors

- Minimum ten years of full-time teaching experience, or its part-time equivalent.
- A minimum of 140 ECTS or 1,400 hours of teaching. This calculation also includes teaching carried out under predoctoral and post-doctoral contracts. The number of teaching hours taught may be lower in those cases in which there is a formally recognised reduction in teaching due to an intensification in research, for example, through the ICREA Acadèmia programme, or for other justified reasons, such as single-person management positions.²⁵ In these cases, the minimum experience is established at 600 hours of teaching.

Exception to the minimum teaching activity requirement

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commission of the CAR has verified these facts.

²⁵. When the applicant has combined several types of contracts, the total calculation is calculated proportionally to the time spent on each contract. Part-time faculty positions and temporary substitute teaching contracts with a teaching load of six hours per week (180 hours of annual teaching capacity) are considered full-time. The rest of the part-time faculty positions and substitute teaching contracts are considered part-time. If the duration of the contract is not annual or for the entire academic year, the proportional part is accounted for.

GENERAL ASSESSMENT CRITERIA

To establish the accreditation criteria for associate professors (research accreditation, according to Act 1/2003) and accreditation for full professors (advanced research accreditation, according to Act 1/2003), in addition to the current legislation and the agreements reached in REACU mentioned previously, the criteria for research and advanced research accreditation previously established by the CAR and their results have been taken into account.

Scoring scales

Accreditation for associate professors²⁶

Research and transfer and university teaching are assessed as dimensions when awarding accreditation to associate professors.

People's activities are assessed considering the contributions they make and the account of the quality, relevance and impact of these contributions. The result of the assessment may be positive or negative. It is positive when the minimum score (50 points) is obtained in both assessment dimensions. That is, this minimum score must be achieved independently in the dimensions of research and transfer, and in teaching.

All the specific commissions for CAR areas assess the same dimensions with the same weights. The minimum and maximum scores for the sub-dimensions and sections of the research and transfer dimension are as follows:

Research and transfer		Maximum score* 100 points
Research activity	40	80
 Research activity results 	35	70
 Competitive projects 	5	20
 Stays, mobility and internationalisation 	0	20
Knowledge and technology transfer and professional activity	0	20
 Knowledge and technology transfer 	0	20
 Professional activity 	0	20

* The maximum score that can be obtained for the "Research activity" is 80 points, and for the "Knowledge and technology transfer and professional activity", 20 points. The first section requires a minimum of 40 points, with a maximum possible score of 110 points. However, only a maximum of 80 points are counted. Similarly, in the "Knowledge and technology transfer and professional activity" you can obtain up to 40 points, but only a maximum of 20 are recorded in the final score.

²⁶. Accreditation of research under Act 1/2003.

The minimum and maximum scores for the sections of the university teaching dimension are as follows:

University teaching	Minimum score 50 points	Maximum score 100 points
University teaching track record and quality	40	80
Teaching innovation	0	20

Accreditation for full professors²⁷

Research and transfer, university teaching, and scientific leadership and management are the dimensions that are assessed when awarding accreditation to full professors.

People's activities are assessed considering the contributions they make and the account of the quality, relevance and impact of these contributions. The result of the assessment may be positive or negative. It is positive when the minimum score (50 points) is obtained in the three assessment dimensions. That is, this minimum score must be achieved independently in the dimensions of research and transfer, university teaching, and scientific leadership and management.

All the specific commissions for CAR areas assess the same dimensions with the same weights. The minimum and maximum scores for the sub-dimensions and sections of the research and transfer dimension are as follows:

Research and transfer		Maximum score* 100 points
Research activity	40	80
 Research activity results 	35	70
 Competitive projects 	5	20
 Stays, mobility and internationalisation 	0	20
Knowledge and technology transfer and professional activity	0	20
 Knowledge and technology transfer 	0	20
 Professional activity 	0	20

* The maximum score that can be obtained for the "Research activity" is 80 points, and for the "Knowledge and technology transfer and professional activity", 20 points. **The first section requires a minimum of 40 points, with a maximum possible score of 110 points.** However, only a maximum of 80 points are counted. Similarly, in the "Knowledge and technology transfer and professional activity" you can obtain up to 40 points, but only a maximum of 20 are recorded in the final score.

²⁷. Accreditation of advanced research under Act 1/2003.

The minimum and maximum scores of the university teaching dimension are as follows:

University teaching	Minimum score 50 points	Maximum score 100 points
University teaching track record and quality	40	80
Teaching innovation	0	20

The minimum and maximum scores for the scientific leadership and management dimension are as follows:

Scientific leadership and management	Minimum score 50 points	Maximum score 100 points
Doctoral thesis supervision	30	40
Leadership in the field of university and scientific supervision and management	0	35
Recognition and responsibility in scientific organisations and scientific and technical committees	0	25

Assessment of research and transfer

For both associate professors and full professors, applicants must obtain a minimum score of 50 points to be considered sufficient in this dimension. The research merits accumulated throughout the CV are taken into account, especially the track record of recent years.

The maximum score that a person can achieve in this block is 100 points, with a maximum of 80 points in the research activity and 20 points in knowledge and technology transfer and professional activity.

Those applying for accreditation as a full professor will be recognised as having sufficient merit in the corresponding block of research and knowledge transfer and exchange if they have funding from the ERC Consolidator Grant, Advanced Grant or Synergy Grant programmes, or in other competitive research calls for prestigious international individuals.

Apart from the above, for accreditation as an associate professor, those who have passed state research assessment procedures with a similarly high level of demand, such as the Incentive Programme for the Incorporation and Intensification of Research Activity (I3), those who have obtained the Certificate as established researchers (R3) and those with funding from the ERC's Starting Grant programme will also be eligible.

Two sub-dimensions are assessed in this dimension:

- > Research activity
- > Knowledge and technology transfer and professional activity

Research activity

To obtain both the accreditation for associate professors and the accreditation for full professors, a minimum of 40 points must be obtained. The following sections are considered in the assessment of the applicant's research activity:

- > Research activity results
- > Competitive projects
- > Stays, mobility and internationalisation

Research activity results

Both for accreditation as an associate professor and full professor, applicants must obtain a minimum of 35 points in this section. Scientific articles, books and book chapters are given priority. For certain subject areas, and provided that it is duly justified by its impact and relevance, peer review articles, conference papers, proceedings, technological developments, reviews, notes, translations, letters to the editor and similar may be considered, among others. Determining factors include originality, variety of subject matter and impact or contribution to the advancement of scientific and technical knowledge, as well as publication in high-quality journals or those indexed in recognised bibliographic databases, as well as on platforms for publishing research results, such as Open Research Europe (in this case, once the peer review process is complete). Only publications that have been unequivocally accepted (that do not require further revisions), in press or published are considered.

As a general principle, quality, which must be demonstrated through objective and internationally accepted parameters, prevails over quantity. Specifically, shortcomings in terms of quantity can be compensated for by contributions of very high or exceptional quality in which the applicant is the main and responsible author. Quality must be duly justified and accredited through indicators and evidence that the person must provide and that allow it to be assessed.

Generally, publications in journals or publishing houses that, according to the reasoned criteria of the corresponding specific committee, have deficient processes of acceptance and review of the content of the originals, regardless of the position of the journal or publishing house in the bibliometric rankings, will not be considered as quality contributions. Thus, papers published in journals or books with practices that compromise their quality (such as editorial times that are too short to guarantee the quality of the evaluation or an unjustifiably high a volume of articles or self-citations) are treated as non-indexed publications, unless they are accompanied by sufficient indications of quality.

For book publications, special consideration is given to those of an original nature (in which the applicant is the author and/or editor of a multiple-authored book) and which are published by specialised publishers. Where applicable, those published by prestigious, accredited publishers are given more value. When assessing books, other quality indicators are also considered, such as the number of citations received, any specific contributions by the applicant, reviews of the work, inclusion in specialised bibliographies, and the impact and originality of the subject matter and/or methodology.

If a substantial fraction of the scientific activity has been carried out within the framework of a large-scale collaboration²⁸, the applicant must provide an account of the objective indicators used to assess their personal contribution (e.g. which aspects of the experimental, fieldwork or theoretical work they carried out; data collection, data analysis, theoretical modelling, conclusions, etc.) and its impact on the final result. However, preference is given to contributions in which the applicant is the first or corresponding author, according to the specifications of each field of knowledge. Moreover, such CVs are positively assessed if the applicant presents a set of academic research papers that combine authorship in small groups or as individuals with large-scale collaborative papers.

Competitive projects

For both accreditation for associate professors and full professors, applicants must obtain a minimum of 5 points in this section. Only research and technology transfer projects funded in competitive selection processes are taken into account, both from public administrations (international, European, state and regional) and the private sector (foundations, companies, etc.), and their results and impact in the corresponding field are assessed. The number and relevance of the projects in which the applicant has participated is particularly valued, and in accordance with the area of specialisation.

Stays, mobility and internationalisation

This section is exclusively for research stays involving the physical mobility of the person to international, national or Catalan universities or research centres other than the institution at which the applicant works or has worked. The number and length of stays, the quality of the activities undertaken, the verifiable results and the progress made in establishing stable working networks are particularly valued, as well as the prestige of the host university or research centre in the field of specialisation.

Several mobility periods can be provided, in the same institution or in different ones, as long as they are equal to or longer than one month in duration.

Applicants who can prove that they have prolonged situations that prevent them from carrying out research stays (due to illness, work-life balance or caring for children, family members or dependents, and leave to care for a child or family member or due to genderbased violence or terrorist violence) can demonstrate sustained collaboration over time

²⁸. A large-scale collaborative article is an academic publication that involves a significant number of contributors, often from multiple institutions, disciplines or countries. These articles can be very common in certain scientific disciplines where large-scale research projects require the input and experience of many researchers. In some cases, the authorship of these publications can involve dozens, hundreds, or even thousands of people, due to the collaborative nature of the research.

with international research groups and networks. This merit is assessed with quality indicators similar to stays.

In the particular case of accreditation for associate professors, this section also assesses the applicant's capacity for creating networks, international collaborations, etc. Aspects such as organising conferences, participating in journal editorial boards, etc., are appreciated here, in view of their contribution to the creation of these links.

Knowledge and technology transfer and professional activity

In this sub-dimension the following sections are considered:

- > Knowledge and technology transfer
- > Professional activity

Knowledge and technology transfer²⁹

The participation and results of processes that aim to disseminate knowledge, skills and/or innovations to society as a whole are assessed, whether companies, sectoral organisations, institutions and government bodies, etc. Applicants must be able to demonstrate in their account of these activities that they have contributed to innovation, economic growth or development by solving real-world problems and/or improving products, processes or services.

Patents

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

Transfer contracts and agreements

This includes contracts and agreements that formalise the exchange of experiences, skills or research results between institutions, companies or individuals, as well as utility models and other legal agreements that regulate the transfer of technological knowledge, software and

²⁹. Knowledge transfer is understood here as the broader process of exchanging skills, experience, knowledge and information between research and development (R&D) environments and society as a whole, including people, companies, organizations, economic sectors, etc. Technology transfer is the more specific process of moving technical knowledge, inventions or innovations from public or private sector research and development (RD) environments to a wider commercial or practical application, usually through patents, licences, partnerships or start-ups.

hardware, product design, innovations, proprietary manufacturing processes, plant varieties, etc.

The type of participation, duration, funding, recruitment of staff, degree of innovation and multidisciplinarity or interdisciplinarity, results, products or services produced, and the social impact achieved are all assessed.

Other activities and transfer results

These include activities that that promote the dissemination and scientific culture, reflection on the role of science, technology and innovation in today's society - publications, conferences, audiovisuals, collaboration with the media, legislative advice, lectures on laws and other activities with social, artistic and cultural value for example - and promote openness and inclusiveness of science and innovation. Likewise, activities aimed at sharing research results, good practices or teaching methods, training workshops with companies and organisations, capacity building and social and transformative innovation programmes, are also appreciated.

Collaboration with business and trade union organisations, spin-offs and scientific advice to public administrations is also valued, as is participation in institutional and company chairs, or similar, that constitute a formula for collaboration with public and private institutions and develop this type of activity.

This section also includes participation as experts in organisations that assess research, technology and innovation projects; that assess university teaching staff and other research personnel, as well as participation in committees, commissions or panels of official agencies and organisations that assess university degrees and centres.

Professional activity

Only professional activity that is directly related to the applicant's field of specialisation, and that has not been carried out simultaneously with their full-time activity at the university. The extent of this activity and its relevance to research and teaching is assessed.

University teaching assessment

As a general rule, applicants must provide positive evaluations of their teaching carried out by their universities as evidence of the quality of the teaching assignment carried out using a teaching evaluation manual certified by AQU Catalonia, or by a similar programme run by the other member agencies of the network REACU, DOCENTIA being one example of such a programme.

Those whose teaching careers have taken place in universities within SUC must first request an assessment of their teaching merits from their respective universities, and provide the certification/resolution issued as a result of this assessment. The specific CAR commissions only carry out direct assessment of this block corresponding to university teaching in those cases in which assessment based on the university manual has not been possible due to not meeting the requirements needed to request it.

The accreditation for associate professors requires that candidates have a positive assessment issued by their university in accordance with the above. In the case of accreditations for full professors, two positive assessments are necessary. This level of competence is obtained with a minimum of 50 points.

For people who have pursued their research and teaching careers abroad or at universities in the Spanish state that do not have a certified teaching assessment manual, the dimensions that are assessed are as follows:

- > University teaching track record and quality
- > Teaching innovation

University teaching track record and quality

Individuals who have not spent the majority of their academic career at the Catalan University System (SUC) and cannot provide positive assessments of their teaching must obtain a minimum of 40 points in this sub-dimension to achieve either of the two accreditations.

The teaching dedication criterion only considers official university teaching (graduate, postgraduate or doctorate) or the equivalent in a foreign university system. Teaching workload is assessed according to plurality, interdisciplinarity, teaching complexity and teaching method, which are specified, among other things, in:

- > The number and diversity of subjects taught.
- > The type of qualifications.
- > Teaching first-year subjects (in degrees) or in large groups (understood as those with a high student/teacher ratio compared to the average ratio for the area or qualification).
- > Teaching in different languages.
- > Teaching at centres or campuses other than the one to which they are assigned.
- > Supervision of final degree projects (TFG) and final master's projects (TFM).

Teaching quality is assessed based on the account of the activity carried out. Teaching quality is assessed based on the account and any evidence that may accompany it. More specifically, among other factors, the following are considered: how well the educational objectives of the subjects and courses taught are met; success and performance rates; student assessment and satisfaction; the review and improvement of teaching practice and its impact; and peer reviews.

Another area for assessment is the development of educational resources that are preferably available for open and unrestricted access through institutional, subject-specific or general repositories and subject to academic and/or external assessment. Textbooks and

books for teaching purposes are assessed according to the prestige of the publishing house, the people in charge of the publication, the collection in which the work is published, any awards it may have received and any reviews it has received, among other things.

Regulated tutoring activity (in accordance with the teaching assignment) is assessed according to its intensity, duration, diversity and degree of dedication. For example, this is the case with supervising final degree and master's projects (TFG and TFM) or mentoring students on external work placements or dual training programmes.

Teaching innovation

Teaching innovation is assessed by taking into account teaching innovation projects, sustainability projects, interdisciplinary and inter-university projects related to teaching or educational action research projects in higher education aimed at improving teaching. Each case is assessed according to the type of participation (lead researcher or participant), the funding body and the amount received (university, regional, central, through Erasmus+, public or private foundations, etc.) and its duration. Supporting evidence can be provided regarding their quality, such as activities carried out and progress made, impact on the classroom and on improving the quality of teaching staff, the creation of open materials, student participation or mobility, improvement of teaching guides, preparation of final degree projects (TFG or TFM) associated with teaching innovation, etc.

This section assesses the institutional tasks of improving teaching and designing new university degrees, the training received and the training provided for the improvement of teaching. These activities are assessed according to their diversity, duration, quality and relevance, and the results and impact achieved.

Assessment of scientific leadership and management

This dimension is only assessed when accrediting full professors. Applicants must demonstrate their ability to lead teaching and research teams; to train, mentor and promote young teachers and researchers; and to lead and manage at university and scientific level. They may also provide proof of recognition and responsibilities exercised in scientific organisations and scientific-technical committees, or other equivalent leadership activities. The degree of internationalisation, innovation and openness to society of the contributions presented is assessed in all cases.

A minimum score of 50 points must be obtained to achieve sufficiency in this dimension.

The following sub-dimensions are assessed in this dimension:

- > Doctoral thesis supervision
- > Leadership in the field of university and scientific supervision and management
- Recognition and responsibility in scientific organisations and scientific and technical committees

Doctoral thesis supervision

In this sub-dimension, a minimum of 30 points must be obtained. Consideration is given to the degree of internationalisation and innovation of the research, the results derived from doctoral theses, multidisciplinary and interdisciplinary approaches, as well as co-supervised theses and industrial doctorates. In addition, international mentions and awards received are also taken into account.

Leadership at university and scientific management level

Activities involving effective leadership of stable teaching and research teams or groups are assessed. These include the size and recognition of the teams, the activities carried out and the results achieved for the discipline or for the institution itself, the vision with which the activities have been carried out, the challenges that have been faced and the implementation of transformations and changes.

The ability of the applicant to attract scientific and/or technical talent through competitive calls for applications is considered another element of leadership, for example, FPU, FPI, FI, Torres Quevedo, Juan de la Cierva, Beatriu de Pinós or Marie Skłodowska-Curie calls.

This section also includes activities of leadership and management in academic and scientific fields: coordination of official qualifications, management of scientific journals or publishers, chairing of evaluation agency committees, single-person positions in the university environment, as well as other functions that demonstrate institutional leadership and transformation of the university and scientific system. These activities are assessed based on the approach taken, the challenges faced, the innovations and improvements introduced in the exercise of the role, as well as the results obtained and the impact achieved on the body led, on the institution as a whole or, where appropriate, on a local or social level.

Recognition and responsibility in scientific organisations and scientific and technical committees

Responsibility exercised in the management bodies of scientific associations or organisations or in national and international committees is taken into account. More specifically, consideration is given to the innovations and improvements introduced in the performance of these activities, as well as the results obtained and the impact achieved on the organisation itself, on the discipline or field of knowledge to which it belongs or, where appropriate, on society as a whole.

Recognition or awards received for excellence in academic activities, research, knowledge transfer and exchange with society are also considered, depending on the prestige of the awarding institution, its national or international character and its relevance and impact.

SPECIFIC CRITERIA BY AREAS OF KNOWLEDGE: ACCREDITATION FOR ASSOCIATE PROFESSORS (ACCREDITATION OF RESEARCH UNDER ACT 1/2003)

Humanities

The Specific Commission for Humanities applies general criteria when evaluating applications and issuing accreditations for associate professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as an associate professor, the applicant must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension.

Research activity

To obtain accreditation for associate professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this subdimension is carried out in line with the general criteria.

Research activity results

As a guideline, six contributions are considered necessary to reach the minimum 35 points required in this section, of which at least four must be level A or B and at least one must be international in scope, whether journal articles or books or book chapters. For Fine Arts and Design, quality indicators of the creative works submitted may be used to complement these values.

Generally speaking, books, book chapters and journal articles will be assessed equally with regard to the results of research activity. However, books without an ISBN, conference proceedings or similar that have not passed an adequate quality control, posters, information brochures and similar will be excluded. All contributions will be assessed according to the general quality criteria specified above.

Original contributions, in terms of subject matter and/or methodology, in which the applicant is the author and/or editor (in the case of books with multiple authors), and which are published by specialised publishers of accredited prestige, are given special consideration with regard to the publication of books and book chapters.

The Specific Commission for Humanities of the CAR defines three levels of quality to assess books and book chapters in this field. These levels are as follows:

Level	Description
A	International or national publishing house of the highest quality, occupying a privileged position in the directories of academic publishers within its discipline.
В	International or national publisher of a notable level of quality, occupying a prominent position in the directories of academic publishers within its discipline.
С	International or national publisher of a good standard of quality and with objective quality indexes within its discipline.

When making the assessment, besides the criteria of the specialists in each discipline, other quality indicators are taken into account, such as the rigour of the external review processes of the originals, the citations received, the specific contribution of the applicant, the reviews of which each contribution has been the subject, the inclusion in specialised bibliographies, the impact and originality.

Research monographs published by prestigious, accredited international publishers are given the highest consideration. Book chapters are classified according to the criteria mentioned above. In the event that the contribution consists of the publication of a collective volume, in addition to the previous criteria, the scientific contribution made by the applicant is assessed.

In the account of the research activity, the applicant can highlight the main indicators of the quality of these contributions.

Regarding articles in scientific journals, preference should be given to publications in journals that have undergone a peer assessment process and are listed in citation indexes such as those of Clarivate Analytics (in particular, the Social Sciences Citation Index and the Arts and Humanities Citation Index) and the Scientific Journal Rank (SJR) of Scopus, or in other similar bibliographic databases of recognised international prestige, as well as on platforms for the publication of research results such as Open Research Europe — provided that the peer review process has been completed.

To specify the effective impact of the research carried out, and whenever possible, the position of the journal in evaluation directories of journals that offer rankings by impact index or by other assessment criteria is taken into account, as well as the number of citations received by each article. The degree of creativity, thematic diversity and innovation in research and national or international projection are also assessed.

Analogous to books and book chapters, the Specific Commission for Humanities defines three levels of quality for articles (A, B and C), depending on the type of journal in which they have been published, and which, indicatively, correspond to certain quartiles defined by international reference citation databases. These levels are defined as follows:

Level	Description
A	A national or international journal of the highest quality within its field that simultaneously fulfils the following conditions:
	 Contributions undergo a rigorous peer review process.
	 They are present in at least two directories and databases such as Web of Science —AHCI or JCR (Q1 or Q2)—, Scopus (Q1), CARHUS A, CIRC A or FECYT Quality Stamp Classification of Journals (Q1).
В	International or national journal that simultaneously meets the following conditions: — Contributions undergo a rigorous peer review process.
	 They are present in at least two directories and databases such as Web of Science —AHCI or JCR (Q3 or Q4)—, Scopus (Q2 or Q3), CARHUS B, CIRC B or Classification of Journals with FECYT Quality Seal (Q2).
С	A journal of good quality within its field, with a rigorous assessment system.

The Specific Commission for Humanities considers the criteria of specialists and the assessment of quality based on the citations received, the contribution of the applicant (in the case of co-authorship), impact, originality, thematic diversity, rigour in the review process and the variety of journals in which it has been published, among other quality indicators. When determining which of the three levels of quality the contribution in the form of an article corresponds to, the assessment of the article takes precedence over the assessment of the journal in which it has been published.

Critical editions, i.e. those with an introductory study and notes, specialised translations, provided they include a critical introduction, the edition of encyclopaedias or dictionaries that are not only of low circulation, and the coordination, edition or translation of texts that include preliminary studies and/or critical annotations will be taken into account, However, simple transcriptions will not be considered, unless they are accompanied by a critical judgement or a historical analysis of the document; conventional prologues and introductions; and cataloguing that does not incorporate theoretical, historical or art-historical studies that represent a perceptible advance in knowledge.

For exhibition catalogues, texts are considered provided that they are the result of specific research or represent an objective contribution to knowledge. However, curating an exhibition is considered a merit of transferability.

Under no circumstances does the Commission for Humanities assess reviews, opinion pieces, notes, letters to the editor and the like, unless exceptional relevance and impact is duly demonstrated.

When appropriate, and provided that the relevance and impact of the contributions made is demonstrated, the Specific Commission for Humanities may complement the criteria established above with specific criteria pertaining to the different Arts departments and related to these departments. Specifically:

Arts departments

Artistic creation: contributions are accepted from all disciplines or creative practices within the areas of Fine Arts and related fields and within the Performing and Musical Arts (theatre, dance, performing music, interpretation, direction, stage design, scenography, etc.), provided that they represent an advancement in the field.

For exhibitions of artistic work, award-winning work, conservation or restoration projects and artistic projects, the object and the magnitude of the contribution (individual/collective, feature film/short film, real estate/movable property, integral projects, interdisciplinary projects, commissioned by a relevant entity, etc.) are assessed, as well as the relevance of the project (cultural heritage, BIC, etc.), and the degree of innovation; itinerancy (other exhibition spaces, festivals, competitions or similar events of relevance, screening rooms, etc.), the relevance of the curator and of the participating artists or researchers, and the link to relevant research projects awarded in a competitive public call for proposals. Criteria are also taken into account regarding the quality of the medium of dissemination; the type of exhibition space/event and its scope (international/national); the publication of the catalogue (length, relevance of the authors of the texts, translation into other languages, etc.); sponsors, producers, promoters or distributors; the type of call for entries and the form of award (type, amount, etc.); and the existence of a jury, an external committee, a monitoring commission or similar. Likewise, criteria regarding the repercussion of the contribution will be considered: identification and relevance of specialised media; bibliographic references included in books or catalogues, specialised magazines, academic bibliographies, audiovisual media, etc.; invitation to participate in workshops, conferences, etc., as well as awards and mentions. Therefore, clear evidence must be presented to identify all these aspects for this type of contribution.

Contributions in the field of the Performing Arts are assessed according to the relevance and degree of innovation of the theatrical, choreographic, musical or scenographic creation, the composition, direction, script, interpretation, instrumentation and design of the staging of the work; the type, object and magnitude of the contribution (original work, version or adaptation); in the case of interpretation, consideration is given to interpretative methodological innovation, the quality of the performance, the premiere and the impact in specialised media and the activities derived from the contribution, such as tours and concerts, the teaching of masterclasses, specialisation workshops, etc., and, in the case of participation in groups or companies, the relevance of the director and the participating performers, and the link to relevant research projects awarded in a competitive public call.

The quality of the medium of dissemination is assessed according to the quality of the type of venue (auditorium, theatre or other), its national and international exposure at competitions and festivals, and its itinerancy (other theatrical venues, festivals, competitions or similar events of relevance, screening rooms, etc.); the sponsors, producers, promoters or distributors of the project; the subsidies, the type of call for applications and the form of award (type, amount, etc.), and the relevance of the jury, the external committee, the monitoring commission or a similar figure. In addition, when assessing the impact of the contribution, the identification and relevance of specialised media is evaluated: bibliographic references in books or catalogues, specialised magazines, academic

bibliographies, audiovisual media, archives or repositories; invitations to participate in workshops, conferences, etc., and awards and mentions.

In the Music department, contributions and their means of dissemination must meet the following criteria in order to be considered high impact: the relevance of the musical creation, composition, direction, performance, instrumentation, technologies and techniques used in the work, etc. Consideration is also given to the invention of new analogue or digital musical instruments, with equal attention to the level of innovation and relevance. For performance, consideration is given to methodological-interpretative innovation, the quality of the performance, the premiere and the impact in specialised media; activities derived from the contribution, such as tours and concerts, and the teaching of masterclasses, specialisation workshops, etc. When participating in orchestral groups, the level of responsibility in their performance will also be taken into account, as well as the level and relevance of the group. Consideration is also given to the quality of the venue (auditorium or other), the premiere and the performance, the national and international profile at concerts and festivals, the prestige of the broadcasting medium and the institutions or companies that commission the project and how it is awarded. Likewise, works published in printed, phonographic or videographic format are assessed. In the first case, the prestige of the publisher is considered in accordance with the above. Otherwise, the prestige of the producers, distributors and record label will be taken into consideration, as well as that of the musical work, the conductor, the ensemble and the performers responsible for the recording; links to relevant research projects awarded in a competitive public call for applications; and prizes in national and international competitions or contests.

Musicology, in all its disciplinary fields, is assessed according to the criteria established by the Commission for Humanities for non-artistic disciplines.

Competitive projects

Only research and technology transfer projects funded in competitive selection processes are taken into account, both from public administrations (international, European, state and regional) and the private sector (foundations, companies, etc.), and their results and impact in the corresponding field are assessed. The number and relevance of the projects in which the applicant has participated is particularly valued, and in accordance with the area of specialisation.

The minimum requirement of 5 points can be achieved by participating in a research or competitive transfer project.

Stays, mobility and internationalisation

The number and length of stays, the quality of the activities undertaken, the verifiable results and the progress made in establishing stable working networks are particularly valued, as well as the prestige of the host university or research centre in the field of specialisation.

As a guideline, a twelve-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of three years full-time would be considered to obtain a positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as an associate professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Humanities carry out the assessment of teaching merits.

Those who can demonstrate exceptional research results and who have developed their career mainly in a non-university research institution, or in a foreign university where the calculation and measuring instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without having to meet a set of requirements and merits of activity.

Social Sciences

The Specific Commission for Social Sciences applies general criteria when evaluating applications and issuing accreditations for associate professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as an associate professor, the applicant must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension.

Research activity

To obtain accreditation for associate professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this subdimension is carried out in line with the general criteria.

Research activity results

Publications in high-quality journals and books that make a contribution in the field of Social Sciences are assessed for all purposes, including the results of the research activity. The degree of creativity, autonomy, coherence and diversity of the lines of research, innovation and international projection are assessed. In the account of the research activity, the applicant can highlight the main indicators of the quality of these contributions.

The quality of the contributions must be duly justified and accredited with indicators and evidence that allow them to be assessed.

For co-authored contributions, justification must be provided and the applicant's significant participation must be clear, for example, using the main categories of the CrediT taxonomy. Consideration will be given to the order of the signature in relevant positions (first author, corresponding author, last author), according to the criteria of each discipline.

Five level A contributions are required to reach the minimum 35 points, according to the quality levels established below.

As for articles in scientific journals, level A contributions are those that have passed a rigorous peer review process and, preferably, are published in prestigious journals in the field of Social Sciences, or are ranked highly in citation indexes such as the first quartile of the Scopus Journal Rank (SJR). Impact indicators from the same year of the publications, or the closest previous year available, and those relating to the areas of knowledge of the Social Sciences prevail. Indicators relating to related areas are also considered in the case of disciplines for which they are relevant.

The use of quartiles is a guiding criterion and does not in itself constitute a necessary or sufficient condition for considering a publication to be level A quality. For publication impact indicators, the Commission may use other indicators beyond the journal's placement in a given quartile, considering several additional elements, such as the number of citations, other bibliometric impact indicators of the contribution (taking into account relative positions within the discipline and/or the publication), inclusion in prestigious specialised lists (such as CARHUS Plus+, the FECYT seal, the ABS Academic Journal Guide, the ABDC Journal Quality List, the FNEGE rankings or the CNRS journal rankings, among others, at the discretion of the experts).

Articles available on research results publication platforms such as Open Research Europe can also be considered as level A contributions when they have completed the peer review process and present evidence of quality and academic impact.

Exceptionally high-quality articles, duly justified, may be considered by the Specific Commission for Social Sciences as equivalent to more than one category A contribution.

Book publications are considered to be level A if they are published by specialised publishers of national or international prestige, occupying a preferential position in the catalogues of academic publishers in their field, and if they have been subject to rigorous peer review. When defining whether contributions can be considered to be level A, the expert criteria of the assessors, the number of citations, the reviews to which the contribution has been subject, the inclusion in specialised bibliographies and other impact indicators are considered.

The highest consideration is given to research monographs published by internationally renowned publishers which, if the Commission deems it appropriate, may be considered equivalent to more than one level A contribution.

In the event that the contribution consists of the publication of a collective volume, in addition to the previous criteria, the scientific contribution made by the applicant is assessed. Only exceptionally are book chapters considered level A contributions.

Popular books and manuals are not considered research contributions.

Competitive projects

Participation in at least one competitive project at a national, European or international level in the field of Social Sciences is considered a requirement, which is equivalent to the 5 necessary points. Competitive projects at the regional or local level are considered when they are comparable to those at the state level. Only in very justified exceptional cases can the absence of this condition be compensated for with other merits.

Participation in more than one project is valued, without being considered a requirement, as is the management of projects at the regional, state, European or international level. Participation in projects must involve an active and demonstrable contribution to results.

Stays, mobility and internationalisation

Stays in renowned research centres in the field of Social Sciences are valued, especially when they have resulted in publications or collaborations.

As a guideline, a twelve-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of three years full-time would be considered to obtain a positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as an associate professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Social Sciences carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Sciences

The Specific Commission for Experimental Sciences applies general criteria when evaluating applications and issuing accreditations for associate professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as an associate professor, the applicant must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension.

Research activity

To obtain accreditation for associate professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this subdimension is carried out in line with the general criteria.

Research activity results

Regarding the results of research activity, publications in journals are given priority. Books and book chapters and patents are also valued. All contributions are assessed according to the general quality criteria specified above. As a guideline, eight quality articles in journals, preferably corresponding to the post-doctoral stage, are considered necessary to reach the requirement of a minimum of 35 points.

As for the articles, publications in journals that have undergone a peer review evaluation process and are present in citation indexes such as the Science Citation Index Expanded of the Journal Citation Reports (JCR), the Scientific Journal Rank (SJR) or in other Open Research Europe databases are preferred, provided they have completed the peer review process. To determine the impact of these articles, among others, the relative position of the journal in these repositories organised by impact index and the number of citations each article has received are assessed. The rest of the articles in scientific journals are considered non-indexed, unless the quality is justified with sufficient evidence in the account of the research activity.

In the account of the research activity, the applicant must provide sufficient evidence of the quality of the articles that derive from a great scientific collaboration and, very especially, of their contribution to the work presented.

Original contributions in which the applicant is the author and/or editor (in the case of books with multiple authors), and which are published by specialised publishers of accredited prestige, are given special consideration with regard to the publication of books

and book chapters. In the account of the research activity, the applicant can highlight the main indicators of the quality of these contributions.

Competitive projects

Only research and technology transfer projects funded through competitive calls for proposals are considered, both from public administrations (international, European, state and regional) and from the private sector (foundations, companies, etc.). Special consideration is given to the fact that the applicant has participated as the project's lead researcher.

As a guideline, the minimum requirement of 5 points can be achieved by participating in a research or competitive transfer project.

Through the account, individuals can specify their contribution to the project or projects, as well as the results of this activity and its quality.

Stays, mobility and internationalisation

Research stays involve the temporary relocation of the person from the institution where they are or have been contracted to another institution or centre to carry out research activities in collaboration with individuals or groups from the host university or centre. Applicants must provide evidence that they have completed the stay or stays and, in the description of the research activity carried out, they may indicate the results and their quality.

As a guideline, a twelve-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of three years full-time would be considered to obtain a positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as an associate professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Experimental Sciences carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Life Sciences

The Specific Commission for Life Sciences applies general criteria when evaluating applications and issuing accreditations for associate professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as an associate professor, applicants must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension.

Research activity

To obtain accreditation for associate professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this subdimension is carried out in line with the general criteria.

Research activity results

Publications in indexed journals are given preference. Consideration may be given, although with much less weight, to topic-based reviews, books and book chapters that make a significant contribution to the consolidation and advancement of knowledge in the corresponding field.

As for articles in scientific journals, of the fourteen articles needed to obtain the minimum 35 points required in this section, around eight should preferably belong to the first quartile of the corresponding category of the Journal Citation Reports (JCR), the Scientific Journal Rank (SJR) or other search Europe databases, once the peer review process has been completed. In approximately 50% of these eight articles (four articles), the applicant should be the corresponding author, the first signatory or the last signatory.

In the account of the research activity, the applicant must provide sufficient evidence of the quality of the articles that derive from a great scientific collaboration and, very especially, of their contribution to the work presented.

Competitive projects

Only research and technology transfer projects funded in competitive selection processes are taken into account, both from public administrations (international, European, state and regional) and the private sector (foundations, companies, etc.). As a guideline, the minimum requirement of 5 points can be achieved by participating in two competitive research projects. Special positive consideration is given if the applicant has participated as the lead researcher on a project.

Through the account, individuals can specify their contribution to the project or projects, as well as the results of this activity and its quality.

Stays, mobility and internationalisation

Research stays involve the temporary relocation of the person from the institution where they are or have been contracted to another institution or centre to carry out research activities in collaboration with individuals or groups from the host university or centre. Applicants must provide evidence that they have completed the stay or stays and, in the description of the research activity carried out, they may indicate the results and their quality.

As a guideline, a twelve-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight. As a guideline, two patents in use are worth 10 points in this section.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of three years full-time would be considered to obtain a positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as an associate professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Life Sciences carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Medical and Health Sciences

The Specific Commission for Health and Medical Sciences applies general criteria when evaluating applications and issuing accreditations for associate professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as an associate professor, applicants must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension.

Research activity

To obtain accreditation for associate professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this subdimension is carried out in line with the general criteria.

Research activity results

Publications in indexed journals and patents are given preference. Consideration may be given, although with much less weight, to topic-based reviews, books and book chapters that make a significant contribution to the consolidation and advancement of knowledge in the corresponding field.

As for articles in scientific journals, of the fourteen articles needed to obtain the minimum 35 points required in this section, around eight should belong to the first quartile of the corresponding category of the Journal Citation Reports (JCR), the Scientific Journal Rank (SJR) or other search Europe databases, once the peer review process has been completed. In approximately three of the eight articles, the applicant should be the corresponding author, the first signatory or the last signatory.

In the account of the research activity, the applicant must provide sufficient evidence of the quality of the articles that derive from a great scientific collaboration and, very especially, of their contribution to the work presented.

Competitive projects

Only research and technology transfer projects funded through competitive calls for proposals are considered, both from public administrations (international, European, state and regional) and from the private sector (foundations, companies, etc.). Special consideration is given to the fact that the applicant has participated as the project's lead researcher.

As a guideline, the minimum requirement of 5 points can be achieved by participating in two competitive research projects.

Through the account, individuals can specify their contribution to the project or projects, as well as the results of this activity and its quality.

Stays, mobility and internationalisation

Research stays involve the temporary relocation of the person from the institution where they are or have been contracted to another institution or centre to carry out research activities in collaboration with individuals or groups from the host university or centre. Applicants must provide evidence that they have completed the stay or stays and, in the description of the research activity carried out, they may indicate the results and their quality.

As a guideline, a twelve-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight. As a guideline, two patents in use are worth 10 points in this section.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of three years full-time (excluding the period of specialised training as a resident doctor in the field of medicine) that has not been carried out simultaneously with full-time university studies would allow for a positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as an associate professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Health and Medical Sciences carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Engineering and Architecture

The Specific Commission for Engineering and Architecture applies general criteria when evaluating applications and issuing accreditations for associate professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as an associate professor, applicants must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension.

As a guideline, the contribution of eight articles and participation in a competitive project with the characteristics and quality indicated in the following sections may allow the minimum score required in the sections on research activity results (35 points) and competitive projects (5 points) to be reached. However, these scores are not enough to reach the minimum required in research (50 points) and must be complemented with additional merits from the previous sections or from stays, mobility and internationalisation, knowledge and technology transfer or professional activity.

Research activity

To obtain accreditation for associate professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this subdimension is carried out in line with the general criteria.

Research activity results

Regarding the results of research activity, publications in journals are given priority. Books and book chapters are also valued. All contributions are assessed according to the general quality criteria specified above.

As a general guideline for all disciplines in this field, eight quality articles in journals in the applicant's field of specialisation are considered necessary to achieve the minimum score of 35 points. Particular consideration is given to the coherence, originality and relevance of the publications and their independence from those of the pre-doctoral stage. For scientific articles, the Commission will especially consider the applicant's contribution, the number of citations, the number of authors and the order in which they are listed.

For disciplines in the field of Engineering and Architecture, the Commission will use quality indicators that are specific to these disciplines and accepted by their academic, scientific and professional communities. For example, the aim of this section in the case of Architecture is to measure the impact of a researcher's activity among the specialists who make up the discipline. The capacity of a reflective professional to contribute, through their

contributions, to the advancement and shaping of knowledge is measured in this sense. These contributions can be evaluated as publications insofar as they draw precise guidelines, are the object of reflective conceptualisation and have an impact on the evolution of the world of architecture.

Consequently, the account of research activity becomes important when it comes to declaring or demonstrating the quality and impact of scientific contributions, especially when they do not meet the preferred evaluation criteria and in disciplines with their own indicators.

In the account of the research activity, the applicant must also provide sufficient evidence of the quality of the articles that derive from a great scientific collaboration and, very especially, of their contribution to the work presented.

Conference proceedings published with ISSN are not considered journal publications, even if they are indexed in SCIE, SSCI or AHCI. These conference proceedings, as well as those referenced in databases such as the Conference Proceedings Citation Index and similar, are only considered complementary to publications in indexed journals. However, in the field of information and communication technologies, works referenced in relevant positions in the GGS (GII-GRIN-SCIE <u>http://gii-grin-scie-rating.scie.es/</u>) or ICORE (<u>https://portal.core.edu.au/conf-ranks/</u>) ranking can be considered.

Original contributions in which the applicant is the author and/or editor (in the case of books with multiple authors), and which are published by specialised publishers of accredited prestige, are given special consideration with regard to the publication of books and book chapters. In the account of the research activity, the applicant can highlight the main indicators of the quality of these contributions.

Competitive projects

Only research and technology transfer projects funded through competitive calls for proposals are considered, both from public administrations (international, European, state and regional) and from the private sector (foundations, companies, etc.). Special consideration is given to the fact that the applicant has participated as the project's lead researcher or co-researcher.

As a general guideline for all disciplines in this area, to achieve the minimum 5 points required, applicants should have participated in a research or transfer project.

Through the account, individuals can specify their contribution to the project or projects, as well as the results of this activity and its quality.

Stays, mobility and internationalisation

Research stays involve the temporary relocation of the person from the institution where they are or have been contracted to another institution or centre to carry out research activities in collaboration with individuals or groups from the host university or centre. Applicants must provide evidence that they have completed the stay or stays and, in the description of the research activity carried out, they may indicate the results and their quality.

As a guideline, a twelve-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of three years full-time would be considered to obtain a positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as an associate professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Engineering and Architecture carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

SPECIFIC CRITERIA BY AREAS OF KNOWLEDGE: ACCREDITATION FOR FULL PROFESSORS (ACCREDITATION OF ADVANCED RESEARCH UNDER ACT 1/2003)

Humanities

The Specific Commission for Humanities applies general criteria when evaluating applications and issuing accreditations for full professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as a full professor, the applicant must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension or scientific leadership and management.

Research activity

To obtain accreditation for full professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this sub-dimension is carried out in line with the general criteria.

Research activity results

As a guideline, twenty contributions are considered necessary to achieve the required minimum score of 35 points, ten of which should be in level A or B journals, and of these ten contributions, four should be published in international journals or publishers. For the arts, these values can be complemented by quality indicators for the artistic work submitted.

Generally speaking, and as far as research results are concerned, preference will be given to books and book chapters and also to journal publications. All contributions are assessed according to the general quality criteria specified above.

Original contributions, in terms of subject matter and/or methodology, in which the applicant is the author and/or editor (in the case of books with multiple authors), and which are published by specialised publishers of accredited prestige, are given special consideration with regard to the publication of books and book chapters.

The Specific Commission for Humanities of the CAR defines three levels of quality to assess books and book chapters in this field. These levels are as follows:

Level	Description
A	International or national publishing house of the highest quality, occupying a privileged position in the directories of academic publishers within its discipline.
В	International or national publisher of a notable level of quality, occupying a prominent position in the directories of academic publishers within its discipline.
С	International or national publisher of a good standard of quality and with objective quality indexes within its discipline.

When making the assessment, besides the criteria of the specialists in each discipline, other quality indicators are taken into account, such as the rigour of the external review processes of the originals, the citations received, the specific contribution of the applicant, the reviews of which each contribution has been the subject, the inclusion in specialised bibliographies, the impact and originality.

Research monographs published by prestigious, accredited international publishers are given the highest consideration. Book chapters are classified according to the criteria mentioned above. In the event that the contribution consists of the publication of a collective volume, in addition to the previous criteria, the scientific contribution made by the applicant is assessed.

In the account of the research activity, the applicant can highlight the main indicators of the quality of these contributions.

Regarding articles in scientific journals, preference should be given to publications in journals that have undergone a peer review process and are listed in citation indexes such as those of Clarivate Analytics (in particular, the Social Sciences Citation Index and the Arts and Humanities Citation Index) and the Scientific Journal Rank (SJR) of Scopus, or in other similar bibliographic databases of recognised international prestige, as well as on platforms for the publication of research results such as Open Research Europe — provided that the peer review process has been completed.

To specify the effective impact of the research carried out, and whenever possible, the position of the journal in evaluation directories of journals that offer rankings by impact index or by other assessment criteria is taken into account, as well as the number of citations received by each article. The degree of creativity, thematic diversity and innovation in research and national or international projection are also assessed.

Analogous to books and book chapters, the Specific Commission for Humanities defines three levels of quality for articles (A, B and C), depending on the type of journal in which they have been published, and which, indicatively correspond to certain quartiles defined by international reference citation databases. These levels are defined as follows:

Level	Description
A	A national or international journal of the highest quality within its field that simultaneously fulfils the following conditions:
	 Contributions undergo a rigorous peer review process.
	 They are present in at least two directories and databases such as Web of Science —AHCI or JCR (Q1 or Q2)—, Scopus (Q1), CARHUS A, CIRC A or FECYT Quality Stamp Classification of Journals (Q1).
В	International or national journal that simultaneously meets the following conditions: — Contributions undergo a rigorous peer review process.
	 They are present in at least two directories and databases such as Web of Science —AHCI or JCR (Q3 or Q4)—, Scopus (Q2 or Q3), CARHUS B, CIRC B or Classification of Journals with FECYT Quality Seal (Q2).
С	A journal of good quality within its field, with a rigorous assessment system.

The Specific Commission for Humanities considers the criteria of specialists and the assessment of quality based on the citations received, the contribution of the applicant (in the case of co-authorship), impact, originality, thematic diversity, rigour in the review process and the variety of journals in which it has been published, among other quality indicators. When determining which of the three levels of quality the contribution in the form of an article corresponds to, the assessment of the article takes precedence over the assessment of the journal in which it has been published.

Critical editions, i.e. those with an introductory study and notes; specialised translations, provided they include a critical introduction, the edition of encyclopaedias or dictionaries that are not only of low circulation, and the coordination, edition or translation of texts that include preliminary studies and/or critical annotations will be taken into account, However, simple transcriptions will not be considered, unless they are accompanied by a critical judgement or a historical analysis of the document; conventional prologues and introductions; and cataloguing that does not incorporate theoretical, historical or art-historical studies that represent a perceptible advance in knowledge.

For exhibition catalogues, texts are considered provided that they are the result of specific research or represent an objective contribution to knowledge. However, curating an exhibition is considered a merit of transferability.

Under no circumstances does the Commission for Humanities assess reviews, opinion pieces, notes, letters to the editor and the like, unless exceptional relevance and impact is duly demonstrated.

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

When appropriate, and provided that the relevance and impact of the contributions made is demonstrated, the Specific Commission for Humanities may complement the criteria

established above with specific criteria pertaining to the different Arts departments and related to these departments. Specifically:

Arts departments

Artistic creation: contributions are accepted from all disciplines or creative practices within the areas of Fine Arts and related fields and within the Performing and Musical Arts (theatre, dance, performing music, interpretation, direction, stage design, scenography, etc.), provided that they represent an advancement in the field.

For exhibitions of artistic work, award-winning work, conservation or restoration projects and artistic projects, the object and the magnitude of the contribution (individual/collective, feature film/short film, real estate/movable property, integral projects, interdisciplinary projects, commissioned by a relevant entity, etc.) are assessed, as well as the relevance of the project (cultural heritage, BIC, etc.), and the degree of innovation; itinerancy (other exhibition spaces, festivals, competitions or similar events of relevance, screening rooms, etc.), the relevance of the curator and of the participating artists or researchers, and the link to relevant research projects awarded in a competitive public call for proposals. Criteria are also taken into account regarding the quality of the medium of dissemination; the type of exhibition space/event and its scope (international/national); the publication of the catalogue (length, relevance of the authors of the texts, translation into other languages, etc.); sponsors, producers, promoters or distributors; the type of call for entries and the form of award (type, amount, etc.); and the existence of a jury, an external committee, a monitoring commission or similar. Likewise, criteria regarding the repercussion of the contribution will be considered: identification and relevance of specialised media; bibliographic references included in books or catalogues, specialised magazines, academic bibliographies, audiovisual media, etc.; invitation to participate in workshops, conferences, etc., as well as awards and mentions. Therefore, clear evidence must be presented to identify all these aspects for this type of contribution.

Contributions in the field of the Performing Arts are assessed according to the relevance and degree of innovation of the theatrical, choreographic, musical or scenographic creation, the composition, direction, script, interpretation, instrumentation and design of the staging of the work; the type, object and magnitude of the contribution (original work, version or adaptation); in the case of interpretation, consideration is given to interpretative methodological innovation, the quality of the performance, the premiere and the impact in specialised media and the activities derived from the contribution, such as tours and concerts, the teaching of masterclasses, specialisation workshops, etc. Where individuals are participating as part of a group or company, consideration will also be given to the level of responsibility, as well as the level and relevance of the company; the relevance of the director and the participating performers, and the link to relevant research projects awarded in a competitive public call for proposals.

The quality of the medium of dissemination is assessed according to the quality of the type of venue (auditorium, theatre or other), its national and international exposure at competitions and festivals, and its itinerancy (other theatrical venues, festivals, competitions or similar events of relevance, screening rooms, etc.); the sponsors, producers, promoters or distributors of the project; the subsidies, the type of call for applications and the form of award (type, amount, etc.), and the relevance of the jury, the external committee, the monitoring commission or a similar figure. In addition, when assessing the impact of the contribution, the identification and relevance of specialised media is evaluated: bibliographic references in books or catalogues, specialised magazines, academic bibliographies, audiovisual media, archives or repositories; invitations to participate in workshops, conferences, etc., and awards and mentions.

In the Music department, contributions and their means of dissemination must meet the following criteria in order to be considered high impact: the relevance of the musical creation, composition, direction, performance, instrumentation, technologies and techniques used in the work, etc. Consideration is also given to the invention of new analogue or digital musical instruments, with equal attention to the level of innovation and relevance. For performance, consideration is given to methodological-interpretative innovation, the quality of the performance, the premiere and the impact in specialised media; activities derived from the contribution, such as tours and concerts, and the teaching of masterclasses, specialisation workshops, etc. When participating in orchestral groups, the level of responsibility in the performance will also be taken into account, as well as the level and relevance of the group. Consideration is also given to the quality of the venue (auditorium or other), its premiere and performance, the national and international profile at concerts and festivals, the prestige of the broadcasting medium and the institutions or companies that commission the project and how it is awarded. Likewise, works published in printed, phonographic or videographic format are assessed. In the first case, the prestige of the publisher is considered in accordance with the above. Otherwise, the prestige of the producers, distributors and record label will be taken into consideration, as well as that of the musical work, the conductor, the ensemble and the performers responsible for the recording; links to relevant research projects awarded in a competitive public call for applications; and prizes in national and international competitions or contests.

Musicology, in all its disciplinary fields, is assessed according to the criteria established by the Commission for Humanities for non-artistic disciplines.

Competitive projects

Only research and technology transfer projects funded in competitive selection processes are taken into account, both from public administrations (international, European, state and regional) and the private sector (foundations, companies, etc.), and their results and impact in the corresponding field are assessed. The number and relevance of the projects in which the applicant has participated is particularly valued, and in accordance with the area of specialisation.

To obtain the accreditation of full professor and the minimum 5 points required, the applicant must have been the lead researcher (LR) in a competitive research project at the state and/or international level. The degree of leadership and initiative in generating new projects is also valued.

Stays, mobility and internationalisation

The number and length of stays, the quality of the activities undertaken, the verifiable results and the progress made in establishing stable working networks are particularly valued, as well as the prestige of the host university or research centre in the field of specialisation.

As a guideline, a eighteen-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of six years full-time would be considered to obtain the positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as a full professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Humanities carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are

difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Scientific leadership and management

Merits corresponding to scientific leadership and management are assessed according to what is specified in the general criteria section. Contributions to doctoral thesis supervision, leadership in the management of teaching and research teams and university and scientific activities are assessed. Recognition and responsibility in scientific and technical organisations and committees (or similar) are also considered.

To obtain accreditation as a full professor, applicants must achieve a minimum of 50 points, of which 30 must be related to supervising doctoral theses. Any shortcomings in this area cannot be compensated for by merits corresponding to research and knowledge transfer or university teaching.

Applicants are valued for having led one or more coherent lines of research with a high profile in the field of Humanities and for having the ability to attract resources.

To obtain accreditation as a full professor, applicants must have supervised more than one doctoral thesis, at least one of which must have been supervised and defended by the applicant alone at the time of application. The lack of this requirement can only be compensated by other merits in very exceptional and justified cases.

Social Sciences

The Specific Commission for Social Sciences applies general criteria when evaluating applications and issuing accreditations for full professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as a full professor, the applicant must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension or scientific leadership and management.

Research activity

To obtain accreditation for full professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this sub-dimension is carried out in line with the general criteria.

Research activity results

Publications in high-quality journals and books that make a contribution in the field of Social Sciences are assessed for all purposes, including the results of the research activity. The degree of creativity, coherence and diversity of the lines of research, innovation and international projection are assessed. The quality of the contributions must be duly justified and accredited with indicators and evidence that allow them to be assessed.

In the account of the research activity, the applicant can highlight the main indicators of the quality of these contributions.

For co-authored contributions, justification must be provided and the applicant's significant participation must be clear, for example, using the main categories of the CrediT taxonomy. Consideration will be given to the order of the signature in relevant positions (first author, corresponding author, last author), according to the criteria of each discipline.

Twelve level A contributions are required to reach the minimum 35 points, according to the quality levels established below.

As for articles in scientific journals, level A contributions are those that have passed a rigorous peer review process and, preferably, are published in prestigious journals in the field of Social Sciences, or are ranked highly in citation indexes such as the first quartiles of the JCR and the SJR. Impact indicators from the same year of the publications, or the closest previous year available, and those relating to the areas of knowledge of the Social Sciences prevail. Indicators relating to related areas are also considered in the case of disciplines for which they are relevant.

The use of quartiles is a guiding criterion and does not in itself constitute a necessary or sufficient condition for considering a publication to be level A quality. For publication impact indicators, the Commission may use other indicators beyond the journal's placement in a given quartile, considering several additional elements, such as the number of citations, other bibliometric impact indicators of the contribution (taking into account relative positions within the discipline and/or the publication), inclusion in prestigious specialised lists (such as CARHUS Plus+, the FECYT seal, the ABS Academic Journal Guide, the ABDC Journal Quality List, the FNEGE rankings or the CNRS journal rankings, among others, at the discretion of the experts).

Articles available on research results publication platforms such as Open Research Europe can also be considered as level A contributions when they have completed the peer review process and present evidence of quality and academic impact.

Exceptionally high-quality articles, duly justified, may be considered by the Specific Commission for Social Sciences as equivalent to more than one category A contribution.

Book publications are considered to be level A if they are published by specialised publishers of national or international prestige, occupying a preferential position in the catalogues of academic publishers in their field, and if they have been subject to rigorous peer review. When defining whether contributions can be considered to be level A, the expert criteria of the assessors, the number of citations, the reviews to which the contribution has been subject, the inclusion in specialised bibliographies and other impact indicators are considered.

The highest consideration is given to research monographs published by internationally renowned publishers which, if the Commission believes it appropriate, may be considered equivalent to more than one level A contribution.

In the event that the contribution consists of the publication of a collective volume, in addition to the previous criteria, the scientific contribution made by the applicant is assessed. Only exceptionally are book chapters considered level A contributions.

Popular books and manuals are not considered research contributions.

Competitive projects

Applicants must have led at least one competitive research project at a national, European or international level in the field of Social Sciences. Competitive projects at the regional or local level are considered when they are comparable to those at the state level. Only in very justified cases can the absence of this condition be compensated for with other merits.

Participation is valued, without being considered a requirement, and especially the management of projects at the regional, state, European or international level. Participation in projects must involve an active and demonstrable contribution to results.

Stays, mobility and internationalisation

Stays in renowned research centres in the field of Social Sciences are valued, especially when they have resulted in publications or collaborations. As a guideline, a eighteen-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of six years full-time would be considered to obtain the positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as a full professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Social Sciences carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Scientific leadership and management

Merits corresponding to scientific leadership and management are assessed according to what is specified in the general criteria section.

To obtain accreditation as a full professor, applicants must achieve a minimum of 50 points, of which 30 must be related to supervising doctoral theses. Any shortcomings in this area cannot be compensated for by merits corresponding to research and knowledge transfer or university teaching.

Likewise, applicants must have supervised at least one doctoral thesis that has already been defended. Only in very justified exceptional cases can the absence of this condition be compensated for with other merits.

The contribution of the person to the supervision of teaching and research teams, of doctoral theses linked to their lines of research, and to the leadership and management of university and scientific activities, as well as the recognition and responsibility in scientific and technical organisations and committees (or similar) is assessed.

Consideration is given to the applicant's having led one or more coherent and promising lines of research, their ability to attract resources, including pre-doctoral and post-doctoral contracts, their activity in organising scientific meetings and conferences, awards, participation in internationally relevant committees and other outstanding merits, always within social sciences and in accordance with the specificities of each discipline.

Sciences

The Specific Commission for Sciences applies general criteria when evaluating applications and issuing accreditations for full professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as a full professor, the applicant must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension or scientific leadership and management.

Research activity

To obtain accreditation for full professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this sub-dimension is carried out in line with the general criteria. Applicants will have to present evidence of current research activity, in terms of both publications and supervised projects and doctoral theses.

Research activity results

Regarding the results of research activity, publications in journals are given priority. Books and book chapters and patents are also valued. As a guideline, the minimum requirement of 35 points is considered to be met by publishing 30 articles in high-quality scientific journals, at least three of which must have been published in the three years prior to the application.

As for the articles, publications in journals that have undergone a peer review evaluation process and are present in citation indexes such as the Science Citation Index Expanded of the JCR, the Scientific Journal Rank (SJR) or in other Open Research Europe databases are preferred, provided they have completed the peer review process. To determine the impact of these articles, among others, the relative position of the journal in these repositories organised by impact index and the number of citations each article has received are assessed. The rest of the articles in scientific journals are considered non-indexed, unless the quality is justified with sufficient evidence in the account of the research activity.

In the account of the research activity, the applicant must provide sufficient evidence of the quality of the articles that derive from a great scientific collaboration and, very especially, of their contribution to the work presented.

Original contributions in which the applicant is the author and/or editor (in the case of books with multiple authors), and which are published by specialised publishers of accredited prestige, are given special consideration with regard to the publication of books

and book chapters. In the account of the research activity, the applicant can highlight the main indicators of the quality of these contributions.

Competitive projects

Only research projects funded in competitive calls for proposals are considered, both from public administrations (international, European, state and regional) and from the private sector (foundations, companies, etc.), assessing their volume of funding, results and impact in the corresponding field. Particular value is placed, depending on the area of specialisation, on the number and importance of projects in which the applicant is or has been the lead researcher (LR)

Through the account, individuals can specify their contribution to the project or projects, as well as the results of this activity and its quality.

As a guideline, the minimum requirement of 5 points is considered to be obtained by having participated in three competitive research or transfer projects, of which it is necessary to demonstrate leadership in at least one of the projects, as lead researcher (LR). This last point is considered an essential requirement.

Stays, mobility and internationalisation

Research stays involve the temporary relocation of the person from the institution where they are or have been contracted to another institution or centre to carry out research activities in collaboration with individuals or groups from the host university or centre. Applicants must provide evidence that they have completed the stay or stays and, in the description of the research activity carried out, they may indicate the results and their quality.

As a guideline, a eighteen-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of six years full-time would be considered to obtain the positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as a full professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Experimental Sciences carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Scientific leadership and management

Merits corresponding to scientific leadership and management are assessed according to what is specified in the general criteria section. Contributions to doctoral thesis supervision, leadership in the management of teaching and research teams and university and scientific activities are assessed. Recognition and responsibility in scientific and technical organisations and committees (or similar) are also considered.

To obtain accreditation as a full professor, applicants must achieve a minimum of 50 points, of which 30 must be related to supervising doctoral theses. Any shortcomings in this area cannot be compensated for by merits corresponding to research and knowledge transfer or university teaching.

To obtain accreditation as a full professor, the applicant must have supervised no fewer than two doctoral theses.

Life Sciences

The Specific Commission for Life Sciences applies general criteria when evaluating applications and issuing accreditations for full professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as a full professor, the applicant must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension or scientific leadership and management.

Research activity

To obtain accreditation for full professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this sub-dimension is carried out in line with the general criteria. Applicants will have to present evidence of current research activity, in terms of both publications and supervised projects and doctoral theses.

Research activity results

Publications in indexed journals are given preference. Consideration may be given, although with much less weight, to topic-based reviews, books and book chapters that make a significant contribution to the consolidation and advancement of knowledge in the corresponding field.

As for articles in scientific journals, of the forty articles needed to obtain the minimum 35 points required in this section, around twenty should preferably belong to the first quartile of the corresponding category of the Journal Citation Reports (JCR), the Scientific Journal Rank (SJR) or other search Europe databases, once the peer review process has been completed. In approximately 50% of these twenty articles (ten articles), the applicant should be the corresponding author, the first signatory or the last signatory.

In the account of the research activity, the applicant must provide sufficient evidence of the quality of the articles that derive from a great scientific collaboration and, very especially, of their contribution to the work presented.

Competitive projects

Only research and technology transfer projects funded in competitive selection processes are taken into account, both from public administrations (international, European, state and regional) and the private sector (foundations, companies, etc.).

To achieve accreditation as a full professor and obtain the minimum of 5 points in this section, the applicant must have been lead researcher on three research projects, preferably one that is current or that has been completed in the last two years, and in at least one of which they must have been the sole lead researcher.

Through the account, applicants can specify their contribution to the project or projects, as well as the results of this activity and its quality.

Stays, mobility and internationalisation

Research stays involve the temporary relocation of the person from the institution where they are or have been contracted to another institution or centre to carry out research activities in collaboration with individuals or groups from the host university or centre. Applicants must provide evidence that they have completed the stay or stays and, in the description of the research activity carried out, they may indicate the results and their quality.

As a guideline, a eighteen-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight. As a guideline, three international patents in use are worth 10 points in this section.

A maximum of 20 points can be obtained in this sub-dimension. As for knowledge transfer, only projects, contracts, agreements, etc., and results not linked to competitive calls for proposals are valued, and these are assessed according to the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of six years full-time would be considered to obtain the positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used.

To obtain accreditation as a full professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Life Sciences carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Scientific leadership and management

Merits corresponding to scientific leadership and management are assessed according to what is specified in the general criteria section. Contributions to doctoral thesis supervision, leadership in the management of teaching and research teams and university and scientific activities are assessed. Recognition and responsibility in scientific and technical organisations and committees (or similar) are also considered.

To obtain accreditation as a full professor, applicants must achieve a minimum of 50 points, of which 30 must be related to supervising doctoral theses. Any shortcomings in this area cannot be compensated for by merits corresponding to research and knowledge transfer or university teaching.

As a guideline, to obtain 30 points in the doctoral theses section, the applicant must have supervised no fewer than three theses.

Medical and Health Sciences

The Specific Commission for Health and Medical Sciences applies general criteria when evaluating applications and issuing accreditations for full professors. The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as a full professor, the applicant must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension or scientific leadership and management.

Research activity

To obtain accreditation for full professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this sub-dimension is carried out in line with the general criteria. Applicants will have to present evidence of current research activity, in terms of both publications and supervised projects and doctoral theses.

Research activity results

Publications in indexed journals are given preference. Consideration may be given, although with much less weight, to topic-based reviews, books and book chapters that make a significant contribution to the consolidation and advancement of knowledge in the corresponding field.

As for articles in scientific journals, of the forty articles needed to obtain the minimum 35 points required in this section, around twenty should belong to the first quartile of the corresponding category of the Journal Citation Reports (JCR), the Scientific Journal Rank (SJR) or other search Europe databases, once the peer review process has been completed. In approximately 50% of these twenty articles (ten articles), the applicant should be the corresponding author, the first signatory or the last signatory.

In the account of the research activity, the applicant must provide sufficient evidence of the quality of the articles that derive from a great scientific collaboration and, very especially, of their contribution to the work presented.

Competitive projects

Only research and technology transfer projects funded in competitive selection processes are taken into account, both from public administrations (international, European, state and regional) and the private sector (foundations, companies, etc.).

To achieve accreditation as a full professor and obtain the minimum of 5 points in this section, the applicant must have been lead researcher on three research projects, preferably one that is current or that has been completed in the last two years, and in at least one of which they must have been the sole lead researcher.

Through the account, applicants can specify their contribution to the project or projects, as well as the results of this activity and its quality.

Stays, mobility and internationalisation

Research stays involve the temporary relocation of the person from the institution where they are or have been contracted to another institution or centre to carry out research activities in collaboration with individuals or groups from the host university or centre. Applicants must provide evidence that they have completed the stay or stays and, in the description of the research activity carried out, they may indicate the results and their quality.

As a guideline, a eighteen-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight. As a guideline, three patents in use are worth 10 points in this section.

A maximum of 20 points can be obtained in this sub-dimension. As for knowledge transfer, only projects, contracts, agreements, etc., and results not linked to competitive calls for proposals are valued, and these are assessed according to the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of six years full-time (excluding the period of specialised training as a resident doctor in the field of medicine) that has not been carried out simultaneously with full-time university studies would allow for a positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as a full professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Health and Medical Sciences carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Scientific leadership and management

Merits corresponding to scientific leadership and management are assessed according to what is specified in the general criteria section. Contributions to doctoral thesis supervision, leadership in the management of teaching and research teams and university and scientific activities are assessed. Recognition and responsibility in scientific and technical organisations and committees (or similar) are also considered.

To obtain accreditation as a full professor, applicants must achieve a minimum of 50 points, of which 30 must be related to supervising doctoral theses. Any shortcomings in this area cannot be compensated for by merits corresponding to research and knowledge transfer or university teaching.

As a guideline, to obtain 30 points in the doctoral theses section, the applicant must have supervised no fewer than three theses, of which at least one must be as the sole supervisor.

Engineering and Architecture

The Specific Commission for Engineering and Architecture applies general criteria when evaluating applications and issuing accreditations for full professors and full professor (contract post). The general criteria for this field of knowledge are specified below.

Research and transfer

To obtain accreditation as a full professor, the applicant must obtain a minimum of 50 points. The sub-dimensions assessed are research activity and knowledge and technology transfer and professional activity. Merit in this dimension cannot be offset by merit in the university teaching dimension or scientific leadership and management.

Research activity

To obtain accreditation for full professors, a minimum of 40 points must be achieved in this sub-dimension. The results of research activity are assessed, as well as competitive projects, and periods of study, mobility and internationalisation. The assessment of this sub-dimension is carried out in line with the general criteria.

As a guideline, the contribution of 24 articles and the supervision of one competitive project as lead researcher, or two as co-lead researcher, with the characteristics and quality indicated in the following sections, may be considered sufficient to achieve the minimum score required in the sections on research activity results (35 points) and competitive projects (5 points). However, these scores are not enough to reach the minimum required in research (50 points) and must be complemented with additional merits from the previous sections or from stays, mobility and internationalisation, knowledge and technology transfer or professional activity.

Research activity results

Regarding the results of research activity, publications in journals are given priority. Books and book chapters are also valued. All contributions are assessed according to the general quality criteria specified above.

As a general guideline for all disciplines in this field, 24 quality articles in journals in the applicant's field of specialisation are considered necessary to achieve the minimum score of 35 points. Particular consideration is given to the coherence, originality and relevance of the publications and their independence. For scientific articles, the Commission will especially consider the applicant's contribution, the number of citations, the number of authors and the order in which they are listed.

For disciplines in the field of Engineering and Architecture, the Commission will use quality indicators that are specific to these disciplines and accepted by their academic, scientific and professional communities. For example, the aim of this section in the case of Architecture is to measure the impact of a researcher's activity among the specialists who

make up the discipline. The capacity of a reflective professional to contribute, through their contributions, to the advancement and shaping of knowledge is measured in this sense. These contributions can be evaluated as publications insofar as they draw precise guidelines, are the object of reflective conceptualisation and have an impact on the evolution of the world of architecture.

Consequently, the account of research activity becomes important when it comes to declaring or demonstrating the quality and impact of scientific contributions, especially when they do not meet the preferred evaluation criteria and in disciplines with their own indicators.

In the account of the research activity, the applicant must also provide sufficient evidence of the quality of the articles that derive from a great scientific collaboration and, very especially, of their contribution to the work presented.

Conference proceedings published with ISSN are not considered journal publications, even if they are indexed in SCIE, SSCI or AHCI. These conference proceedings, as well as those referenced in databases such as the Conference Proceedings Citation Index and similar, are only considered complementary to publications in indexed journals. However, in the field of information and communication technologies, works referenced in relevant positions in the GGS (<u>GII-GRIN-SCIE</u>) or <u>ICORE</u> ranking can be considered.

Original contributions in which the applicant is the author and/or editor (in the case of books with multiple authors), and which are published by specialised publishers of accredited prestige, are given special consideration with regard to the publication of books and book chapters. In the account of the research activity, the applicant can highlight the main indicators of the quality of these contributions.

Competitive projects

Only research and technology transfer projects funded through competitive calls for proposals are considered, both from public administrations (international, European, state and regional) and from the private sector (foundations, companies, etc.). Special consideration is given to the fact that the applicant has participated as the project's lead researcher.

As a general guideline for all disciplines in this field, to achieve the minimum 5 points required it is considered necessary to have led (as lead researcher) one competitive research or transfer project, or two projects if they were led as co-lead researcher.

Through the account, individuals can specify their contribution to the project or projects, as well as the results of this activity and its quality.

Stays, mobility and internationalisation

Research stays involve the temporary relocation of the person from the institution where they are or have been contracted to another institution or centre to carry out research activities in collaboration with individuals or groups from the host university or centre. Applicants must provide evidence that they have completed the stay or stays and, in the description of the research activity carried out, they may indicate the results and their quality.

As a guideline, a eighteen-month post-doctoral stay with verifiable results in one or more centres of recognised prestige would be worth 10 points in this section.

Knowledge and technology transfer and professional activity

Patents are assessed to see if they have been transferred or licensed, which must be demonstrated by means of a sales contract or a licence agreement. Patents granted without being put to use are only assessed if the granting has been carried out with a prior examination (type B2) and they have not been abandoned. The extent of the patent protection (national, European or international) is considered and the patent with greater protection is given more weight.

Projects, contracts, agreements, etc., and the results of knowledge transfer not linked to competitive calls and professional activity are assessed in accordance with what is indicated in the general criteria. Applicants may indicate the type of participation, contribution, and the quality and impact of the results in the account of the research activity.

The professional activity must be directly related to the applicant's field of specialisation. The extent of this activity and its relevance to research and teaching activities will be assessed.

As a guideline, relevant professional experience of six years full-time would be considered to obtain the positive assessment (10 points) in this section.

University teaching

To assess the merits linked to university teaching activity, the quality criteria and the minimum number of credits (hours) taught specified in the general criteria section are used. To obtain accreditation as a full professor, applicants must obtain a minimum of 50 points, of which 40 must be linked to the track record and quality of university teaching.

Positive assessments of the teaching activity available to the applicant are recognised, provided that they have been carried out in accordance with a university teaching manual certified by AQU Catalunya or similar programmes from the other member agencies of the REACU network. Consequently, as a general rule, individuals hired by a Catalan university must first submit their teaching activity for assessment through their university. Only in cases where this is not possible does the Specific Commission for Engineering and Architecture carry out the assessment of teaching merits.

Those people who can demonstrate exceptional research results and who have developed their career mainly in a non-university institution dedicated to research, or in a foreign university in which the calculation and measurement instruments of teaching activity are difficult to transfer to the Catalan Higher Education System, can obtain accreditation without the need to meet the set of requirements and merits of teaching activity, once the corresponding specific commissions of the CAR have verified these facts.

Scientific leadership and management

Merits corresponding to scientific leadership and management are assessed according to what is specified in the general criteria section. Contributions to doctoral thesis supervision, leadership in the management of teaching and research teams and university and scientific activities are assessed. Recognition and responsibility in scientific and technical organisations and committees (or similar) are also considered.

To obtain accreditation as a full professor, applicants must achieve a minimum of 50 points, of which 30 must be related to supervising doctoral theses. Any shortcomings in this area cannot be compensated for by merits corresponding to research and knowledge transfer or university teaching.

As a general guideline for all disciplines in this field, the minimum number of points required for the supervision of doctoral theses is considered to be 30. This can be achieved by supervising two doctoral theses as sole supervisor or the equivalent number in the case of co-supervision, bearing in mind that the supervision merits of all groups (15) must have been obtained. For example, one doctoral thesis as sole supervisor and two as co-supervisor with another co-supervisor would allow the minimum score of 30 points to be reached. However, this score is not enough to reach the minimum required for scientific leadership and management (50 points) and must be complemented with additional merits in the supervision of doctoral theses or the management of teaching and research teams, leadership in the field of university and scientific administration and management, and recognition and responsibility in scientific organisations and scientific and technical committees.

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