## (BL236/2025-IST-ID)

## **Research Studentships (PhD students)**

Applications are open for 1 Research Studentship, within the framework of 1801P.01534.1.01 SUPPORT-HH: Decision support tools for Home Hospitalization management, LISBOA2030-FEDER-00853500, financed by national funds through FCT/MCTES (PIDDAC) and co-financed by the European Regional Development Fund (FEDER) through COMPETE – "Programa Operacional Fatores de Competitividade (POFC)" (when applicable)/ with the financial support of FCT/MCTES through national funds and, when applicable, co-financed by the FEDER, under the Partnership Agreement PT2020, under the following conditions:

Scientific Area: Systems Engineering (EMS-SIS)

## **Admission Requirements:**

a) hold a master's degree in Industrial Engineering and Management, Healthcare Management, or a related area;

b) be enrolled at the date of signing the scholarship contract in a non-degree-granting course integrated into the educational project of a higher education institution, developed in association or cooperation with one or more R&D units, or be enrolled at the date of signing the scholarship contract in a doctoral program.

**Workplan:** The tasks to be carried out focus on planning the network of home hospitalization units, combining demand forecasting and optimization. First, patient data and contextual variables, such as disease prevalence and demographic data, will be collected to forecast demand, with particular attention to acute illnesses and admission policies. To address uncertainty in the forecasts, several prospective demand scenarios will be generated. These forecasts will feed into a generic multi-objective optimization model under uncertainty, designed to determine appropriate levels of human and material resources. The model will aim to balance demand satisfaction, cost efficiency, and quality of care, and will be validated with real results to ensure its applicability.

**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 of Professor Inês Marques Proença.

**Duration:** The research fellowship will have the duration of 12 months. It is expected to begin in November 2025, and may be eventually renewed until the end of the project. 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/fct-atualizou-o-valor-das-bolsas-para-2025/">https://www.fct.pt/fct-atualizou-o-valor-das-bolsas-para-2025/</a>), the amount of the monthly maintenance allowance is € 1 309.64, being the payment method an option of the Fellow by Wire Transfer/Check.

**Selection methods**: The selection methods will be the following: 1) Curriculum evaluation, considering experience in the area of Industrial Engineering and Management or Healthcare Management, 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**: Ana Paula Ferreira Dias Barbosa Póvoa, Inês Marques Proença, Daniel Rebelo dos Santos.



**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 October 27 until 7 November, 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/recursos-humanos/bolseiros/#documentos-relacionados">https://ist-id.pt/recursos-humanos/bolseiros/#documentos-relacionados</a>); ii) Curriculum Vitae; iii) academic degree certificate, where applicable; iv) proof of enrollment at an academic degree course of PhD; v) motivation letter;

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

