

Bearing in mind Regulation No. 437/2020 on Research Grants of the Polytechnic Institute of Setúbal, published in the 2nd series of the Official Gazette No. 83, of April 28, it is made public that, by order of 01-07-2025 from the President of the IPS, a competition is open for the award of Three Master Research Grant (MRG) aimed at carrying out R&D activities for candidates enrolled in a Master Degree, in the area of data science, information systems management, software engineering, computer engineering, applied mathematics, civil engineering, environmental engineering or related areas, within the scope of the StreamWater project, funded through the Foundation for Science and Technology (FCT), reference no. 2024.07282.IACDC, with the period for receiving applications from 07-07-2025 to 18-07-2025, in accordance with the following conditions:

- **1. Duration of the Scholarship** The grants last for 5 months, with the condition that does not exceed the final execution date of the respective project.
- 2. **Recipients** The scholarship is intended for candidates with the following profile:
 - Students enrolled in master's programs in data science, information systems management, software engineering, computer engineering, applied mathematics, civil engineering, environmental engineering, or related areas;
 - Knowledge of Python, data processing, analysis, and visualization, time series processing and machine learning;
 - A sense of responsibility and the ability to communicate and integrate into multidisciplinary work teams.
- 3. Financial component According to the Table, contained in Annex I to the FCT Scholarship Regulation, approved by Regulation No. 950/2019, published in the Diário da República, 2nd series of December 16 (updated version), the value of the Scholarship corresponds to € 1040,98 being paid monthly, by bank transfer.
- **4. Workplace** The work will be carried out exclusively at the Setúbal Higher School of Technology, under the scientific guidance of Professors Ana Mendes (ESCE), Raquel Barreira (EST Setúbal) and Rui Madeira (EST Setúbal).



- **5. Activity plan** The candidate will perform functions in one of the Work Packages (WP) in which IPS is participating:
 - The candidate will perform tasks in Tasks T1 and T2 of the project, i.e., T1 –
 Streaming data processing; T2 Real-time data-driven anomalous events detection and location.

6. Assessment and ranking criteria:

6.1. Curriculum and Motivational Letter Assessment (CV+ML) – (scale of 0-15 values)

a) Academic training (weighting of 0.30) - maximum 15 values

Enrollment in a master's degree in data science, information systems management, software engineering, computer engineering, applied mathematics, civil engineering, environmental engineering, or related fields	15 val.
Enrolment on a master's degree in a related field	5 val.
Enrolment on a master's degree in another scientific area	0 val.

Analysis of knowledge in Python, data analysis, processing and visualization (weighting of 0,20) - maximum 15 values

With expertise in international transport systems in the port area (e.g. participation in research projects, communications, published articles)	15 val.
With expertise in Python, data analysis, processing and visualization, and time series processing.	10 val.
With knowledge and experience in Python, data analysis, processing and visualization	5 val.
No knowledge of international transport systems in the port area.	0 val.

c) General analysis of the Curriculum Vitae (weighting 0,30) - maximum 15 values

Very good	15 val.
Good	10 val.
Satisfies	5 val.
Does not satisfy	0 val.



d) General analysis of the Letter of Motivations (weighting 0,20) - maximum 15 values

Very good (presents motivational factors related to the activities to be performed as a scholarship holder duly framed in the role)	15 val.
Good	10 val.
Satisfies	5 val.
Does not satisfy	0 val.

6.2. Selection Interview (scale of 0-5 values)

In the interview, 4 evaluation parameters are defined and their classification results from the following formula: E=MI+TTK+CS+VEF

- Motivation and Interest (MI)
- Theoretical and Technical Knowledge (TTK)
- Critical Sense (CS)
- Verbal Expression and Fluency, including in English (VEF)

Each parameter is valued from 0 points to 1.25 points according to the candidate's demonstration of competence or behavior.

When provided for in the competition notice, the interview is a compulsory and eliminatory selection method.

- **6.3.** The classification of each candidate will be calculated by the sum of the values obtained in the **CURRICULAR EVALUATION, LETTER OF MOTIVATIONS** and in the **SELECTION INTERVIEW**.
- **6.4.** If the candidate fails to attend the interview without expressly presenting a justification provided for by law for this purpose, he/she will be automatically excluded and a new date for the interview will not be rescheduled.



- **6.5.** The classification of each candidate will be calculated by the sum of the values obtained in the selection methods specified in the previous point and the ordering of the candidates will be expressed on a scale of 0 to 20 values, rounded to the nearest tenth.
- **6.6.** For the candidate to be admitted, they must achieve a minimum total classification of 9.5 values and must have obtained at least half of the maximum possible score in Curriculum Assessment method.
- **6.7.** In the event of a tie, the one who achieved the highest rating in the Interview component will be used as the tiebreaker.
- **6.8.** Based on the final ranking list, a recruitment reserve will be created, which will be used to potentially hire successful candidates in the event of withdrawal from those placed in positions eligible for hiring.
- **7. Application documents** The application must be accompanied by the following documentation:
 - Letter of motivation addressed to the President of the IPS;
 - Candidacy form (signed);
 - Detailed CV;
 - Certificates of qualifications for academic degrees held;
 - Proof of student status for the course and degree attended at a Portuguese Higher
 Education Institution, issued by the respective academic services;
 - Proof of residence permit in Portugal (for applicants without Portuguese citizenship).
- **8.** How to submit your application The application must be made by filling out the standard form, available on the IPS website, at www.ips.pt, in the Central Services/DICI/Research Grants tabs, and sent to bolsas.investigacao.dgp@ips.pt or through the address, Campus do IPS, Estefanilha, 2910 761 Setúbal, until the application deadline.



9. The jury is made up of:

President

Professor Doutor Nelson Jorge Gaudêncio Carriço, Professor Adjunto da Escola Superior de Tecnologia do Barreiro/IPS

Effective vowels

Professora Doutora Ana Jesus Pereira Barreira Mendes, Professor Coordenador da Escola Superior de Ciências Empresariais/IPS

Professor Doutor Rui Neves Madeira, Professor Adjunto da Escola Superior de Tecnologia de Setúbal/IPS

Substitute members

Professora Doutora Maria Raquel Feliciano Barreira, Professor Coordenador da Escola Superior de Tecnologia de Setúbal/IPS

10. Applicable legislation and regulations - The scholarship is awarded under Law No. 40/2004 of August 18, in its updated version (Statute of the Scientific Research Fellow) and Regulation of Scholarships and Research of the Foundation for Science and Technology, available for consultation at https://www.fct.pt/apoios/bolsas/regulamento.phtml.pt

Instituto Politécnico de Setúbal.