

Call for Applications for a Research Initiation Grant (BII) - 1 vacancy

A call for applications is open for the award of a Research Initiation Grant (BII) within the scope of Research and Development activities at IPCB under the following conditions:

Admission Requirements:

The recipient of the BII must be a student enrolled in a bachelor's degree in Electrical and Telecommunications Engineering, Industrial Engineering and Management, Renewable Energy Engineering, Computer Engineering, or related fields, aiming to consolidate their scientific training through the development of research work in the areas of reuse and retrofitting of printed circuit boards (PCB). The ideal candidate should have knowledge/experience in PCB diagnostics and testing, schematic and PCB design using computer software, soldering and replacing electronic components on PCBs, and programming. The candidate must have a good command of spoken and written English.

Work Plan:

- Laboratory validation of existing technologies for PCB diagnostics and reverse engineering.
- Define detailed technical specifications for artificial vision systems for automatic PCB inspection.
- Propose a prototype of an artificial vision system for automated visual defect inspection on PCBs.
- Prepare a report and a scientific article with the work results.

Applicable Legislation and Regulations:

The research grant will be awarded through a scholarship contract between the Polytechnic Institute of Castelo Branco and the grantee, in accordance with the Research Fellow Statute established by Law No. 40/2004, of August 18, and subsequent amendments, as well as the Scientific Research Grants Regulations of the Polytechnic Institute of Castelo Branco.

Workplace:

The work will be carried out at the School of Technology of the Polytechnic Institute of Castelo Branco, Avenida do Empresário, 6000-767 Castelo Branco, under the scientific supervision of Professor Rogério Pais Dionísio.

Grant Duration:

The grant will last for 6 months, starting on 30/04/2025, and may be renewed up to the maximum duration of the project (or service provision).

Monthly Maintenance Allowance:

The grant amount is €651.12, based on the table included in the Research Grants Regulations of the Foundation for Science and Technology, I.P. The grant is paid monthly via bank transfer. This amount may be supplemented by Voluntary Social Security.

Selection Methods:

The selection methods to be used will be as follows: curriculum evaluation and interview, with respective weightings of 60% and 40%.

Selection Committee:

President: Professor Fernando Reinaldo da Silva Garcia Ribeiro

Effective Members: Professor José Carlos Meireles Monteiro Metrolho and Professor Arlindo Ferreira da Silva.

Substitute Members: Professor Ana Paula Neves Ferreira da Silva and Professor Filipe Miguel Bispo Fidalgo.

The president of the jury will be replaced in case of absence or impediment by the first effective member.

Publication/Notification of Results:

The draft final ranking list and the final ranking list approved by the President of IPCB will be published on the IPCB website or the respective Organizational Unit website and posted in a visible and public place. Candidates will be notified via email with delivery receipt.

Application Deadline and Submission:

The application deadline will be ten working days from the publication of this call, during regular business hours.

Applications must be formally submitted through the mandatory submission of an application form accompanied by the following documents: Curriculum Vitae, academic and professional qualification certificates, and other relevant supporting documents. Failure to submit these documents will result in the candidate's exclusion.

The application form is available as Mod.IPCB.RH.11 on the IPCB website.

Applications must be submitted in person during office hours (9:00 AM - 12:30 PM and 2:00 PM - 5:30 PM) at the address below or sent by mail/email to Professor Rogério Pais Dionísio, School of Technology, Avenida do Empresário S/N, 6000-767 Castelo Branco, Email: rdionisio@ipcb.pt.