

## PONTIFICAL CATHOLIC UNIVERSITY OF RIO GRANDE DO SUL Polytechnic School Graduate Program in Computer Science Regular Call 01/2025 Selection for admission to Master's and Doctoral programs in 2025/1

- 1. The Coordination of the Postgraduate Program in Computer Science (PPGCC) of the School of Polytechnics of the Pontifical Catholic University of Rio Grande do Sul (PUCRS) publishes the rules for the 01/2025 Selection Process, for admission in the first academic semester of 2025, at the Master's and Doctorate levels, in accordance with the requirements of the Program Regulations and the University's Statutes and General Regulations.
- 2. The program, grade 7 (maximum grade) at the Coordination of Superior Level Staff Improvement (CAPES), has a concentration area called Computer Science.

The Program has the following lines (and topics) of research:

- DATA SCIENCE (Machine Learning, Database, *Big Data Analytics, Big Data* Infrastructure, Data Visualization);
- GRAPHIC COMPUTING (Computer Graphics, Augmented Reality, Virtual Reality, Virtual Human Simulation, Computer Vision);
- SOFTWARE ENGINEERING (Agile Software Development, Requirements Engineering, Human-Computer Interaction, Information Systems, Software Testing);
- ARTIFICIAL INTELLIGENCE (Machine learning, Automatic planning, Natural language processing, Multiagent systems, Computer vision);
- PARALLEL AND DISTRIBUTED SYSTEMS (Cybersecurity, Cloud computing, Parallel computing, Systems reliability, Computer networks);
- EMBARKED SYSTEMS (*many-core* architecture, cybersecurity, video coding, Internet of Things, microelectronics).

Information about the area of concentration, lines of research and accredited professors can be obtained via the *link* https://portal.pucrs.br/pesquisa/programas-de-pos/ciencia- da-computacao/.

3. Eligibility

All holders of undergraduate degrees in Computer Science or related areas, duly recognized by the Ministry of Education or by the competent body in their country of origin, as well as undergraduate graduates, may take part in the Master's Degree Selection Process, provided they can prove that they completed the course before enrolling in the Postgraduate Program. Likewise, may take part in the Doctorate Selection Process all holders of Bachelor's and Master's degrees in Computer Science or related areas, duly recognized and recommended by MEC/CAPES or by the competent body in the country of origin; as well as Master's degree graduates, provided they can prove that they have completed the course before enrolling in the Doctorate.



## 4. Places for candidates

This selection aims to fill up to 40 (forty) places at Master's level and up to 20 (twenty) vacancies at Doctorate level. In addition to the 40 (forty) places offered at Master's level, 02 (two) places will be offered to foreign candidates and 02 (two) places will be offered to self-declared black, brown or indigenous candidates. Likewise, in addition to the 20 (twenty) places on offer at PhD level, 02 (two) places will be offered to foreign candidates and 02 (two) places will be offered to self-declared black, brown or indigenous candidates.

If there are no candidates who meet the selection requirements, the places allocated to these candidates may be filled by other non-foreign candidates and self-declared black, brown or indigenous candidates.

5. Registration

Registration will take place exclusively on the Internet, via the link: <u>https://webapp.pucrs.br/inscricao-stricto/#/login</u> from 01/09/2024 to 25/11/2024 .

After completing the online registration form, the candidate must pay the registration fee of R\$ 100.00.

6. Documents

When registering on the *online* platform, the candidate must provide the following documents.

- 1. For all candidates (Master's or Doctorate level)
  - 1.1. Identity card or, in the case of foreigners, passport or National Foreigner Registration (RNE).
  - 1.2. Individual Taxpayer Registration (CPF) (for Brazilians only).
  - *1.3.* Curriculum Lattes/CNPq (<u>http://lattes.cnpq.br</u>) for Brazilians or standard curriculum for foreign candidates.
  - 1.4. Graduation diploma or proof of completion of the course by the date of enrollment, with the obligation to present the Diploma at the first enrollment, under penalty of losing the place.
  - 1.5. Copy of the undergraduate transcript.



- 1.6. Letters of recommendation (at least 2) using the standardized form available on the Program's website <u>https://portal.pucrs.br/pesquisa/programas-de-pos/ciencia-da-computacao/#ingresso-e-processo-seletivo3</u> Menu Ingresso e Processo Seletivo/Documentos. The recommender must access the template available on the website and fill in the letter.
- 1.7. Proof of having taken the POSCOMP exam, indicating the score obtained (optional).
- 1.8. Letter of Motivation with a brief text (maximum 5 pages) describing the objectives in attending the program, expectations in relation to the Postgraduate course, and how/where the candidate intends to apply the knowledge acquired. The letter should be sent to the e-mail address ppgcc@pucrs.br (optional).
- 2. Only for candidates at doctoral level
  - 2.1. Master's degree diploma or proof of the course completion by the date of enrollment, with the obligation to present the diploma at the first enrollment, under penalty of losing the place.
  - 2.2. Copy of the Master's degree transcript.
  - 2.3. Work plan (Pre-Research Project) for doctoral studies, in line with one or more research themes currently being carried out at the PPGCC.
  - 2.4. Expression of interest (letter of acknowledgement from the probable advisor) signed by a probable PPGCC advisor, available on the Program's website <a href="https://portal.pucrs.br/pesquisa/programas-de-pos/ciencia-da-computacao/#ingresso-e-processo-seletivo3">https://portal.pucrs.br/pesquisa/programas-de-pos/ciencia-da-computacao/#ingresso-e-processo-seletivo3</a> Menu Ingresso e Processo Seletivo/Documentos (optional).
- 3. Candidates with disabilities or special educational needs who require specific assistance or adapted material must attach a recent report (maximum 12 months) to the documentation, issued and signed by a specialist accredited by the Regional Medical Council (CRM). The document must specify the nature, type and degree of disability, as well as the conditions recommended for carrying out the assessment activities provided for in this Notice.
- 7. The Selection Process
  - 1. The Selection Committee

The Selection Committee is made up of two PPGCC professors, appointed by its Coordinating Committee.

- 2. Stages of the Selection Process
  - For Master's candidates:



For the Master's course, selection is based on an analysis of the documentation submitted by the candidate, the performance obtained in the POSCOMP Exam (when the exam was held during the period) and alignment with a probable advisor in the Program.

• For Doctoral candidates:

For the PhD course, in addition to analyzing the candidate's documentation, an individual interview is conducted by PPGCC professors. During the interview, the candidate will have up to 15 (fifteen) minutes to present their work plan orally, and will then be questioned by the evaluating professors appointed by the Selection Committee. There is the possibility of holding the interview by videoconference in cases where the candidate is unable to attend in person at the time indicated. The interview will be scheduled by the PPGCC Secretariat, by contacting the candidate and the professors at least two (2) working days in advance.

The stages followed for both courses are qualifying.

- 3. Selection Criteria
  - For Master's candidates:

The PPGCC Selection Committee will assign a final grade of between 0.0 (zero) and 10.0 (ten) to each candidate. This grade will be calculated considering the following weights:

- $\bigcirc\,$  Examination of documentation [1.5 points], divided into the following items:
  - Letters of recommendation [0.2 points]
  - Student's final performance coefficient in the undergraduate course [0.3 point]
  - Previous research experience as a CI scholarship holder or research project intern [0.5 points]
  - Previous scientific production published in a qualified event or journal [0.5 points]
- $\bigcirc\,$  Performance in POSCOMP considering the base year or previous year [0.5 point],
- Alignment with the PPGCC based on the list of candidates of interest informed by the prospective supervisor [8 (eight) points]

The final ranking of the Master's candidates is made up of the candidates' final grades, in descending order.



• For Doctoral candidates:

The PPGCC Selection Committee will assign a final grade between 0.0 (zero) and 10.0 (ten) to each candidate. This grade will be calculated considering the following weights:

- $\, \bigcirc \,$  Examination of documentation [4 points], divided into the following items:
  - Quality of the Research Project, containing a recent review of the literature on the topic proposed in the document, clear objectives, and an appropriate timetable [2 points]
  - Previous production considering publications in the last four years plus the current year, weighted by the current Qualis in the area of Computer Sciences [1.5 points].
  - Letters of recommendation [0.5 points]
- $\bigcirc$  Individual interview [6 points], divided into the following items:
  - The candidate's mastery of the research topic [4 points]
  - Presentation quality [1 point]
  - Ability to argue [1 point]

The interview score will be the result of the arithmetic mean of the scores of the evaluators appointed by the Selection Committee.

The ranking is made up of the candidates' final grades, in descending order, and the candidates who obtain a final grade greater than or equal to 7.0 are approved.

4. Final ranking

The final ranking will be calculated based on the weights assigned to each of the Selection Criteria listed in Section 7.3.

In the event of a tie between Master's candidates, the tie-breaking criterion will be the score obtained in the alignment with a probable PPGCC advisor.

In the event of a tie between candidates for the Doctorate, the tie-breaking criterion will be the score obtained in the individual interview.

The final result will be published in alphabetical order.

8. Results of the Selection Process

The list of selected candidates and alternates will be published in a list with partial results, on December 09, 2024 on the Program's site

(<u>https://portal.pucrs.br/pesquisa/programas-de-pos/ciencia-da-computacao/#ingresso-e-processo-seletivo3</u>)

r the appeals period, the final result will be published on December 18, 2024.

9. Schedule

Activity	Date
Publication of Notice 01/2025	01/09/2024
Registration period	01/09/2024 to 25/11/2024
Interview period (only for PhD candidates)	02/12/2024 to 06/12/2024
Publication of the partial results of the selection process	09/12/2024
Appeal Period	10/12/2024 to 13/12/2024
Publication of the final results of the selection process	18/12/2024

## 10. General Provisions

- 1. The candidate's registration implies acceptance of the rules for this Selection Process contained in this Notice.
- 2. The deadline for appealing the partial result of the Selection Process for the Postgraduate Program in Computer Science will be from 10/12 to 13/12/2024. Any appeal requests should be sent to ppgcc@pucrs.br and will be analyzed and judged by the Program Coordinating Committee.
- 3. The documents of not selected candidates and selected candidates who fail to enroll in the program will be deleted from the system after the enrollment period.
- 4. Any cases not covered by this Notice will be resolved by the Coordinating Committee of the Postgraduate Program in Computer Science at PUCRS.

Porto Alegre, September 1, 2024.

Prof. pr. Tiago Coelho Ferreto

Coordinator of the Graduate Program in Computer Science Afte