



UNIVERSITÀ
DI PISA

PhD PROGRAMME IN INDUSTRIAL ENGINEERING

ACADEMIC YEAR 2026/2027 (42ND CYCLE)

Coordinator professor *Francesca Di Puccio*

Administrative headquarters: Department of Civil and Industrial Engineering

(<https://www.dici.unipi.it/>)

SELECTION PROCEDURES

Total no. of positions with grant: 11

ING_IND01_B	Type of selection procedure Single ranking list		
	No. of available positions with grant 2 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	2	University of Pisa	
ING_IND02_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Department of Civil and Industrial Engineering of University of Pisa	Advanced Microwave-Assisted Manufacturing of Ceramic Matrix Composites for Energy and Environmental Technologies
ING_IND03_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Department of Civil and Industrial Engineering of University of Pisa	Theoretical and Experimental Development of a High-Power-Density Hall Thruster for Space Applications Project BRIGHT - CUP I59I25001450001 - Avviso FISA D.D. n. 1075 del 18/07/2024
ING_IND04_B	Type of selection procedure Single ranking list for research project		

	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Department of Civil and Industrial Engineering of University of Pisa	Investigation of high power MPD thrusters operating with multiple propellants for nuclear electric propulsion
ING_IND05_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Avio S.p.A	Development of a Simulation Framework for Reliability Assessment of Cryogenic Space Propulsion Systems under Uncertain Conditions
ING_IND06_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Toyota Material Handling Manufacturing Italy SpA	Theoretical and Numerical Investigation of Forklift Stability Conditions and Definition of Design Methodologies for Industrial Applications
ING_IND07_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Department of Civil and Industrial Engineering of University of Pisa	High-fidelity modelling of coupled neutronic and thermal hydraulic behaviour of existing and innovative nuclear reactors
ING_IND08_B	Type of selection procedure Single ranking list for research project		

	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Istituto Nazionale di Geofisica e Vulcanologia (INGV)	Miniaturized Multi-Sensor Integration for In-Situ Volcanic Gas and Ash Characterization using Aerostatic Platforms
ING_IND09_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Research Center “E. Piaggio”	Theoretical Development and Experimental Validation of Optimal Control Techniques for Time-Optimal Execution of Tasks on Lagrangian Dynamical Systems
ING_IND10_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Department of Civil and Industrial Engineering of University of Pisa	Design, development, and characterization of biodegradable polymeric systems for soil applications within the project VIGNETI PLASTIC FREE

NB: For the above-mentioned selection procedures, candidates who, on the closing date of the Call for applications, are employed under a subordinate employment contract with a public body, for a duration at least equal to that of the PhD programme, may choose whether to:

1. participate in the selection as a public employee, thereby automatically waiving the doctoral grant;
2. participate in the selection for a position with grant, without declaring their status as a public employee at the application stage.

Applicants who are public employees, in the case referred to under point 1, must declare their status during the above-mentioned online application procedure by selecting the corresponding option in the dedicated field available on the “Alice” platform <https://www.studenti.unipi.it>. Such candidates must also submit a self-declaration certifying their employment with the relevant public body, in accordance with Annex 1 to the Call for applications. Any applicant who, when submitting the online application, declares that they wish to participate as a public employee shall automatically waive the grant, and the provisions governing the ranking list set out in Article 5 of the Call shall apply. This choice is irrevocable and may not be changed at a later stage.

The information below applies to all the selection procedures indicated above

ADMISSION REQUIREMENTS (Article 3 of the Call for applications)

Master’s Degree (LM) /Second Degree (Specialistica-LS) (or Old system University Degree): **ALL**

or
equivalent academic qualification in accordance with *Ministerial Decree of 9 July 2009* **to be obtained by 31 October 2026.**

In the event that the degree has not yet been awarded by the deadline of the Call for applications, the candidate must attach a list of the examinations taken, including the corresponding marks.

Important: In this regard, during the online application procedure for the selection, the candidate must attach a self-declaration concerning the degree already obtained, or to be obtained, drawn up in accordance with Presidential Decree no. 445/2000, as per Annex 2 to the Call for applications.

SELECTION METHODS AND CRITERIA (*Article 4 of the Call for applications*)

Curriculum vitae

The CV, duly signed and accompanied by a photocopy of a valid identity document, must be uploaded exclusively during the online application procedure for the selection, and must outline the candidate's educational background, as well as their professional and research experience. **Candidates are advised to submit any documentation deemed useful for the purposes of assessing the CV** including, but not limited to:

- a) scientific publications;
- b) a list of examinations completed during their university studies, together with the corresponding grades, as well as the final grades obtained in both the Bachelor's and Master's degree programmes;
- c) certificates of participation in conferences, seminars, summer schools, or training courses;
- d) scholarships, research grants, or other academic awards and distinctions

Written test

The written test may only be taken in person at the Department of the University of Pisa or at other partner institutions (e.g. other universities, consulates, embassies).

The written examination will be held in person and is intended to assess the candidate's fundamental knowledge and academic background. The examination may be taken either in Italian or in English. Candidates will be allowed to choose from several topics proposed by the Selection.

ONLY for selection **ING_IND01_B** this project proposal is not binding with respect to the candidate's future research activity; rather, it will be assessed in terms of the candidate's competencies, research planning skills, and the relevance of its content to the themes of the PhD Programme

Pursuant to Article 4, paragraph 2 of the internal regulations for the PhD program in Industrial Engineering (issued via Rectoral Decree no. 353/2026 of March 20, 2026), no written examination is required for selection **ING_IND09_B**.

Interview

The interview shall assess the candidate's knowledge, aptitude for research, willingness to undertake training pathways in Italy and abroad, and interest in further scientific study.

Videoconferencing **YES**

Candidates wishing to take the interview by videoconference must upload the VIDEO Annex to the Call for applications **exclusively during the online application procedure for the selection**. Requests received after the deadline of the Call for applications (**10 August 2026**) shall be submitted to the Selection Committee, which will assess whether to accept them in light of the technical time required to organise the interview by videoconference.

	Minimum score	Maximum score
CV	24	40
Candidates who have obtained a score of at least 24 out of 40 points shall be admitted to the written test.		
Written test	18	30
Candidates who have obtained a score of at least 18 out of 40 points shall be admitted to the interview.		
Interview	18	30
Eligibility is achieved with a minimum score of 60 out of 100 points		

SCHEDULE OF THE TESTS

The tests may take place in the period **between 14 and 30 September 2026**.

The schedule of the tests, for each of the selections below, will be published **by 24 July 2026** at <https://www.unipi.it/bando-dottorato>, including the indication of the venue where they will be held.

RANKING LIST AND ENROLMENT

Article 5 of the Call for applications sets out:

- the procedures for drawing up the ranking list
- the date of publication of the ranking list
- the procedures and deadlines for enrolment
- the procedures and deadlines for subsequent admissions from the ranking list.

Important: Subsequent admissions from the ranking lists, after 6 October and until 31 December 2026, are permitted only for “open” grants (i.e. those without a specific research topic), namely: **ING_IND01_B**.

In the other selection procedures, as they involve subject-based grants, any unassigned positions at the end of the third round of admissions from the ranking list will be made available by means of a specific notice, to be issued by Rector’s Decree in November. Such notice will be reserved for eligible candidates suitably placed in the ranking lists of the selection procedures already completed and will be published at <https://www.unipi.it/didattica/corsi/dottorati/>.

With regard to the publication of the notice and the procedures for the reallocation of the grants, **no individual email communication will be sent to eligible candidates**, as all relevant information will be provided upon publication of the ranking lists.

INFORMATION ON THE TEACHING ACTIVITIES OF THE PROGRAMME

Educational project and objectives of the programme:

<https://www.unipi.it/didattica/corsi/dottorati/scienze-ingegneristiche-ed-informatiche/ingegneria-industriale/>

Curricula of the PhD programme

1. *Aerospace Engineering;*
2. *Chemical and Materials Engineering*
3. *Land Vehicle and Transport Systems Engineering*
4. *Mechanical Engineering*
5. *Nuclear Engineering and Industrial Safety*

6.

PhD programme website:

<http://phd.dici.unipi.it/>

PhD programme regulations:

<https://www.unipi.it/wp-content/uploads/Ingegneria-industriale.pdf>