







UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II



Application procedure for national Ph.D. Programme in Artificial Intelligence A.Y. 2023/2024 (39th cycle)

This document cannot be used for legal purposes and it is only meant to provide information in English on the call for applications.

CALL FOR APPLICATIONS TO PHD PROGRAMME

For the academic year 2023/2024 (39th cycle) the University of Naples Federico II is accepting applications for the admission to National PhD Programme in Artificial Intelligence – Agrifood and Environment Area – with administrative headquarters at the University of Naples Federico II. Selection procedures and available PhD grants are available in the annexed form, being an integral part of this Call. In this section are published also:

- the number of places for which the competition is held;
- the affiliated institutions and the number of scholarships financed or co-financed by them;
- the duration, the Coordinator and the Department/Institutions where the PhD student will be registered at;
- the calendar of the selection procedure;
- the webpage address of each PhD course, which provides the candidates with information about the organization, research topics and educational activities;
- details on the research project layout.

Vacancies with scholarships pursuant to Ministerial Decree no. 117 of 2nd March 2023 and the Ministerial Decree n. 118 of 2nd March 2023 are published under the condition of the approval of the ministerial funding. The PhD scholarships are granted to the candidates only to pursue the restricted topics indicated in the aforementioned decrees and in compliance with the eligibility criteria pursuant to art. 7 of the Ministerial Decree 117 of 2nd March 2023, and art. 7, 8, 9 and 10 of the Ministerial Decree n. 118 of 2nd March 2023. Positions with scholarship pursuant to Ministerial Decree no. 117/2023 they will be activated subject to the signing of the agreement by the co-financing entities.

The places covered by scholarships may be increased as a result of funding by public or private entities. The authorization to sign the relevant agreement must take place before the beginning of the examination's procedure of the research doctorate. The agreement can take into account some specific modalities of the research and training program.

The timetables reported in the announcement has to be considered as the official notification to candidates, who will not receive any further written notice about the modalities of the examinations.

Any changes to the calendars will be promptly published on the University website, at http://www.unina.it/didaţca/post-laurea/dottorato-di-ricerca/bandi-di-ammissione. The candidates are expected to refer to this link constantly.

ADMISSION REQUIREMENTS

To apply to the above PhD Programme candidates (with no restriction about age and citizenship) should have obtained one of the following degrees:

master degree, equivalent to "laurea specialistica" or "laurea magistrale" (as defined in the Italian Ministerial Decree nr. 509/1999 and its subsequent modifications and integrations);









- academic degree, equivalent to the "laurea vecchio ordinamento" Degree, of a total minimum duration of 4 years;
- an equivalent degree obtained from a foreign university.

The candidates, who does not have completed yet the academic degree during the selection procedure, have to graduate by the date of the enrollment.

The equivalence of the degree of the candidates graduated abroad will be evaluated on the basis of the documents attached by the candidate to the application form. Candidates with a master degree conferred from a foreign University (and which was not yet declared equivalent - by virtue of agreements between the foreign Country and Italy - to the Italian master/specialist degree), requiring - for the sole purpose of admission to the PhD programme – that this equivalency be declared, must deliver the certificate of the master degree issued from their University, with the corresponding final grade, the list of the passed examinations and their marks and syllabi, and any other related useful document. Should the certificate be written in language other than Italian, English, French, Spanish or German, the candidate must also submit its translation into one of the aforesaid languages.

The foreign academic title and the supporting documents should be uploaded in the application procedure. Candidates will be admitted conditionally. The University of Naples Federico II has the right to exclude at any time those candidates who do not fulfil the necessary requisites.

APPLICATION PROCEDURE

The application form to participate in the selection process may only be submitted using the dedicated online procedure, available at: https://pica.cineca.it/unina/ Application forms must be submitted no later than August 2nd, 2023 3 pm (CEST)). In order to apply for the call, candidates should pay, under penalty of exclusion, the application fee of € 50,00. The application fee has to be paid in the manner described in the procedure. The fee paid for participation in the selection will not be refundable under any circumstances. Candidates graduated abroad are exempted from the payment of the examination fee.

Once the application form has been completed, it must be printed, signed and re-uploaded following the instructions described in the online procedure, and copy of a valid identity document must be attached. A missing signature and/or missing identity document could lead to exclusion from the selection process. After closing the application, the candidate can request reference letters by completing the appropriate section on the application form. The candidate can request reference letters before the same closing date for applications, i.e. August 2nd 2024 at 3 pm (CEST). A notification for completion of the letter will be sent to the referee only after the application has been fully submitted. The referee will be automatically notified by the system and will have to personally complete the reference letter section in the online procedure and submit it by the deadline of August 4th 2023 at 3 pm (CEST).

In order to assess the academic titles, candidates are expected to upload the following documents on the https://pica.cineca.it/unina/ platform:

Candidates with an italian degree

- Graduation mark and weighted average on the basis of the CFU of the marks of the relative exams
 passed during the Laurea Specialistica / Laurea Magistrale and other elements deemed suitable for
 evaluation (for example, list of exams taken with the relative marks). Such titles must be submitted
 by substitutive declaration of certification, made pursuant to article 46 of Presidential Decree n.
 445/2000 and subsequent amendments;
- 2. graduation mark and weighted average on the basis of the CFU marks of the relative exams passed during the *Laurea Triennale* and other elements deemed suitable for evaluation (e.g. list of the exams









taken with the relative marks). These qualifications must be presented by substitutive declaration of certification, made pursuant to Article 46 of Presidential Decree n. 445/2000 and further modifications;

- 3. master's degree thesis and any publications accompanied by a "dichiarazione sostitutiva di atto notorio concernente la conformità all'originale";
- 4. any other qualifications (e.g. scholarships, further academic qualifications) by means of substitutive declaration of certification, made pursuant to Article 46 of Presidential Decree n. 445/2000 and further modifications.
- 5. Reference letter(s), which must be submitted as explained below.

Candidates graduating in Italy

- 1. Weighted average on the basis of the CFU of the marks of the exams taken during the *laurea* specialistica / laurea magistrale and other elements deemed suitable for evaluation (for example list of exams taken with the relative marks). These qualifications must be presented by substitutive declaration of certification, made pursuant to Article 46 of Presidential Decree n. 445/2000 and further modifications;
- 2. graduation mark and weighted average on the basis of the CFU marks of the relative exams passed during the *laurea triennale* and other elements deemed suitable for evaluation (e.g. list of the exams taken with the relative marks). These qualifications must be presented by substitutive declaration of certification, made pursuant to Article 46 of Presidential Decree n. 445/2000 and further modifications;
- 3. any publications accompanied by a "dichiarazione sostitutiva di atto notorio concernente la conformità all'originale";
- 4. any other qualifications (e.g. scholarships, further academic qualifications) by means of substitutive declaration of certification, made pursuant to Article 46 of Presidential Decree n. 445/2000 and further modifications;
- 5. Reference letter(s), which must be submitted as explained below.

Candidates with a foreign academic degree

- 1. degree certificate, both first and second level, indicating the exams taken and the study plan followed (the certificate must be translated in English);
- 2. second level degree thesis and any publications accompanied by *dichiarazione sostitutiva di atto notorio concernente la conformità all'originale"*;
- 3. any other qualifications (scholarships and certificates of attendance of post-graduate courses, qualifications linked to research activities, scores reported in standardized tests used for the admission to university courses at national or international levels etc.)
- 4. Reference letter(s), which must be submitted as explained below;
- 5. Curriculum Vitae.

Candidates graduating abroad

- 1. academic certificate, indicating the exams taken and the study plan followed (the certificate must be translated if not in English);
- 2. any publications accompanied by *dichiarazione sostitutiva di atto notorio concernente la conformità all'originale"*;
- any other qualifications (scholarships and certificates of attendance of post-graduate courses, qualifications linked to research activities, scores reported in standardized tests used for the admission to university courses at national or international levels etc);
- 4. Reference letter(s), which must be submitted as explained below;
- 5. Curriculum Vitae.









The application must be printed, signed and uploaded in the procedure following the instructions described in the procedure, attaching a copy of a valid identity document. Lack signature and / or identity document are grounds for exclusion from the selection.

After completing the application, the candidate can request letters of reference by filling in the dedicated section, by the deadline for submitting the application (2 August 2023, 3.00 pm - Italian time).

The notice of completion of the letter will be sent to the referee only after the final closure of the application. The referee will be automatically notified by the system and will have to fill in the letter model himself in the online procedure and send it by 4 August 2023 at 15:00 (Italian time).

The Administration assumes no responsibility for the failure to receive the documentation linked to an error attributable to the candidate, or by any errors attributable to third parties, case fortuitous or force majeure.

To candidates with disabilities, who declare in the procedure that they request further support during the selection, the procedure provides the indications on how to fill in the declaration, pursuant to current legislation (Law No. 104/1992 as supplemented and amended by Laws No. 17/1999 and n. 53/2000 and subsequent amendments and additions), and the uploading of the relative medical certification.

The list of the candidates admitted to the programme will be published at the following address http://www.unina.it/didattica/post-laurea/dottorati-di-ricerca/bandi-di-ammissione at least five days before the interview; before that deadline the selection committee will have to establish the evaluation criteria for the curriculum and for the interview.

Candidates with disabilities declaring in the procedure to request support during the entrance examination should submit a request made pursuant to the existing Law (Law n. 104/1992 as integrated and amended by Laws no. 17/1999 and no. 53/2000 and subsequent amendments and additions) and a medical certificate. Full details regarding this request are given to candidates with specific needs in the procedure.

ADMISSION EXAMS

Admission to the PhD Programme is based on the assessment of the qualifications, research proposal evaluation and interview. Candidates must also demonstrate good knowledge of the English language. The qualifications and topics covered by the tests must be relevant to the design themes of the course doctorate.

The marks will be assigned as here stated: a maximum of 20 for the assessment of the qualifications, a maximum of 30 for the evaluation of the research proposal, a maximum of 50 for the interview. Qualifications will be assessed by following the rating here below reported:

- the entire university career, using the graduation grade or average weighted on the basis of the CFU, the marks of the exams taken and, possibly, others elements deemed suitable by the Commission as evaluation elements: up to a maximum of 15 points;
- scientific publications, master's degree thesis and other relevant qualifications (awards, patents, grants of study, etc.), any reference letter(s): up to a maximum of 5 points.

To be admitted to the interview, the candidate must get no less than 8/20 in the assessment of his/her qualifications and 18/30 in the research proposal's evaluation.

To pass the interview, the candidates are expected to obtain a score of at least 30/50.

The final score will correspond to the sum of the marks assigned in the assessment of the qualifications, written examination (if required), and interview.









To take the examination, candidates will produce one the following legally valid identity document: identity card, passport, driving license. The candidate will be considered as a renouncer, if she/he, for any reason, will be absent on the day, place and time scheduled for the examinations. The interview may be held remotely.

RANKING OF CANDIDATES AND ENROLMENT

The Rectoral Decree approving the ranking of the PhD programme will be published by September 26th 2023, at the following link: http://www.unina.it/didattica/postlaurea/dottorati-di-ricerca/bandi-di-ammissione

This publication will formally notify the winners of the competition results. No further personal communication will be sent to the candidates.

The winners, no later than the next five days from the date of publication of the Rectoral Decree approving the ranking list, must enroll in the PhD programme. To that end, at the following link http://www.unina.it/didattica/post-laurea/dottorati-di-ricerca/bandi-di-ammissione will be published the list of the candidates entitled to the enrollment. This publication will formally notify the candidates entitled to enroll in the PhD Programme. No further communication will be sent to the candidates.

The winners with a foreign academic degree, which has not been declared equivalent to the Italian specialist/master's degree, they must present or submit the translated and legalized degree certificate with the attached declaration of value issued by the Italian Representation competent for the territory of the country where the academic institution resides. For further information in this regard, please refer to the website of the Ministry of the University and Research at https://www.studiare-in-italia.it/studentistranieri/

Registration requires the payment of the regional contribution for the right to study of € 140.00 (how to pay the regional tax will be explained in the University portal at the address http://www.unina.it/didattica/postlaurea/dottorati-di-ricerca/bandi-di-missioni).

Registration cannot take place after the deadline indicated in the third paragraph of this section.

Once the deadline for registration referred to in the third paragraph of this article has passed, the places that will result vacant will made available to candidates classified as suitable.

Any aforementioned scrolling will be published until November 27, 2023, no later than that date.

STUDENT GRANTS

The grants will be conferred considering the order in the final ranking, until full coverage of the available vacancies. For the sole purpose of the assignment of scholarships, in the event of a tie between two or more candidates, the one with a lower income will have priority in the ranking (the economic status of the candidates will be evaluated with the same procedures adopted for the enrolment fees of the students.). Grants cover the period of 1 year; they are renewed year per year, on the condition that the PhD student has completed the timetable for the previous year, plus the admission to the following one. The annual grant is €16.243,00, plus social security contributions. The grant covers the whole duration of the PhD programme. The instalments will be set every monthly, through postponed payments. PhD students who exceed €16.243,00 (the grant itself is not calculated) cannot be the recipients of the grant. The amount of the grant can be increased of 50% of the gross amount, when the PhD student carries the research abroad; the extra funds can cover a maximum of 12 months. The period of time the PhD student will spend in her/his own Country, or in the Country in which she/he has the residence will not be included in the calculation for extra funding. When the PhD student who has won the grant, exceeds the personal income per year and at the same time of the collected installments, needs to give back them to the University. The same happens if the PhD student does not fulfil the requirement stated below (see section on "Rights and Obligations of PhD Students"). Whoever has already received a student grant for a PhD Programme, even for a half of the total









duration of the PhD course, cannot apply again for a new grant. Multiple grants cannot be combined, except for those which refer to national or foreign institutions, and integrate training or research activities abroad. Scholarships will be credited according to the actual periods of attendance to study and research activities. Starting from the second year of the PhD course, in addition to the scholarship (and limited to the availability of resources in the financial budget of the university) an extra budget will be assigned to the PhD student, to support the research in Italy and abroad: this budget depends on the typology of the PhD program, and it will be at least 20% of the PhD gross scholarship amount. In the act of enrolling, who is eligible for a grant has to set a declaratin about presumed gross personal income and absence of the mentioned incompatibilities. Such a declaration must be done at the beginning of each new academic year of attendance of the PhD Programme. Moreover, students supported with grants must register themselves to "Gestione separata" position at INPS (the Italian National Social Security Institute), via https://www.inps.it

FEES AND CONTRIBUTIONS

Students enrolled at PhD Programme are supposed to pay, for each year of course, the regional tax for education of € 140.

RIGHTS AND OBLIGATIONS OF PhD STUDENTS

Attending a PhD course implies an exclusive and full time engagement. Ph.D. students recipient of scholarship assigned under Ministerial Decree 117/2023 and Ministerial Decree 118/2023 have to satisfy the following requirements: The recipients of scholarships funded pursuant to D.M. 117/2023 and of the D.M. 118/2023 are also required to comply with the following obligations:

- a) for D.M. scholarships 117/2023 (art. 7): spend a period of study and research, even non-continuous over the three-year period, in the company, from a minimum of six (6) months to a maximum of eighteen (18) months, and abroad from a minimum of six (6) months to the maximum period set forth in art. 9, paragraph 3, of the D.M. no. 226/2021;
- b) for D.M. scholarships 118/2023 digital and environmental transitions (art. 7): spend a period of study and research, even non-continuous over the three-year period, in a company or research centre, for a minimum of six (6) months to a maximum of twelve (12) months, and abroad from a minimum of six (6) months to a maximum period provided for in art. 9, paragraph 3, of the D.M. no. 226/2021;
- c) for D.M. scholarships 118/2023 PNRR Research (art. 8): spend a period of study and research abroad, even non-continuous over the three-year period, from a minimum of six (6) months up to the maximum period envisaged to art. 9, paragraph 3, of the D.M. no. 226/2021;
- d) for D.M. scholarships 118/2023 PNRR Public Administration (art. 9): spend a period of study and research, even non-continuous over the three-year period, at a Public Administration or a company or a research centre, from a minimum of six (6) months to a maximum of twelve (12) months, and abroad from a minimum six (6) months to the maximum period set forth in art. 9, paragraph 3, of the D.M. no. 226/2021;
- e) for D.M. scholarships 118/2023 Cultural Heritage (art. 10): spend a period of study and research, even non-continuous over the three-year period, in Public Administrations, including museums, institutes and training institutions of the Ministry of Culture (e.g. Foundation of the school of goods and cultural activities and other Higher Education Schools), archives, libraries, from a minimum of six (6) months to a maximum of twelve (12) months, and abroad from a minimum of six (6) months to the maximum period set forth in art. 9, paragraph 3, of the D.M. no. 226/2021;
- f) report the activity carried out, through the appropriate online platform (http://dottorati.mur.gov.it), with a half-yearly report, indicating the time commitment (divided into months in company/institution, in









headquarters, abroad) and a summary of the main activities carried out, validated by the course coordinator doctorate.

Recipients of grants funded by Extended Partnerships (PE), National Centers (CN) and Research Infrastructures (RIs) are also required to carry out the entire doctoral, training and research, in line with the themes and objectives of the projects that finance the grant, in collaboration with the respective scientific representatives of Spoke and the project, will also have to report the research activity, as foreseen by the PhD program and by the project, producing: - a periodic summary of the main activities carried out, countersigned by the tutor and the scientific manager; - suitable documentation certifying the activity carried out; - a report indicating the time commitment. Research and training activities are ordinarily foreseen for each PhD student, consistent with the doctoral project, at highly qualified institutions abroad. PhD students are obliged to attend and undertake all the scheduled activities, to present all the oral and written reports required, and carry out whatsoever is established by the Academic Board of the PhD Programme. At the end of each academic year the Board, on the basis of a detailed report of the activities and research carried out by each PhD student, will rate the admission to the next year, or ask the Rector for the exclusion from the PhD Programme. At the end of the PhD programme, the students must provide the Academic Board with a report concerning all the activities they attended to, and their publications, if any. Simultaneous attendance of a PhD Programme and another Ph.D. programmes is forbidden. Students enrolled in a PhD Programme may request suspension from attending the courses for maternity, civil service (for this last occurrence, no more than 1 year). The Academic Board will take note of these suspensions. Students enrolled in a PhD programme may request suspension from attending the course due to serious illness for no more than 6 months. Suspension with a duration more than 30 days obliges the PhD students to recover all the time corresponding to the interruption of their academic activities; additionally, for PhD students granted with scholarship, this suspension entails the cessation of the grant payment for the period involved. The entire duration of the PhD course cannot be reduced due to these suspensions: thus, the completion of the course will be deferred for a corresponding time. PhD students are allowed to carry out the research activities abroad, for a period no longer - as a whole - than 12 months; in case of a joint (cotutela) agreement, the period abroad can be extended to a maximum of 18 months. In that event, the authorization has to come from the Academic Board, after the previous consent from the Supervisors. If the period spent abroad lasts up to 6 months, it will be sufficient the authorization of the PhD coordinator, and the previous consent by the supervisor.

DEGREE OF DOCTOR OF PHILOSOPHY AND PhD THESIS

The degree of "Doctor of Philosophy" (in its shorted Italian form "Dott. Ric.", corresponding to "Ph.D.") is obtained by passing the final examination, i.e. defending a PhD thesis at the end of the PhD Programme. The Rector confers it in conformity with the university regulations. The final dissertation can be written in English, or in a different language, with the previous approval of the Academic Board. By 30 days after the discussion of the PhD thesis, the University will record them — as electronic files — in the MIUR (Italian Ministry for University and Research) data-base. The University of Naples Federico II uploads the full text of the PhD thesis on its Open Archive, with a free internet access. The University also provides to transfer the PhD works to the National Libraries of Rome and Florence. On duly justified request by the PhD student, the Academic Board could allow to inhibit parts of the PhD thesis to the open access, so that data covered by industrial secret cannot be consulted — for a certain period — by third partes.

THE RECTOR

Matteo Lorito









Attachment A)

National Ph.D. Course in ARTIFICIAL INTELLIGENCE for Agrifood and Environment

ACADEMIC YEAR 2023/2024 (39TH CYCLE)

Administrative Seat: Università degli Studi di Napoli Federico II – Department of Biology

Length: 3 years

Ph.D. Coordinator: Prof. Francesco Loreto

Webpage of the ph.d. course: https://www.phd-ai.it/

Partners:

Università degli Studi di Napoli Federico II

Università degli Studi della Basilicata

Università degli Studi di Firenze

Università "Campus Bio-Medico" di Roma

Università degli Studi di Udine

Università degli Studi di Parma

Università degli Studi di Perugia

Università degli Studi di Napoli "Parthenope"

Università degli Studi "Mediterranea" di Reggio Calabria

Istituto di Calcolo e Reti ad Alte Prestazioni del CNR (ICAR_CNR)

Position with grant:	n. 35
Position without grant:	n. 4
Total:	n. 39
Details of the grants offered:	 n. 2 funded by the University of Naples Federico II pursuant D.M. 118/2023 M4C1-Inv. 4.1 research PNRR n. 3 funded by the University of the University of Naples Federico II pursuant D.M. 118/2023 M4C1-Inv. 4.1 Public Administration
	n. 1 funded by the University of the University of Naples Federico II pursuant D.M. 118/2023 M4C1-Inv. 4.1 Cultural Heritage
	n. 1 funded by the University of Basilicata pursuant D.M. 118/2023 M4C1-Inv. 4.1 research PNRR









	n. 1 funded by the University of Firenze pursuant D.M. 118/2023 M4C1-Inv. 4.1 research PNRR
	n. 1 funded by the University of Rome "Campus Bio Medico" pursuant D.M. 117/2023
	n. 1 funded by the University of Udine pursuant D.M. 118/2023 M4C1-Inv. 3.4 Digital and Environmental transition
	n. 1 funded by the University of Parma pursuant D.M. 118/2023 M4C1-Inv. 4.1 research PNRR
	n.2 funded by the University of Perugia pursuant D.M. 117/2023
	n. 1 funded by the University of Napoli "Parthenope" pursuant D.M. 118/2023 M4C1-Inv. 4.1 Public Administration
	n. 1 funded by the University of Reggio Calabria "Mediterranea" pursuant D.M. 118/2023 M4C1-Inv. 4.1 research PNRR
	n. 2 funded by the University of Pisa pursuant D.M. 118/2023 M4C1-Inv. 4.1 research PNRR
	n. 4 Funded by the <i>Istituto di Calcolo e Reti ad Alte Prestazioni del</i> CNR (ICAR_CNR)
	n. 4 Funded by the <i>Istituto per la protezione Sostenibile delle</i> Piante del CNR (IPSP – CNR) ex D.M. 117/2023
	n. 5 Funded by the University of Naples Federico II PNRR Project PE00000013 project title: Future Artificial Intelligence Research (FAIR) - Spoke / theme: Resilient Artificial Intelligence - CUP E63C22002150007
	n. 1 co-funded by the University of Naples Federico II and <i>Fides</i> Consulting Srl. pursuant D.M. 117/2023
	n. 2 co-funded by the University of Naples Federico II and <i>Sharing</i> Communication Agency Srl pursuant D.M. 117/2023
	n. 2 co-funded by the University of Naples Federico II and da Associazione Università popolare Libera Università delle Culture Europee (LUCE) pursuant D.M. 117/2023
Research themes	The research themes will be published on July 12 th 2023 at the following link http://www.unina.it/didattica/post-laurea/dottorati-di-ricerca/bandi-di-ammissione
Details on the research project	The research project is on a topic freely chosen by the candidate as long as it is related to the field of interest of the Doctorate and to the topics that will be published on the University website. The project must be uploaded when submitting the application for participation in the competition and will be evaluated together with the curriculum.









	In addition to reporting the candidate's personal data, the date and being signed, the project must be structured as follows: TITLE (MAX 300 characters including spaces), INTRODUCTION (MAX 3,500 characters including spaces), RESEARCH OBJECTIVES (max 1,000 characters including spaces), PROPOSED RESEARCH ACTIVITY, METHODOLOGIES AND CONTENTS (MAX 4,000 characters including spaces), EXPECTED RESULTS AND DEGREE OF INNOVATION OF THE RESEARCH CA PROPOSAL (MAX 2,000 characters including spaces), CONCLUSIONS AND POSSIBLE TRANSLATIONAL IMPACTS (MAX 1,000 characters including spaces), BIBLIOGRAPHY (MAX 3,000 characters including spaces).
Selection calendar	The calendar of the selection procedure will be published on July 12 th 2023 at the following link http://www.unina.it/didattica/post-laurea/dottorati-di-ricerca/bandi-di-ammissione . The interview will be held remotely