

(BL26/2025_IST-ID)

Research Studentship for PhD students

Applications are open for 1 Research Studentship, within the framework of of the project "ATE - Aliança para a Transição Energética", Agenda 56 - Projeto C644914747-00000023 financed by the European and Resilience Plan, under the following conditions:

Scientific Area: Mechanical Engineering and Engineering Systems, Energy and Environment

Admission Requirements:

a) *To be enrolled at a PhD in mechanical, civil, environmental engineering, energy management or similar (on the date of signing the scholarship contract) or be enrolled in a course that does not award an integrated academic degree (on the date of signing the contract) in the pedagogical project of a higher education institution, developed in association or cooperation with one or more R&D units in the field of mechanical, civil, environmental engineering, energy management or similar*

b) To have a master's degree in mechanical engineering, environmental engineering, energy management or related subjects.

c) To have knowledge in the area of building decarbonization, building rehabilitation and maintenance solutions, LCA, energy and material flow analysis.

Workplan: Development of a calculation and analysis model for the embodied carbon of Heating, Ventilation and Air Conditioning (HVAC) systems and different rehabilitation solutions for a representative commercial and service building. The work plan includes the analysis of the composition of the selected equipment and construction elements, the use of standardized methodologies to calculate GHG emissions at each stage of the equipment life cycle and the development of an embodied carbon database for materials, construction rehabilitation systems and solutions. The model will be integrated into a platform in a real context. Preference is given to users with knowledge of Python programming and familiarity with databases.

Legislation and Regulations: Statute of Scientific Research Fellow, approved by Law nr. 40/2004, of August 18, as worded by Decree-Law nr. 123/2019, of August 28; IST-ID Regulation for Research Fellowships, available on <https://ist-id.pt/recursos/documentos/recursos-humanos/bolseiros/#1690453819726-6707f7f2-ce04>.

Workplace: The work will be developed at CERIS, Civil Engineering Research and Innovation for Sustainability of IST-ID, under the scientific supervision of Professors José Silvestre and Inês Colen.

Duration: The research fellowship will have the duration of 10 months. It's expected to begin in March 2025 and may be eventually renewed up to the duration of the project, with the limit of 48 months, including the duration of the initial contract.

Monthly maintenance allowance: the amount of the monthly maintenance allowance is € 1259.64, being the payment method of the Fellow by wire transfer.

Selection methods: The selection methods will be the following: *Curriculum evaluation, with the respective assessment of curricular excellence (40%) and relevant experience for the project (40%). The best-ranked candidates in the curriculum evaluation will be invited to an individual interview, knowledge tests, others), with the respective weight of 20%.*

Composition of the selection Jury: Prof. José Silvestre, Prof, Inês Colen and Dr. Ricardo Gomes.

Announcement/ notification of the results: The final evaluation results will be communicated to all applicants by email.



Deadlines and procedures of complaint and appeal. A complaint may be lodged from the final decision, or an appeal to the Executive Board of IST-ID, within 15 working days counted from the respective notification.

Application deadline and formalization: The call is open from February 27 until March 13, 2025.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/concursos/bolsas/>); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment at an academic degree course (PhD); v) motivation letter;

Applications must be submitted to the email: jobs@in3.tecnico.ulisboa.pt