

How to apply to a funded Master/PhD in Brazil?

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1. Motivation

What does a CS Master/PhD consist of?

Why should I apply to a Master/PhD?

- Specialization and deep understanding.
- Working opportunities and career growth.
- Networking.
- Access to better resources/technologies.
- Development of new skills.

Why should I apply to a Master/PhD in Brazil?

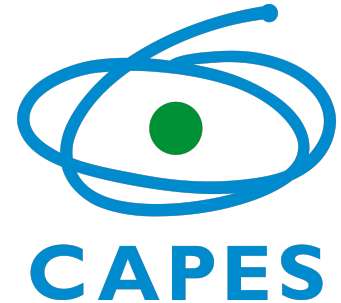
- The best universities in the country are free.
- Access to scholarships.
 - Some selected students receive a monthly salary during their studies.
- Student benefits.
 - Cheap university restaurant meals (i.e., around 2 BRL → 1.5 PEN).
 - Half price tickets for museums, touristic places, cinema, transportation.
- High-end infrastructure.
 - Wi-Fi, well-equipped labs, well-stocked libraries, high level professors.

2. Universities

What to consider when choosing a university?

CAPES Score

- “Coordenação de Aperfeiçoamento de Pessoal de Nível Superior”.
- Evaluates the quality of postgraduate courses.
- Scores:
 - 5 → Good at national scope.
 - 6 → Very good at national scope and with potential international insertion.
 - **7 → Very good at international scope.**
- Determines the budget and the number of scholarships received.
- Current CAPES ranking



CAPES Score

Public universities with graduate CS programs with CAPES 7 score:

- U. de São Paulo - São Carlos (**USP/SC - ICMC**)
- U. Estadual de Campinas (**UNICAMP**)
- U. Federal do Rio Grande do Sul (**UFRGS**)
- U. Federal de Rio de Janeiro (**UFRJ**)
- U. Federal de Pernambuco (**UFPE**)
- U. Federal de Minas Gerais (**UFMG**)

Lines of Research

- Check the graduate program site and find the lines of research you are most interested in.
 - ICMC - USP
 - INF - UFRGS
- Look for the professors working in a line of research of interest in dblp, in order to know what topics are they currently researching in.

Scholarships

- Monthly payment for your expenses during the studies (e.g., food, transportation, rent).
- Current amounts:
 - Master: **2100** BRL → 1617.18 PEN (Feb 22-2024)
 - PhD: **3100** BRL → 2387.27 PEN (Feb 22-2024)
- There are also other benefits for students not receiving scholarships (e.g., free meals in the university restaurant, living in the university residence).
- Additionally, there are the PEC-PG Scholarships ([more info](#))

3. POSCOMP

How do I validate my CS knowledge?

POSCOMP

- Entrance exam for a CS graduate course in Brazil.
- Taken presentially and in Peru it is taken in Arequipa.
- Taken around september - october.
- Each question gives you 1 point, 70 points is the highest score.
- **Get a score above or close to the median** to be considered approved.

ÁREA DE CONHECIMENTO	NÚMERO DE QUESTÕES
Matemática	20
Fundamentos da Computação	30
Tecnologia de Computação	20
TOTAL DE QUESTÕES	70

POSCOMP – Topics

Math

- Linear Algebra
- Combinatorial Analysis
- Calculus
- Analytic geometry
- Mathematical logic
- Discrete Math
- Probability and statistics

CS Fundamentals

- Algorithms analysis
- Algorithms and DS
- Computer architecture
- Digital Circuits
- Programming Languages
- Formal languages and automatas
- Files organization
- Operating Systems
- Graph Theory

CS Technologies

- Databases
- Compilers
- Computer Graphics
- Software Engineering
- Artificial Intelligence
- Image Processing
- Computer networks
- Distributed systems

POSCOMP

- Edital (with full topics there): [Link](#).
- Summaries, resources that I made/used when preparing for the exam: [Link](#).
- POSCOMP Peru group: [Link](#).
- Past exams: [Link](#).
- Additional study material: [Link](#).

4. Applying to universities

What should I have?

General requisites

- Registration form.
- Undergraduate school history.
- **POSCOMP score.**
- CV: Publications, projects, programming contests, internships, languages, university exchange, etc.
 - Honors & Awards: mention the rank you obtained during undergrad studies.
- Recommendation letters.
 - Also from the thesis advisor or professors that know your aptitudes.

Example Editais

- [Edital ICMC](#)
- [Edital IC - Unicamp](#)
- The Google search is very straightforward:
 “Processo seletivo [Mestrado | Doutorado] [Informática | Ciencias de Computação] [University name / Institute]”

My Experience

- University exchange at ICMC.
 - Met a lot of foreign Master/PhD students.
- Enjoyed working with data during the experiments for my undergrad thesis (Data Mining in Social Networks).
- Prepared for the POSCOMP and **got score 48, median was 28,67.**
- Applied to: UFMG, UFRGS and ICMC.
 - Got selected on all!
- Had an interview with **Karin Becker** before applying to UFRGS, and liked the topics she was working in → **Decided to study at the UFRGS!**

Thank you!

Questions?



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