

Il Rettore

DEADLINE: 29/09/2023 14:00 (Italian time)

According to Law No. 168 of 9.5.1989;

According to Law No. 240 of 30.12.2010;

According to the Decree of Ministry of Education, University and Research (MUR) "Regulations containing the procedures for accreditation of PhD locations and programmes and criteria for the establishment of PhD programmes by accredited bodies" No. 226 dated 14.12.2021;

Having regard to the Politecnico di Milano PhD Regulations issued with R.D. No. 3337 dated 01.04.2022 and subsequent amendments;

According to the deliberation of the Ph.D. School Board of 07.10.2013;

According to the deliberation of the Academic Senate of 21.10.2013;

According to the deliberation of the Board of Governors of 29.10.13;

Having regard to Italian Ministerial Decree dated 02-03-2023 n. 117 for the award of three-year PhD scholarships for the attendance of innovative doctoral programs that respond to the innovation needs of companies and promote the recruitment of researchers from companies. The allocation is based on the NRRP (PNRR) Mission 4, Component 2 "From Research to Business" - Investment 3.3 "Introduction of innovative doctorates that respond to the innovation needs of companies and promote the recruitment of researchers from business";

DECREES

Art. 1 (Institution)

The Politecnico di Milano opened the admission selection call 39° ciclo ingr. 22/12/2023: BANDO DOTTORATO PNRR 117 corso di SCIENZE E TECNOLOGIE ENERGETICHE E NUCLEARI / ENERGY AND NUCLEAR SCIENCE AND TECHNOLOGY - STUDIO DELLE PRESTAZIONI DI RAFFREDDATORI ADIABATICI for 1 position, with a Ph.D. research topic scholarship available, research being restricted to the research topic (as described in the Research topic description form attached).

The selection call is open to Italian and foreign nationals. Stateless students are viewed as foreign students.

Admission to Ph.D. programmes will be determined on the basis of an assessment of the educational curriculum and qualifications, the Personal statement and a document illustrating the development of a possible Ph.D. research project, which candidates must send at the time of applying for selection, as specified in Art. 3 below, and of the suitability of the candidate for the research topic.

The PhD programme will last three years.

Art. 2 (Requirements for admission to the call)

Applications may be submitted by Italian and foreign students holding a university degree obtained under the educational system in force prior to M.D. n. 509 dated 03/11/1999, or a Laurea Specialistica (equivalent to a Master of Science) obtained in accordance with M.D. n. 509 dated 03/11/1999, or a Laurea Magistrale (equivalent to a Master of Science) obtained in accordance with M.D. n. 270 dated 22/10/2004, or similar academic qualifications obtained abroad that are equivalent in terms of duration and contents to the Italian qualifications and qualified as fit by the Selection Committee.

Where there are foreign qualifications, applicants must submit all documents required to enable the Selection Committee to establish the eligibility of the qualifications obtained abroad.

Only applicants who meet the following requirements can apply for the call:

- have obtained a Laurea Magistrale in Italy (or equivalent qualifications that are valid for admission to PhD programmes) with a final score no lower than 95/110 or 86/100;

- for qualifications obtained abroad, have the minimum average score in exams indicated in the appendix to the call (attachment 1). For the Countries not included in this list, the evaluation will be carried out directly by the Selection Committee.

Former PhD candidates of Politecnico di Milano cannot participate in the call for the same programme if they have been issued a measure of exclusion from the programme in the last 5 years.

Candidates who are not in possession of the required qualification at the closing date of this call may also apply for it. Following the assessment by the Selection Committee, any admission of such applicants to PhD programmes will be "subject to verification".

In any event, the academic qualifications must be awarded before enrolment, with the minimum marks indicated above. Otherwise, applicants will lose their right to be admitted to the PhD programme.

Certified knowledge of English is required from all candidates. They are required to submit one of the certificates listed if they have not already submitted it at the closing date of this call.

Failure to submit the requested certificates by the above-mentioned deadlines irrevocably entails the loss of the right to enrol.

Below is a list of the certifications accepted by the Politecnico di Milano and the corresponding levels.

| TEST | MINIMUM LEVEL REQUIRED |
|---|-------------------------------------|
| CAMBRIDGE | >= FCE grade B |
| CAMBRIDGE IELTS (International English Language Testing System) (Academic) | >= 6 |
| ETS - TOEFL (Test of English as a Foreign Language) | paper based (total score): >= 547 |
| ETS - TOEFL (Test of English as a Foreign Language) | computer based (total score): >=210 |
| ETS - TOEFL (Test of English as a Foreign Language) | internet based (total score): >=78 |
| ETS - TOEIC (Test of English for International Communication - Listening and Reading Test) | >=720 |
| TRINITY COLLEGE LONDON | >=ISE II |

The aforementioned certifications are valid regardless of the date when they were awarded.

Citizens of Countries in which English is an official language are not required to certify their knowledge of English. Similarly, applicants who have been awarded or will be awarded academic qualifications by an institute in which all teaching activities have been carried out in English are not required to certify their knowledge of English. In this latter case, candidates are required to submit an official language certification from the corresponding academic institute.

Art. 3 (Applications for Selection)

In order to correctly submit the PhD Call application, you must first register in order to access the Politecnico di Milano online services by following this link:

[Online Services](#)

After registering, you can use your Person Code and password to access the PhD application. The PhD application for admission to the Call and the accompanying documentation must be submitted electronic format only by 29/09/2023 14:00 PM (Italian Time C.E.T.) via the link available in the page in online services:

online services --> Application forms --> Application for "bandi aggiuntivi" PhD programmes

The deadline is final, the system will not accept applications closed after the deadline.

Until confirmed, the application can be saved and modified by the candidate as many times as required. After confirmation, it can no longer be modified, it can be deleted and, if necessary, a new application can be inserted, if before the deadline.

It is the candidate's responsibility to verify the correct conclusion of the procedure and any complaints, regarding any malfunctions in the IT / banking system, will not be accepted.

A non-refundable contribution of Euro 25.82 is payable for each application submitted and must be paid no later than 29/09/2023 14:00. Payment of the contribution must be made through the PAGO PA system following the instructions in the online application submission procedure.

In the admission application, the candidate declares under his/her own responsibility:

- their personal data, including date and place of birth, residence and address chosen for the call purposes (specifying their postal code, phone number and email address). Applicants also undertake to promptly notify of any changes in their residence and/or address where communications are to be sent;
- nationality;
- academic qualifications held and required for admission to the PhD programme, awarded by an Italian University, specifying: date of award, corresponding University, official duration of the study programme, final score and corresponding score scale (if any);

or

- academic qualifications held and required for admission to the PhD programme, awarded by a foreign University, specifying: date of award, corresponding University, official duration of the study programme, final score associated with the qualifications awarded and corresponding score scale, and all the documents necessary for the recognition and evaluation of the suitability of such qualifications, for the sole purpose of being admitted to the PhD programme;

or

- that he/she will provide the Degree or equivalent qualification by the expected start date of the Ph.D. programme, specifying the University at which it will be achieved and the official duration of the study course;
- certification proving their knowledge of the English language, as specified in art. 2 of this call;

or

- that he/she will submit the certification attesting to knowledge of the English language as specified in Art. 2 of this notice, by the start date of the course;
- the title of the topic scholarship applied for;
- up to 2 names of referees, complete with their e-mail address and telephone number;
- to undertake to attend the Ph.D. in accordance with the provisions set out in this call, the Regulations of the Politecnico di Milano in relation to Ph.D. programmes and the procedures established by the Faculty Board;
- to be aware that the originality of their publications and dissertations provided for this application or during their doctoral career at the Politecnico di Milano can be verified by anti-plagiarism software.

You must include all of the following documentation, otherwise your application will not be considered (the documents must be in pdf format):

- a certificate proving his/her knowledge of English, as specified in art. 2 of this call;
- a PDF report illustrating the development of a possible PhD research project (minimum 4,000, maximum 8,000 characters, excluding bibliographies and pictures), prepared using the RTF form available in the procedure. If the aimed PhD programme includes research areas, applicants must attach a report for each ζ maximum two ζ research area for which they intend to compete. Please note that the research project illustrated in the report prepared for the competition is not necessarily the project that will be carried out during the PhD programme. If admitted, the research project that will in fact be carried out will be subsequently defined and approved by the Programme Faculty Board after the start of the PhD programme. The dissertation, complete with bibliographies and pictures must be contained in a single pdf file maximum size 3 MB;
- a curriculum vitae in PDF format, using the template provided in RTF in the procedure. Applicants must supply the information requested in the CV template. In particular, the CV should include the list of the applicant's publications and a recent photo of the candidate. Furthermore, it can also contain no more than two attached documents (for instance, a portfolio and a publication, or 2 publications) chosen among those that are deemed most significant to illustrate the applicant's potential. The curriculum and its attachments, must be provided in a single file that shall not exceed 10 MB;
- motivation letter for the admission to the chosen PhD programme (max 2000 characters);
- PDF documents relating to all their University qualifications (awarded, or to be awarded), with the diploma in the original language, if available, the list of exams taken and the corresponding scores along with translations in Italian or English;
- a copy of their Italian tax code. This request is mandatory for Italian applicants, while foreign applicants will be required to obtain and submit an Italian tax code to complete the enrolment.

All documents submitted must be in Italian or English. If drafted in another language, they must be translated into Italian or English.

The Administration reserves the right, at any stage during the procedure and even after the commencement of the Ph.D. course, to perform checks on the accuracy of the declarations submitted and request that original documents be provided. Therefore, it may, at any time, for justified reasons, exclude candidates from the selection who do not meet the requirements set out by this call.

Art. 4 (Admission Boards)

The Selection Committees for admission to the PhD programmes referred to in this call are set up in accordance with the PhD Regulations of this University.

Art. 5 (Assessment Criteria)

The applicants duly registered for the call will be admitted to the PhD programme after the Selection Committee's assessment of their eligibility, and subject to the number of positions available.

The applicant's eligibility for admission to the selected PhD programme is based on the assessment of their quality and their aptitude for scientific research in the research areas of the PhD programme for which they are competing. The assessment is based on their application documents and specifically on their curricula, motivation letters and reports illustrating the development of possible research projects in the specific areas of the PhD programme to which they are applying. As previously stated the research project submitted as part of the application does not necessarily represent the project that will be carried out during the PhD programme. If admitted, the research project that will actually be carried out will be subsequently defined and approved by the Programme Faculty Board after the start of the PhD programme, as laid down in the PhD Regulations of Politecnico di Milano.

The Admission Board will assess each application, giving each a mark out of 100.

The rating is broken down as follows:

- curriculum: maximum 45 points;
- reasons for the development of the research topic: maximum 15 points;
- research proposal describing the development of a possible Ph.D. research project, within the given topic of the research applied for: maximum 40 points.

The Board will be evaluated suitable of the candidate if:

- achieves a total score of at least 60 out of 100 points
- the research topic is evaluated suitable by the Commission

The Board may contact candidates for an interview to investigate the material submitted (that interview does not involve additional points).

Art. 6 (Formulation of Rankings)

At the end of the assessments, each Admission Board will draw up, in accordance with the criteria identified in the Article above, a ranking list.

In the case of having the same score, gender balance is taken into account (the gender that prevails is the less represented one among candidates placed in higher positions of the same ranking list). Where there are further equal results, the younger candidate will prevail.

The rankings will be published starting from the 05/10/2023 on the web page:

<http://www.dottorato.polimi.it/en/>

Art. 7 (Obligations after Publication of the Rankings)

Following the publication of the ranking, the admitted candidate is required to enroll or renounce to the scholarship by 21/12/2023.

You can proceed with the enrollment through the On-line services - called: "Application for bandi aggiuntivi" PhD programmes - participation in Additional calls for the research doctorate, by accessing your application under the ranking item. Please refer to article n.9 for the necessary enrolment requirements. After the aforementioned deadline, if the candidate has not enrolled, the Department will withdraw the offer by office, in order to make the positions available for other candidates according to the replacement procedures indicated in the following art. 8.

The withdrawal of the PhD scholarship is irrevocable.

Failure to comply with the requirements and deadlines will result in the irrevocable loss of the right to the scholarship and to the place offered, and the admission will be considered null and void.

Art. 8 (Replacements)

In the case of refusal of a scholarship by a candidate, the Department will offer the scholarship to the next candidate in the same cycle in accordance with the ranking, until it reaches the end. In any case, those candidates must have obtained the required degree and English language certificate.

Art. 9 (Enrolment requirements)

The candidate will only be able to enroll if he/she has obtained the qualification with the required scores as well as the level of English as written in art. 2.

Applicants who have foreign qualifications must present, by the beginning of the course, the originals of the following documents (this applies only to the academic qualification required for admission to the PhD programme) in accordance with the procedures that will be given by the PhD School administration offices:

- Final qualification (diploma) in the original language and relative official translation in Italian
- Final certificate with exams taken and relative translation in Italian
- Declaration of equivalence issued by the Italian diplomatic representatives of the country to which the national education system of the awarded qualification refers
or
Certificate issued by ENIC-NARIC centers (statement of verification)
or
Diploma Supplement in English

The payment of the first installment of the scholarship, will be paid in the month following the start of the activities, together with the second installment. Subsequent payments will be made approximately at the end of each month.

For PhD candidates with a scholarship, the regional fee, the stamp duties and insurance costs will be withheld each year, from the first monthly grant. This amount is established on a yearly basis. For the current academic year this amount is equal to Euro 165.59, unless there are changes in national and regional legislation.

The method of award of a PhD is indicated in the Politecnico di Milano PhD Regulations.

Article 10 (Specific obligations of the PhD candidate)

In addition to what required by the Regulations of the PhD School of the Politecnico di Milano to all doctoral students, and as established by Ministerial Decree 117/2023, the PhD candidate who is awarded the scholarship associated with this call must undertake, upon enrollment, to:

- produce a report every 6 months indicating months spent in the company, at the University and abroad (if applicable), and a summary of the main activities carried out;
- carry out the required research periods in the company and abroad as indicated in the attached descriptive sheet.

Art. 11 (Reference Rules)

Any issues that are not expressly covered by this call, shall be regulated by the provisions set out in Law n. 398 dated 30.11.1989, Law n. 240 dated 30.12.2010 and in the MIUR Decree "Regulations containing the procedures for accreditation of PhD venues and programmes and criteria for the establishment of PhD programmes by accredited bodies" No. 226 dated 14/12/2021, in the Politecnico di Milano PhD Regulations, in the Regulations regarding University industrial property, and in other applicable provisions.

In accordance with Article 5 of the Law n. 241 dated 7 August 1990, as amended and supplemented, the Manager of the Procedure for this call is PAPOFF ANDREA

For further information, interested parties may contact the PhD Programme Department Secretary(email andrea.papoff@polimi.it)

This call will be published on the web page <http://www.dottorato.polimi.it/en/> and on the system 'Euraxess'.

Any changes or additions to the call will be published on the same web page.

Art. 12 (Personal data protection)

Pursuant to EU Regulation no. 679/2016, the candidates are informed that the processing of personal data they have supplied to the Politecnico di Milano is aimed solely at the completion of the selection and assignment of the position and/or scholarship of study indicated by this Call. The processing of data, for the recipient only, will be finalized also to the granting of the scholarship itself and for the purposes related to its management. The treatment will be carried out by the persons in charge of the procedure, including by the Politecnico di Milano Awarding Committee, with the use of computerized procedures, in the ways and within the limits necessary to pursue the aforementioned purposes, even in the event of any communication to third parties.

The provision of such data is necessary to verify the requirements for participation and the possession of securities and their failure to indicate may preclude such verification. Further data may be requested for the sole purpose of granting the grant. The data will be stored, in accordance with the provisions of current legislation, for a period not exceeding the necessary time to achieve the purposes for which they are processed.

The candidates have all the rights as referred on the third chapter of EU Regulation no. 679/2016, in particular, the right to access their personal data, to request correction, updating and cancellation, if incomplete, mistaken or collected in violation of the law, and to oppose to their processing for legitimate reasons.

Further information is available on the University website at www.polimi.it/privacy

Complaints can be filed with a specific request to the Responsible for the protection of personal data, point of contact: privacy@polimi.it .

Data controller of the Politecnico di Milano is the General Manager delegated by the Rector pro-tempore - contact: dirgen@polimi.it .

Il Rettore

Prof. Donatella Sciuto

Digital signature according to the Digital Administration Code

Attached:

- 1- minimum average score in exams for qualifications obtained abroad
- 2- Research topic description
- 3- Research proposal form
- 4- C.V. form

Attachment 1 - MINIMUM AVERAGE SCORE IN EXAMS FOR QUALIFICATIONS OBTAINED ABROAD

| COUNTRY | MINIMUM GPA |
|--|-------------|
| BANGLADESH | 3,3/4 |
| CHINA | 70/100 |
| COLOMBIA | 3,5/5 |
| European Countries (ECTS grading system) | C+ |
| EGYPT | 65/100 |
| ETHIOPIA | 3/4 |
| GHANA | 65/100 |
| INDIA | 70/100 |
| INDONESIA | 2,8/4 |
| IRAN | 14,5/20 |
| NIGERIA | 3/5 |
| PAKISTAN | 3,3/4,0 |
| SERBIA | 7,5/10 |
| TURKEY | 3/4 |
| VIETNAM | 7/10 |

These values are the minimum values accepted, except as otherwise indicated in the Table.

Other Countries not included in the Table or scoring systems that are different from those indicated in the Table: the Judging Panel will assess the qualifications submitted by the applicant.