## (BL62/2025-IST-ID)

## Research Studentship (PhD student or students of a course that does not award an academic degree)

Applications are open for 1 Research Studentship, within the framework of project (1801P.01476.1.01) LL@GREEN\_2023.13482.PEX - IST-ID (Optimizing towards sustainable last-mile logistics), financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Systems Engineering (EMS-SIS)

## **Admission Requirements:**

a) To be enrolled at a PhD (on the date the contract is signed).

Or

a) to hold a master's degree and be enrolled at a course that does not award an academic degree and it is integrated in the educational project of a higher education institution, performed in association or cooperation with one or several R&D units (on the date the contract is signed).

**Workplan:** The work plan focuses on the development, testing, and validation of novel optimization models and solution approaches designed to address multiple last-mile logistics challenges, such as warehouse location selection, fleet composition, warehouse-order-vehicle assignment, and routing. The aim is to maximize customer satisfaction while ensuring economic, environmental, and social sustainability. Another important aspect of the work plan involves the integration of data-driven demand forecasting models with the optimization models. Within this integration, the demand forecasting models will generate essential data—such as the location, size, weight, and volume of orders—which will then inform the optimization models. Testing and validation of the models will be conducted using real data from companies operating in the last-mile logistics sector.

**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; FCT Regulation for Research Studentships and Fellowships, available on <a href="https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf">https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf</a> and <a href="https://dre.pt/application/file/a/127230968">https://dre.pt/application/file/a/127230968</a>.

**Workplace:** The work will be developed at Centre for Management Studies of Instituto Superior Técnico, under the scientific supervision of Professor Ana Paula Ferreira Dias Barbosa Póvoa and Professor Diana Rita Ramos Jorge.

**Duration:** The research fellowship(s) will have a duration of 12 months and is expected to begin in March 2025. The contract may be renewed until the end of the project for a PhD student, with the limit of 48 months, including the duration of the initial contract. When the academic degree or diploma is awarded during the term of the scholarship contract, it may be concluded under the established contractual terms.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<a href="https://www.fct.pt/wp-content/uploads/2025/02/Tabela\_valores\_SMM\_2025.pdf">https://www.fct.pt/wp-content/uploads/2025/02/Tabela\_valores\_SMM\_2025.pdf</a>), the amount of the monthly maintenance allowance is € 1309.64, being the payment method of the Fellow by wire transfer.

**Selection methods**: The selection methods will be the following: 1) Curriculum evaluation, considering experience in the field of Engineering and Management, with preference given to candidates with knowledge in logistics, proficiency in mathematical modeling, and in a programming language, preferably Python. This evaluation may be accompanied by an interview if the jury considers it necessary. In the case of a PhD student, preference is given to candidates enrolled in the PhD program in Engineering and Management at IST; and 2) motivation letter, with respective weighting of 90% and 10%.

**Composition of the selection Jury**: Tânia Rodrigues Pereira Ramos, Ana Paula Ferreira Dias Barbosa Póvoa, Diana Rita Ramos Jorge.



**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 within 15 working days, or an appeal to the Executive Board of IST-ID within 30 working days, both counted from the respective notification.

Application deadline and formalization: The call is open from March 18 until March 31, 2025.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<a href="https://ist-id.pt/concursos/bolsas/">https://ist-id.pt/concursos/bolsas/</a>); ii) Curriculum Vitae; iii) academic degree certificate, where applicable; iv) proof of enrollment at an academic degree course (PhD) or at a course that does not award an academic degree; v) motivation letter; vi) (for holders of Master degrees who are enrolled at a course that does not award an academic degree) declaration on honour that the applicant does not exceed with this contract an accumulated period of two years in this type of studentship, continuously or with interruptions.

Applications must be submitted to the email: <a href="mailto:cegist@tecnico.ulisboa.pt">cegist@tecnico.ulisboa.pt</a>

