

Call for mobility procedure pursuant to Article 7 paragraphs 5-bis, 5-ter and 5-quater of Law No. 240 of 2010 and MUR Ministerial Decree No. 367 of 29-4-2022

Executive summary

ACADEMIC SECTOR: 01/B1 INFORMATICS

SCIENTIFIC DISCIPLINARY SECTOR: INF/01 - INFORMATICS

The **application form** (<https://pica.cineca.it/imtlucca/2023-po-informatica/>) must be **mandatorily** filled out through the School's online procedure **by November 18, 2023, at 01:00 p.m. (Italian time)**.

IMT School for Advanced Studies Lucca (hereinafter, "IMT School" or "IMT") announces the opening of a call for the selection of a full professor in Computer Science through a mobility procedure per art. 7 paragraphs 5-bis, 5-ter, and 5-quater of Law no. 240 of 2010 and D.M. MUR no. 367 of 29-4-2022.

The ideal candidate will be able to strengthen IMT's competence in computer science concerning the modeling and analysis of complex systems in coherence with the IMT's multidisciplinary model for education and research, developing and employing methodologies and tools with solid mathematical foundations.

IMT encourages applications from individuals of recognized leadership with significant and verifiable experience in research, both nationally and internationally. Candidates should also demonstrate proficiency in securing research funding through competitive calls and have a track record of successfully handling management and institutional responsibilities at both national and international levels. The ability to engage in scientific collaboration across diverse knowledge domains and work effectively in a multidisciplinary environment will be highly valued.

Applicants express their interest by submitting a project proposal outlining their intended contribution to IMT's objectives for research, education, outreach, public engagement, and technology transfer.

RESEARCH

The ideal candidate will conduct research within one or more of the following lines:

- development of techniques based on machine learning and complex networks to build, analyze, and validate models;
- analysis of cultural and individual variables in social phenomena and practices, integrating domain knowledge and methodologies, interaction networks, innovation tools, social media, and information circulation;
- consolidation of the centrality of IMT in the area of cybersecurity from the perspective of research and higher education, maintaining its role as a reference point in the network of national doctoral programs;
- support for activities planned for the Department of Excellence RED - Economic and Digital Resilience project (<https://www.imtlucca.it/en/scuola-imt/department-of-excellence>), involving methods for robust, reliable, and universally accessible digital infrastructures.

For the evaluation, the candidate should submit a three-year research plan in one or more of the following areas: cybersecurity, data science, artificial intelligence, machine learning, formal methods, distributed systems, and performance evaluation. The plan should be framed internationally, considering the interaction with other disciplines.

The project proposal will be evaluated according to the following criteria:

1. relevance to the areas of interest at IMT;
2. interdisciplinary and multidisciplinary aspects;
3. alignment with IMT's strategic research objectives of the IMT and specifically:
 - a. engagement in competitive calls and external collaborations;
 - b. collaboration with research units inside and outside IMT;
 - c. enhancement of research activities.

EDUCATION

The candidate will be expected to carry out teaching as per current regulations on the rights and duties of IMT's staff (<https://www.imtlucca.it/it/file/172160/download?token=y4kzqfOe>). In particular, the candidate will enrich the offerings of one or more of the following doctoral courses and teachings active at IMT (<https://www.imtlucca.it/en/programma-dottorato/overview>):

- curriculum in Software Quality of the Ph.D. program in Systems Science;
- Ph.D. program in Management of Digital Transformation;
- national Ph.D. program in cybersecurity;
- inter-university Master's degree in "Software: Science and Technology";
- other contributions to teaching that the candidate may propose.

The candidate should submit proposals for one or more new courses or revisions of existing ones, providing the following information for each course:

- reference program;
- title of the course;
- synopsis (250-500 words);
- number of teaching hours.

The proposals will be evaluated according to the relevance of the topics to the reference program and their feasibility with the number of teaching hours planned.

PUBLIC ENGAGEMENT, OUTREACH AND TECHNOLOGY TRANSFER

The ideal candidate should contribute to the realization of the School's strategic design by pursuing the following objectives:

1. Strengthening technology transfer and local relations by introducing new activities and expanding current ones, such as participation in the Netval networks (<https://netval.it/>), JoTTO (<https://www.jointto.it/it>) and C3T (<https://www.c3t.it/>).
2. Enhancing IMT School's visibility and image through institutional communication and dissemination efforts emphasizing research innovation and its international outlook.
3. Consolidating and strengthening public engagement initiatives to foster dialogue with society and effectively transfer research results to institutional policy-makers.

The candidate should submit a proposal for the envisaged public engagement, outreach, and technology transfer activities. The proposal will be evaluated according to the criteria of originality and alignment with the aforementioned School's objectives.

All documentation must be written in English.

Overall, the proposals will be assessed for their scientific feasibility and alignment with the candidate's curriculum.

Applicants may be invited to support a seminar at the School concerning the research activity carried out and the prospects for its development, including its impact on research, education, public engagement, outreach and technology transfer and possible interdisciplinary integration with other scientific areas of the School.

IMT adopts equal opportunity principles in its selection procedures and rejects any type of discrimination based on sex, gender identity, nationality, ethnicity, religious belief, sexual orientation, state of health, and any other status or quality that is not strictly relevant to the call outlined in this document.

Requirements

Admissible candidates are:

- a) full professors already in service for at least five years at other Italian universities;
- b) scholars permanently engaged abroad in research or teaching activities, who have held for at least five years, at foreign universities, an academic position equivalent to full professor, on the basis of the tables of correspondence defined by the Ministry (D.M. n. 662/2016 and subsequent amendments and supplements)
- c) research directors and researchers at public research institutions, or those who are on the permanent or fixed-term roles pursuant to art. 1, paragraph 422 et seq. of Law no. 205 of December 27, 2017, of the Institutes of Hospitalization and Treatment of Scientific Character (IRCCS) carrying out translational, preclinical and clinical research activities, in service for at least five years at the institution to which they belong and in possession of the national scientific qualification for the competition sector and the band covered by this notice.