

PhD PROGRAMME IN ARTIFICIAL INTELLIGENCE (NATIONAL PhD PROGRAMME)

ACADEMIC YEAR 2026/2027 (42ND CYCLE)

in agreement with University of Napoli “L’Orientale”, University of Bari “Aldo Moro”, University of Modena e Reggio Emilia, University of Palermo, University of Aquila, Gran Sasso National Institute- International PhD School, University Cattolica del Sacro Cuore Milano, Sant’Anna School of Advanced Studies, Scuola Normale Superiore di Pisa, University of Messina, University of Perugia, Alma Mater Studiorum - University of Bologna, National Research Council (CNR), Institute for Nuclear Physics INFN

Coordinator professor *Salvatore Ruggieri*

Administrative headquarters: Department of Computer Science
(<http://www.di.unipi.it>)

SELECTION PROCEDURES

Total no. of positions with grant 37

of which

No. of positions with grant 36

No. of positions reserved for holders of an employment contract 1

DIN01_B

Type of selection procedure

Subject-specific PhD grants with separate ranking lists: no. of ranking lists 5 for following subject area:

- **Subject Area A** “Trustworthy, human-centered and responsible AI”
- **Subject Area B** “Architectures, models and applications of AI”
- **Subject Area C** “Human-centered AI for health, well-being and learning”
- **Subject Area D** “AI for scientific research in Physics”

Subject Area E “AI regulation and governance”		
No. of available positions with grant 34 of which		
No.	Funding organisation / Partner institution	
Positions with grant		
1	University of Pisa	Subject Area A Subject grant: <i>Next generation human-centered Artificial Intelligence</i>
1	Institute of Information Science and Technologies "A. Faedo" ISTI CNR	Subject Area A Subject grant <i>Reliability and learning to defer in agentic AI frameworks</i>
1	Institute of Information Science and Technologies "A. Faedo" ISTI CNR	Subject Area A Subject grant <i>Social Digital Twins: Modeling Synthetic Societies</i>
1	Scuola Normale Superiore di Pisa	Subject Area A Subject grant <i>Methods for trustworthy, human-centered, explainable AI and their application for understanding and predicting complex phenomena at the individual and social scales in domains characterized by human-machine collaboration in the decision-making process</i>
2	Sant'Anna School of Advanced Studies	Subject Area A Subject grant <i>AI, Statistics, Computer Science and Engineering for methodological research driven by big data with applications in Economics, Management and Law</i>
1	Gran Sasso Institute National Institute GSSI	Subject Area A Subject grant: <i>Ethical and Social Challenges of Agentic AI</i>
1	University of Aquila	Subject Area A Subject grant: <i>Explainable Neuro-Symbolic Agents for Cognitive Resilience and Human-AI Deliberation</i>
1	University of Perugia	Subject Area A Subject grant: <i>Advancing Artificial Intelligence: Novel Algorithms, Methodologies and Theoretical Foundations”</i>
1	Institute of Informatics and Telematics IIT CNR	Subject Area B Subject grant: <i>Green, Continual, and Decentralized AI</i>
1	Institute of Informatics and Telematics IIT CNR	Subject Area B Subject grant <i>Causal AI</i>
1	Institute of Information Science and Technologies "A. Faedo" ISTI CNR	Subject Area B Subject grant <i>Learning Aesthetic on 3D</i>
1	University of Bari “Aldo Moro”	Subject Area B Subject grant <i>Large Multimodal Models for Symbiotic AI in the domain of Earth Observation</i>
1	Alma Mater Studiorum University of di Bologna Fondazione Bruno Kessler	Subject Area B Subject grant <i>Ensuring Fair and Compliant AI in Socio-Technical</i>

			<i>Systems: A Focus on Civic Digital Twins</i>
	1	<i>Alma Mater Studiorum Università di Bologna Fondazione Bruno Kessler</i>	Subject Area B Subject grant <i>Robust and Compliant AI for Environmental Pollution Sciences</i>
	1	University of Messina	Subject Area B Subject grant <i>Advanced Machine Learning algorithms in the Cloud and at the Edge</i>
	1	University of Modena e Reggio Emilia	Subject Area B Subject grant <i>Next-generation Multimodal Foundation Models for Robust Real-world Generalisation: Architectures, Training and Fairness</i>
	1	University of Modena e Reggio Emilia	Subject Area B Subject grant <i>Deep learning models training, maintenance and resilience using model merging task arithmetic and incremental training</i>
	1	University of Napoli "L'Orientale"	Subject Area B Subject grant <i>Terminology and Generative AI: Towards Terminology-Aware Language Models for the Production and Translation of Specialised Texts</i>
	1	University of Palermo	Subject Area B Subject grant <i>Development of distributed and Human-centered AI Ecosystem: from Precision Medicine to 6G Networks</i>
	1	Fondazione Pisana per la Scienza Onlus ETS	Subject Area C Subject grant <i>Machine Learning Algorithmic Frameworks for Biomarker Discovery from Multi-Omics Data in Oncology</i>
	1	Institute of Informatics and Telematics IIT CNR	Subject Area C Subject grant: <i>AI for Next-Generation Mobile Health Solutions</i>
	1	Institute of Information Science and Technologies "A. Faedo" ISTI CNR	Subject Area C Subject grant: <i>AI & education - Artificial Intelligence for Learning Technologies and Pedagogical Innovation</i>
	1	University of Bari "Aldo Moro"	Subject Area C Subject grant: <i>Wearable Emotion AI</i>
	1	University Cattolica del Sacro Cuore Milano	Subject Area C Subject grant. <i>"Analysis of the socio-comunicative and emotional aspects of a chatbot for caregiver support"</i>
	1	University Cattolica del Sacro Cuore Milano	Subject Area C Subject grant <i>Cognitive Dynamics of Human-AI Interaction</i>
	1	Department of Computer Science of University of Pisa project <i>RehAI - Pioneering AI-Driven Solutions for Advanced Rehabilitations Service</i> (CUP: I53C25000680001) resp. Prof Giuseppe Prencipe	Subject Area C Subject grant: <i>Trustworthy Artificial Intelligence for Multimodal Predictive Modeling in Digital Health and Rehabilitation</i>

	1	Department of Computer Science of University of Pisa Department of Clinical and Experimental Medicine of University of Pisa projects AInCP resp. Prof. Giuseppe Prencipe; HUMMINGBIRD resp. Prof.ssa Alina Sirbu; InSisergia resp. Prof. Stefano Masi	Subject Area C Subject grant: <i>Toward Intelligent Models for Cardiovascular Health: AI-Based Multimodal Approaches</i>									
	1	University of Pisa Department of Clinical and Experimental Medicine of University of Pisa, project InSisergia resp Prof. Stefano Masi	Subject Area C Subject grant: <i>Evaluation and analysis of advanced vascular modeling performed from cardiovascular physiological signals</i>									
	2	Institute for Nuclear Physics INFN	Subject Area D Subject grant: <i>Accelerating Physics research using Artificial Intelligence</i>									
	1	Sant'Anna School of Advanced Studies	Subject Area D Subject grant: <i>Scientific Machine Learning for computational physics, as part of the activities of the ERC project "DANTE - Data Aware efficient models of the urban microclimate (GA 101115741)</i>									
	1	University of Napoli "L'Orientale"	Subject Area E Subject grant: <i>Digital Assistants in Consumer Contexts: A Legal Analysis of Contracts, Transparency, and User Risks</i>									
	1	Fondazione Bruno Kessler (FBK)	Subject Area E Subject grant <i>Governing AI in Practice: implementing the AI Act in public and corporate contexts</i>									
DIN02_B	Type of selection procedure Single ranking list for research project											
	No. of available positions with grant: 1 of which											
	<table><tr><td>No.</td><td>Funding organisation / Partner institution</td><td>Subject / Research project</td></tr><tr><td colspan="3">Positions with grant</td></tr><tr><td>1</td><td>FIBERCOOP S.p.A:</td><td><i>Geospatial Intelligence and Models B2B2X for Transforming the Network into a Platform: Developing Data-Driven to support Wholesale Ecosystem</i></td></tr></table>			No.	Funding organisation / Partner institution	Subject / Research project	Positions with grant			1	FIBERCOOP S.p.A:	<i>Geospatial Intelligence and Models B2B2X for Transforming the Network into a Platform: Developing Data-Driven to support Wholesale Ecosystem</i>
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DIN03_B	Type of selection procedure Single ranking list for research project											
	No. of available positions with grant: 1 of which											
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	Department of Computer Science of University of Pisa, project 489999_CONTOTERZI_SADAS_2026_RUGGIERI	
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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.

DIN04_B

Type of selection procedure

Ranking list reserved for employees of Presidenza del Consiglio dei Ministri (registered office Roma RM, via XX Settembre n. 8) for the activation of an industrial-oriented PhD programme (agreement finalised on June 23, 2026)

No.	Partner institution	Subject / Research project (if any)
1	Presidenza del Consiglio dei Ministri	<i>Social Agents: modeling and simulation of social dynamics through artificial intelligence and knowledge representation</i>

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.**

The candidate must also indicate, **during the online application procedure for the selection**, 2 referees and their contact details (email addresses and telephone numbers), consisting of academics and scholars in Artificial Intelligence willing to provide references, who must upload their reference letter **by 23:59 (CEST) on the deadline of the Call for applications (10 August 2026)**, in accordance with the instructions that will be sent directly to them by email.

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.

During the interview the Examination Committee will verify the candidate’s English Language proficiency

Videoconferencing **YES** **Interviews will only take position remotely**

Research Project:

to be assessed together with the CV and to be presented at the interview

The research project must be uploaded **during the online application procedure for registration**.

The research project must be uploaded only during the application process, and it will be evaluated with the CV and illustrated at the interview to highlight the candidate's research and planning capacity.

The research project aims to determine the candidate's attitude for research activity and awareness of the challenges of multidisciplinary research and innovation in Artificial Intelligence (AI), both in the innovative application of AI in society and in the conception of new tools and theories for future AI. The submitted project should therefore briefly outline the research challenges addressed, contextualising them in the context of the forementioned challenges and the state of the art. The document should not exceed 9000 characters (including spaces), corresponding to approximately two pages (excluding bibliography).

ONLY for selection DIN01_B, an additional page of the document can be included solely to illustrate the relevance of the project to one or more of the topics of the scholarships offered.

The project submitted during the selection procedure does not constitute a binding commitment for the conduct of future research activities.

	Minimum score	Maximum score
CV	36	60
Candidates who have obtained a score of at least 36 out of 40 points shall be admitted to the interview.		
Interview	36	60
Eligibility is achieved with a minimum score of 72 out of 120 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).

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/dottorato-nazionale-in-intelligenza-artificiale/>

PhD programme website:

<https://phd-ai-society.di.unipi.it/>

PhD programme regulations:

to be issued