

Notice no. 2140/2019

International tender for Assistant Professor for disciplinary / scientific subareas:

**Applied Informatics and Programming Technologies/ Information Systems and Software Engineering/ Computing Systems and Human-Computer Interaction**

Public notice of the opening of an international tender, by the University of Trás-os-Montes and Alto Douro (UTAD), for the period of 30 working days, from the day immediately following the publication of this notice in Diário da República [Official Journal of the Portuguese Republic], hereinafter referred to as DR, for a position to be held under a public service employment contract as Assistant Professor, in the disciplinary/scientific sub-areas of Applied Informatics and Programming Technologies/ Information Systems and Software Engineering/ Computing Systems and Human-Computer Interaction, integrated in the disciplinary/ scientific area of Informatics Engineering, in UTAD, in the pursuant to Articles 37 to 51, 61 and 62 A of the Estatuto da Carreira Docente Universitária [University Teaching Career Statute], republished by Decree-Law no. 205/2009, of 31 August, hereinafter referred to as ECDU, and applicable legislation, namely Regulation no. 106/2019 – Regulamento Geral de Concursos para Recrutamento de Professores Catedráticos, Associados e Auxiliares da UTAD [General Regulation on the Recruitment of Full, Associate and Assistant Professors of UTAD], published in DR on January 25, 2019.

In addition to the duties to be performed at UTAD, the Assistant Professor should also be able to develop research activities at one of the research units or poles.

The recruiter shall enter into a public service employment contract of unspecified duration, in the category for which this tender was opened, with a trial period of five years. The tender is especially aimed at young doctorates of high potential and research capacity who wish to enter the university teaching career.

The present tender is opened under the programme contract to support the development of R & D activities between FCT, IP and UTAD and in accordance with Article 28 (no.4) of the Regulation on Scientific Employment [Regulamento do Emprego Científico], hereinafter referred to as REC, published in DR by Regulation No. 607-A / 2017 of 22 November.

In accordance with articles 37 to 51 of the ECDU and other applicable legislation, and with the provisions of article 8 of the General Regulation of Competitions for the Recruitment of Full Professors, Associates and Auxiliaries of UTAD, hereinafter referred to as the Regulation, the following rules shall apply:

I- Rector's authorization order

The present tender was opened by order of the Rector of UTAD, on February 6, 2019, after the execution of the aforementioned programme contract between FCT, IP and UTAD, the confirmation of the existence of an adequate budget and that the position is included in the

personnel map of the University and characterized there, so that the holder must carry out the teaching and research activities assigned to an Assistant Professor of UTAD.

## II- Place of work

University of Trás-os-Montes and Alto Douro, Quinta de Prados, 5000-801 Vila Real, Portugal

## III- Admission requirements

III.1 - Pursuant to article 41-A of the ECDU, only those who hold a PhD degree may be admitted to this tender.

III.2 - The provisions of Chapter VI of the Regulation shall apply in relation to the proof and fulfillment of the admission and exclusion requirements of the candidates.

III.3 - If the doctorate has been conferred by a foreign educational institution, it must comply with the provisions of Decree-Law no. 341/2007, of October 12, and the formalities established there must be fulfilled until the date of the deadline for the application.

## IV - Admission requirements in absolute merit

IV.1 - The provisions of Article 10 of Chapter III of the Regulation apply to the admission of candidates to absolute merit.

IV.2 - The Jury will deliberate on its approval or rejection in absolute merit, by a justified nominal vote where no abstentions are admitted.

IV.3 - It is considered approved in absolute merit the candidate who obtains a favorable vote of more than half of the jury members voting.

IV.4 - The vote unfavorable in absolute merit must be based on one or more of the following circumstances:

- a) The candidate's scientific curriculum is manifestly outside the disciplinary/ scientific sub-areas of the tender and/ or
- b) The branch of knowledge and/ or specialty in which the doctoral candidate's qualification was conferred is not shown to be suitable for the minimally adequate exercise of teaching duties in the disciplinary sub-areas for which the tender was opened and this fault is not considered to be supplied by other training courses held by the applicant and/ or
- c) The relevance, quality and timeliness of the curriculum vitae of the candidate, and the most relevant and high impact academic contributions selected by the candidate, if they prove to be clearly insufficient for the minimally adequate exercise of teaching duties at UTAD and/ or
- d) The candidate has not published in the last 5 (five) years at least 5 (five) articles or chapters, as author or coauthor, in publications indexed in Scopus, relevant to the disciplinary/scientific subareas of the tender.

V- Valuation parameters and ranking in relative merit, respective weighting and final valuation system.

V.1 - The present tender is designed to assess the capacity and performance of candidates in the different aspects that, according to article 4 of the ECDU, integrate all the functions to be performed if, following the tender, they come to be hired. Under article 4 of the ECDU, it is generally the responsibility of university teachers to:

- a) Perform activities of scientific research, cultural creation and/ or technological development;
- b) Provide the teaching service distributed to them and supervise and guide the students;
- c) Participate in tasks of university extension, scientific dissemination and economic and social knowledge appreciation;
- d) Participate in the management of their respective university institutions;
- e) Participate in other tasks distributed by the competent management bodies and included in the scope of university teaching activity.

V.2 - The selection method to be used is the curricular evaluation. The curricular evaluation, taking into account the general functions committed to university teachers by art. 4 of the ECDU, focuses on the following aspects:

- A. Pedagogical capacity
- B. Research
- C. Other relevant activities

V.3 - The curricular evaluation of the various candidates in each of these aspects must take into account the disciplinary/ scientific sub-areas of the tender.

V.4 - The elements and parameters to be taken into account in the curricular evaluation of the candidates in each of the aspects listed in V.2 and the weighting and punctuation to be assigned to each element in the final classification are those that are discriminated below, given particular importance to the relevance, quality and timeliness of the Curriculum Vitae of the candidate and to the most relevant and high impact academic contributions selected by the candidate.

V.5 - Mode of operation of the Jury

Once final candidates have been identified in absolute merit, on the basis of section IV, each member of the jury carries out his or her evaluation exercise, punctuating each candidate in relation to each item of the elements and parameters of the curricular evaluation referred to in V.4 and in relation to the public hearing referred to in VII on a scale of 0 to 100 points, taking into account the approved criteria for each element and parameter, following the procedures referred to in V.5.I, V.5.II and V.5.III and taking into account the preferential parameters (VI).

V.5.I - The classification of the curricular evaluation (C-AC) is obtained by the formula, with rounding to the tenths:

$$\mathbf{C-AC = C-CP + C-DC + C-AR}$$

Being,

C-CP the final score of the Pedagogical Capacity element on a standard scale so as not to exceed the weight of 40% (scale from 0 to 100) in the classification of curricular evaluation:

$$C-CP = [40 \times (pA.1 + pA.2 + pA.3 + pA.4)] / [40 + (pA.1 + pA.2 + pA.3 + pA.4)]$$

Where pA.1, pA.2, pA.3 and pA.4 are the scores of the items of the CP element, obtained by applying the associated scores (V.5.I.a).

C-DC the final score of the Scientific Performance element on a standard scale so as not to exceed the weight of 50% (scale from 0 to 100) in the classification of curricular evaluation:

$$C-DC = [50 \times (pB.1 + pB.2 + pB.3 + pB.4)] / [50 + (pB.1 + pB.2 + pB.3 + pB.4)]$$

Where pB.1, pB.2, pB.3 and pB.4 are the scores of items of the DC element, obtained by applying the associated scores (V.5.I.a).

C-AR the final score of the Other Relevant Activities element on a standard scale so as not to exceed the weight of 10% (scale from 0 to 100) in the classification of curricular evaluation:

$$C-AR = [10 \times (pC.1 + pC.2)] / [10 + (pC.1 + pC.2)]$$

Where pC.1 and pC.2 are the scores of the items of the AR element, obtained by applying the associated scores (V.5.I.a).

V.5.I.a. - Weights of the aspects and the scores of the items of the curricular evaluation (AC)

A. Pedagogical capacity (CP element). Weighting of 40%.

A.1 Teaching activities in higher education institutions

A.1.1 Teaching of curricular units (per semester):

- In the sub-areas of the tender and corresponding to the preferential parameters (VI):
  - o Up to 6 h/week/year: 4 to 8 points per school year;
  - o In addition to 6 hours/week/year: 0.5 points/hour per school year.
- In the sub-areas of the tender:
  - o Up to 6 h/week/year: 4 points per school year;
  - o In addition to 6 h/week/year: 0.25 points/hour per school year.
- In other areas or sub-areas:
  - o Up to 6 h/week/year: 1 to 2 points for each school year;
  - o In addition to 6 h/week/year: 0.2 points/hour per school year.

A.1.2 Coordination of curricular units (UC):

- In the sub-areas of the tender - 4 points/UC/school year.
- In other areas or sub-areas - 2 points/UC/school year.

## A.2. Production of pedagogical material

A.2.1 Textbooks of pedagogical scope with ISBN, excluding publications in didactic series of Universities or other HEIs:

- In the sub-areas of the tender and corresponding to the preferential parameters (VI) - 4 to 8 points per book.
- In the tender sub-areas - 2 to 4 points per book.
- In other areas or sub-areas - 0 to 2 points per book.

A.2.2 Production of other relevant pedagogical material, including publications in didactic series of Universities or other HEIs:

- In the sub-areas of the tender and corresponding to the preferential parameters (VI) - 0.5 to 2 points per material;
- In the sub-areas of the tender - 0.25 to 1 point per material;
- In other areas or sub-areas - 0 to 0.25 points per material.

A.2.3 Other pedagogical material: 0 to 0.25 points per material.

## A.3 Coordination and participation in pedagogical projects

A.3.1 Creation or reinforcement of laboratory facilities or other of experimental and/or computational nature to teaching support: 0,5 to 2 points per activity.

A.3.2 Creation of study plans, duly accredited and/or implemented: 0.5 to 2 points per activity.

A.3.3 Other coordination activities and participation in pedagogical projects: 0.25 to 1 point per activity.

## A.4 Student supervision and guidance, with completed examination.

A.4.1 Supervision or joint supervision of PhD students: Supervision/joint supervision - 8 points per thesis.

A.4.2 Supervision or joint supervision of master's students: Supervision/joint supervision: 4 points per dissertation.

A.4.3 Supervision or joint supervision of undergraduate students (internships, projects): Supervision/joint supervision - 0.25 points per work.

A.4.4 Supervision or joint supervision of final degree and/or master's degree students before Bologna: Supervision/joint supervision - 0.2 points per work.

A.4.5 Other student supervisions: Supervision/joint supervision - 0.1 points per work.

## B. Scientific Performance (DC Element). 50% weight. Evaluation parameters:

### B.1 Scientific, cultural or technological production

B.1.1 Patent registration in production stage: 4 to 8 points.

B.1.2 Scientific books (not resulting from papers of conference proceedings):

- In the sub-areas of the tender and corresponding to the preferential parameters (VI)
  - National or international book: 4 to 8 points;
- In other areas or sub-areas - National or international book: 1 to 4 points.

#### B.1.3 Chapter in scientific book (not resulting from papers of conference proceedings)

- In the sub-areas of the tender and corresponding to the preferential parameters (VI):
  - o First or last author – 2 to 4 points;
  - o Author in intermediate position – 0.5 to 1.5 points.
- In other areas or sub-areas:
  - o First or last author – 2 points;
  - o Author in intermediate position - 1 point.

#### B.1.4 Papers in indexed journals (according to the Scopus source)

- In the sub-areas of the tender and corresponding to the preferential parameters (VI): 8 to 16 points per paper;
- In the sub-areas of the tender and not corresponding to the preferential parameters (VI): 2 to 6 points per paper;
- In other areas or sub-areas: 0 to 2 points per paper.

#### B.1.5 Papers in journals indexed to other databases

- In the sub-areas of the tender: 2 to 4 points per paper;
- In other areas or sub-areas: 0 to 2 points per paper.

#### B.1.6 Papers in indexed conference proceedings (according to the Scopus source)

- In the sub-areas of the tender: 2 to 4 points per paper;
- In other areas or sub-areas: 0 to 2 points per paper.

#### B.1.7 Papers in journals or non-indexed conference proceedings

- In the sub-areas of the tender and corresponding to the preferential parameters (VI): 0.5 to 1 points;
- In other areas or sub-areas: 0 to 0.5 points.

#### B.1.8 Creation of works within artistic areas: 0 to 2 points.

#### B.1.9 Other papers or works: 0.25 to 2 points.

### B.2 Coordination and participation in scientific projects of cultural, artistic or technological development and supervision or joint supervision of fellowships

#### B.2.1 Coordination or participation in projects funded on a competitive basis by public funds through national or international agencies:

- Coordination – 6 to 10 points per project;

- Participation – 2 to 4 points per project.

B.2.2 Coordination or participation in other funded projects:

- Coordination – 3 to 5 points per project;
- Participation – 1 to 2 points per project.

B.2.3 Supervision or joint supervision of postdoctoral fellows: 10 points per fellow.

B.2.4 Supervision or joint supervision of doctoral fellows: 8 points per fellow.

B.2.5 Supervision or joint supervision of research fellows: 6 points per fellow.

B.2.6 Supervision or joint supervision of science and technology management fellows: 4 points per fellow.

B.2.7 Supervision or joint supervision of research technician fellows: 2 points per fellow.

B.2.8 Supervision or joint supervision of scientific initiation studentships: 1 point per fellow/student.

B.2.9 Supervision or joint supervision of other fellows: 0 to 1 point per fellow.

B.3 Recognition by the scientific community and society in general

B.3.1 Prizes of scientific or artistic merit: 0 to 2 points per prize.

B.3.2 Coordination or participation in organising or scientific commissions of scientific events: 0 to 2 points for coordination or participation.

B.3.3 Lectures at scientific meetings, by invitation:

- Guest speaker in sub-areas of the tender – 2 a 6 points;
- Guest speaker in other subáreas – 1 to 2 points.

B.3.4 Public exhibition of artistic work: 0 to 1 points.

B.3.5 Member of the jury of public doctoral examinations in higher education institutions:

- Arguer - 10 points;
- Non-arguer member - 5 points.

B.3.6 Member of the jury of public examinations of masters in institutions of higher education:

- Arguer - 5 points;
- Non-arguer member - 2 points.

B.3.7 Member of the jury of other public examinations in higher education institutions:

- Arguer - 2 points;
- Non-arguer member - 1 point.

B.3.8 Other activities with community recognition: 0.25 to 1 point per activity.

B.4 Participation, coordination, leadership and dynamisation of research activity.

B.4.1 Coordination Activity: 0.1 to 1 points per activity

B.4.2 Member of the R&D centre or pole in the disciplinary / scientific area of the tender (in 2018):

- 50 points for integrated member in a R&D centre or pole with classification of excellent;
- 40 points for integrated member in R&D centre or pole with classification of very good;
- 30 points for integrated member in R&D centre or pole with classification of good;
- 30 points for collaborator in R&D centre or pole with classification of excellent;
- 20 points for collaborator in R&D centre or pole with classification of very good;
- 15 points for collaborator in R&D centre or pole with classification of good.

C. Other relevant activities (AR). 10% weight. Evaluation Parameters:

C.1 Extension

C.1.1 Transfer of patents to the business environment: 2 points per patent.

C.1.2 Papers of scientific, cultural, artistic or technological dissemination (not included in teaching and research): 0.25 to 2 points per paper.

C.1.3 Elaboration of technical regulations: 0.25 to 2 points per regulation.

C.1.4 Participation in activities involving the business community and the public sector, including provision of services, consultancy and expert assessments: 0.25 to 2 points per provision of services (annual basis).

C.1.5 Participation in activities involving extension: 0.5 to 4 points per activity (annual basis).

C.2 Management

C.2.1 Management activity in higher education or research institutions or in other scientific, technological or cultural entities: 2 to 4 points per activity (annual basis).

C.2.2 Positions and temporary tasks assigned by the relevant management bodies in higher education or research institutions or in other scientific, technological or cultural entities: 1 to 2 points per activity (annual basis).

C.2.3 Academic evaluation activities, namely in the scope of examinations and tenders: 0, 5 to 1 point per activity.

C.2.4 Other positions or management tasks: 0.5 to 1 point per activity (annual basis).

The weights of the A, B and C aspects of curricular evaluation (AC) totals 100%



V.5.II - Once the classification of the curricular evaluation is obtained, on the basis of point V.5.I and using the preferential parameters indicated in point VI as the qualification criterion, the jury will order these candidates following the procedure established in article 20 of the Regulation, selecting the three best classified for the public hearing.

V.5.III - Classification of Public Hearing. In the evaluation of the Public Hearing, the parameters Quality of Oral Expression in Portuguese Language and Interpersonal Skills (E.1), Motivation of the Application (E.2) and Training Scope (E.3) are considered, being the weights of the element in the final classification and the weights of the parameters in the classification of the elements provided in V.5.III.a. The final classification of the public hearing (C-AP) will be obtained by the following formula:

$$C-AP = (35\% \times pE.1 + 30\% \times pE.2 + 35\% \times pE.3)$$

At where:

pE.1 is the classification of the parameter Quality of Oral Expression in Portuguese Language and Interpersonal Skills (E.1), scored from 0 to 100 and weighting 35% in the Public Hearing classification

pE.2 is the classification of the parameter Motivation of the Application (E.2), scored from 0 to 100 and having a weighting of 30% in the Public Hearing classification

pE.3 is the classification of the parameter Training Scope (E.3), scored from 0 to 100 and weighting 35% in the Public Hearing classification.

V.5.IV - For the candidates subject to public hearing, a new calculation of the classification must be carried out, being the Final Result (RF) of the evaluation of each candidate obtained by the formula, rounded to the tenths:

$$RF = 70\% C-AC + 30\% C-AP$$

At where

C-AC is the classification of the Curricular Evaluation obtained as described in V.5.I, having the weighting in the final classification of 70% and

C-AP the classification of Public Hearing, obtained as described in V.5.III, having the weight in the final classification of 30%.

V.6 - Once final candidates have been identified on absolute merit, on the basis of point V.5.IV, the jury will proceed to the ranking of these candidates following the procedure established in article 20 of the Regulation. The preferential parameters indicated in point VI shall be used as qualification criteria in the candidates ranking.

## VI- Preferential parameters

The candidate with a recent PhD, having a high potential and research capacity who intends to join the university teaching career, with a curriculum vitae that suits the disciplinary/scientific area and sub-areas of the tender, with particular emphasis on the scientific production of the candidate in the last 5 (five) years.

Being an integrated member of a R&D centre or pole in the disciplinary/scientific area and sub-areas of the tender.

Teaching of curricular units and production of pedagogical material, such as books and other pedagogical publications, in the disciplinary/scientific sub-areas of the tender, as broken down in V.5.I.a, aspect A.

Publications of books and chapters of scientific books, as well as of all other scientific, cultural or technological production, in disciplinary/scientific sub-areas of the tender, broken down in V.5.I.a, aspect B.

If the candidate is not a native speaker of the Portuguese language, she/he must have language skills in this language.

## VII- Public Hearings

VII.1 - The evaluation by public hearings, in addition to the curricular evaluation, will be carried out to the candidates who, having been approved in absolute merit, according to point IV, are ranked in the first three positions of the curricular evaluation (C-AC), in accordance with point V.I.

VII.2 - Public hearings are exclusively intended to clarify what is stated in the curriculum vitae submitted by the candidates, according to paragraph 4 b) of article 50 of the ECDU.

VII.3 - The public hearings of the candidates identified in VIII.1 will take place between the 30th day and the 70th day after the deadline for submission of the application, with all candidates being informed, at least 5 days, of the date and place where such public hearings will take place.

VII.4 - The jury may also request candidates to hand over supplementary documentation related to the curriculum submitted, on the basis of paragraph 4 a) of article 50 of the ECDU.

## VIII - Submission of applications

VIII.1 - The documents that instruct the application must be submitted up to the 30th business day counted from the date of publication of this notice, in Diário da República.

VIII.2 - The documents referred to in the previous point must be submitted electronically as indicated on the website of the Human Resources Division of UTAD:

<https://www.utad.pt/srh/>

## IX- Application

The application must be accompanied by the form referred to in article 33 of the General Regulation of Competitions for the Recruitment of Full Professors, Associates and Auxiliaries of UTAD, with the following documents.

**Only will be accepted applications submitted, with corresponding documents, on the electronic platform available at <https://www.campus.utad.pt/CDES/>**

IX.1 - In the application form of this notice, which is available on the electronic platform of applications, the candidate must express her/his consent so that the communications and notifications, in the context of the tender procedure, can be sent by electronic mail for the provided e-mail address.

IX.2 - In the application, the following documents must be submitted:

a) Curriculum vitae of the candidate, containing the information required for the application review, in line with the aspects and criteria stated in V.4 and V.5 of the notice, also including the "Scopus Author ID", that allows to identify the list of papers, the number of respective citations and the H-index according to the source Scopus.

The candidate should structure the curriculum vitae in order to facilitate the prompt and complete identification of her/his contribution in each of the sub-points of point V.4, as well as demonstrate compliance with the quantitative criteria identified in point IV.4;

b) Electronic version (.pdf) of the submitted documents;

c) Other work that the candidate considers relevant for the jury's consideration;

d) Statement on honor that the candidate meets the requirements for admission to the tender, as set forth in the notice and in the law, attached to this notice and available on the electronic platform of applications.

X- Language

The documents that instruct the application must be submitted in Portuguese or English languages.

XI- Constitution of the Jury

Pursuant to Articles 45 and 46 of the ECDU and Article 14 of the Regulation, the jury shall be composed of the following members:

President, by delegation:

Artur Fernando Arede Correia Cristóvão, University of Trás-os-Montes and Alto Douro

Members:

Gabriel de Sousa Torcato David, Associate Professor, Faculdade de Engenharia da Universidade do Porto

João Miguel Lobo Fernandes, Full Professor, Universidade do Minho

Armando José Formoso de Pinho, Associate Professor with Aggregation, da Universidade de Aveiro

Luís Filipe Barbosa de Almeida Alexandre, Full Professor, Universidade da Beira Interior

José Afonso Moreno Bulas Cruz, Full Professor, University of Trás-os-Montes and Alto Douro

João Manuel Pereira Barroso, Associate Professor with Aggregation, University of Trás-os-Montes and Alto Douro

Vítor Manuel de Jesus Filipe, Associate Professor with Aggregation, University of Trás-os-Montes and Alto Douro

In compliance with paragraph h) of the Article 9 of the Constitution, the University of Trás-os-Montes and Alto Douro, as an employer, actively promotes a policy of equal opportunities for men and women in access to employment and professional advancement, scrupulously providing for the avoidance of all forms of discrimination.

## ATTACHMENT

### Declaration on honor

... (*name*), candidate for the tender for the recruitment of a position of Assistant Professor on the staff map of UTAD, declares, on an honorable basis, that she/he meets the requirements set forth in article 17 of the General Labor Law in Public Functions, approved by Law no. 35/2014 of June 20, as well as those required in article 41-A of the Statute of the University Teaching Career, republished by Decree-Law No. 205/2009, of August 31, that fulfills all the requirements for admission to this tender, which are laid down in the Law, in particular in Chapter IV of the Statute of the University Teaching Career, the Regulations, in particular in the General Regulations of Competitions for the Recruitment of Full Professors, Associates and Auxiliaries of UTAD, and in this notice.

The declarant is fully aware that the provision of false declarations implies exclusion from this tender, without prejudice to notify the competent authority for the purpose of criminal prosecution.

The declarant is fully aware that if she/he is set in a place eligible for employment in the final approved ranking of this tender, she/he has a non-extendable period of 10 working days, counting from the notification of that final ranking, to submit, at UTAD, documents proving that she/he has the requirements demanded for admission to this tender.

The declarant is also fully aware that the non-presentation of the supporting documents referred to in the previous paragraph, for reasons attributable to him, determines her/his exclusion from this tender.

... (place), ... (date).

...

(signature)