## (BL63/2025-IST-ID)

## Research Studentship (Master student)

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: To be enrolled at the Master of Industrial Engineering and Management of IST.

**Workplan:** The work plan involves exploring various types of data, identifying specific factors that influence last-mile logistics demand, and developing data-driven demand forecasting models to create flexible, integrated, and robust decision support tools for last-mile logistics. This plan mainly includes two tasks. The first task involves exploring data related to last-mile logistics, consumer and retailer characteristics, general population elements, and external factors such as weather. The aim is to gather pertinent data for the informed development of demand forecasting models, which is the focus of the second task. These models will be developed using artificial intelligence methods, including data mining and machine learning. Unlike conventional approaches, these models will leverage historical data to forecast demand under conditions of significant uncertainty and variability. The developed models will be tested and validated using real data from companies operating in this 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 will have the duration of 6 months. It's expected to begin in March 2025, and may be eventually renewed until the end of the project, with the limit of 24 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 € 1040.98, 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 Industrial Engineering and Management and in Logistics, accompanied by individual interview in case the jury considers it necessary, and 2) motivation letter, with the respective weight of 90% and 10%.

**Composition of the selection Jury**: Susana Isabel Carvalho Relvas, 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 of Master; v) motivation letter;

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

