Call for applications for the Master's degree programme

In Nanotechnologies for ICTs (Nanotecnologie per le ICT) international major MNIS - Micro and Nanotechnologies for Integrated Systems

a.y. 2023-24

Available at: https://www.polito.it/en/education/applying-studying-graduating/admissions-and-enrolment/master-s-degree-programmes/studenti-con-titolo-italiano

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1 Overview

Politecnico di Torino, based on the agreements undertaken starting from 2010 with the Ecole Polytechnique Fédérale de Lausanne (hereinafter EPFL) and with the Institut Polytechnique de Grenoble (hereinafter INPG), organizes an international Master's degree programme in Nanotechnologies for ICTs. The international curriculum includes a first semester at Politecnico di Torino, a second semester at the School of engineering in Physics, Applied Physics, Electronics & Materials Science (PHELMA) of INPG in Grenoble and a third semester at EPFL. The fourth and last semester is dedicated to the thesis activity.

Further information is available at the following links:

- https://www.polito.it/en/education/master-s-degree-programmes/nanotechnologies-for-icts
- http://nanotech.grenoble-inp.fr/

Given the internationality of this training path, Politecnico di Torino supports the mobility abroad of the students enrolled in the programme with an ERASMUS+ scholarship plus other University funds. The scholarship will be granted to the students who meet the requirements of this Call for applications and who actually take part in the mobility project at the partner university.

2 Number of places available and mobility scholarships

For academic year 2023/24 there are totally 20 places available. The following categories of applicants can apply for admission to the programme:

- European Union students: Italian or European citizens

- Equivalent students [1]

Each student admitted to the programme will receive a mobility scholarship that covers the additional expenses that the student will incur during his/her stay abroad compared to what he would spend in Italy. The amounts and payment methods are indicated in art. 9.

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[1] Equivalent students are :

- students from Norway, Icaland, Lichtenstein, Switzerland and the Republic of San Marino;
- non-EU nationals legally residing in Italy with a valid residence permit for study, work or family reasons
- political refugees
- staff members of Foreign Diplomatic Missions (Embassies/Consulates) and International Organizations based in Italy, legally accredited to the Italian Government or to the Holy See (including family members: spouse and children);
- non-EU nationals legally residing in Italy or diplomats who have an Italian high school diploma awarded in Italy or abroad (Law no. 189/2002).

3 Admissions

In order to be admitted to the Master's degree programme in Nanotechnologies for ICTs - MNIS - Micro and Nanotechnologies for Integrated Systems, applicants must meet the requirements listed in article 4 (Requirements). Applicants will be assessed based on the criteria listed in article 6.

Students who already have a Master's degree can apply to the programme, but –if admitted-, they will not be able to request the recognition of the credits earned during their previous Master's degree programme(no credit transfer).

4 Requirements

4.1 Applicants with an Italian Bachelor's degree

4.1.1 Curricular Requirements

The curricular requirements are:

- Bachelor's degree or university diploma obtained after a period of study of minimum 3 years;
- competencies and knowledge acquired by the applicants during their previous academic path, expressed in credits (ECTS), as further below specified:
  - **a minimum of 40 credits (ECTS) earned in the following Scientific Disciplinary Fields:** CHIM/07, FIS/01, FIS/03, ING-INF/05, MAT/02, MAT/03, MAT/05
  - **a minimum of 60 credits earned in the following Scientific Disciplinary Fields:** CHIM/07, FIS/01, FIS/02, FIS/03, FIS/04, ING-IND/22, ING-IND/31, ING-IND/33, ING-INF/01, ING-INF/02, ING-INF/03, ING-INF/04, ING-INF/05, ING-INF/06, ING-INF/07, MAT/06, MAT/07, MAT/08

Each course can be linked to one or more Scientific Disciplinary Field (SSD). The credits of the SSD found both in the first group and in the second group are primarily counted for the first group. The remaining ones are counted for the second group. The credits of the same subject can be counted partly to reach the minimum number of credits of the first group and partly to reach the minimum number of credits of the second group.

If you lack less than 10 credits the Supervisor will consider if there are similarities among the Scientific Disciplinary Fields and provide guidance. If you lack more than 10 credits, the evaluation of the similarities will be subject to the final approval of the Coordinator or the Vice coordinator of the degree programme.

Students who have not earned their Bachelor's degree at the date of application submission are allowed to submit their application if they earn at least 100 ECTS by **25th February 2023.**

4.1.2 Language requirements

Applicants must have an English language certificate (B2 level or above) according to the Common European Framework of Reference for Languages (CEFR). For the purposes of proving the B2 level, please consider the following table of certificates:

https://didattica.polito.it/cla/en/certificates and read the Student Guide. The table is the "Table adopted on 23/09/2019 updated on 22/12/2022".

4.1.3 Assessment of academic performance

Applicants' average grade is assessed in accordance with the same rules that apply to admissions to all Engineering Master's degree programmes at Politecnico di Torino, as further below specified:

Applicants from Politecnico di Torino

- Applications are open to Politecnico graduates who are in the following conditions:
- students who completed their Bachelor's degree programme in 4 years or less, regardless of their average grade;
- students who completed their Bachelor's degree programme in more than 4 years but less than 5 years, with a weighted average grade equal to or greater than 21/302;
- students who completed their Bachelor's degree programme in more than 5 years, with a weighted average grade equal to or greater than 24/30 .

In compliance with the resolutions of the Academic Senate, due to the COVID-19 health crisis, the academic years 2019/20 and 2021/22 will not be included in the calculation of the number of years it took students to graduate (time to graduation).

The weighted average grade is calculated on all accrued course credits (graded on a scale of 30) counting towards the achievement of the Bachelor's degree, after having subtracted the worst 28 credits (these 28 credits will not be subtracted in case of credit transfer).

The time to graduation is calculated based on the number of academic years you have been enrolled at the university, starting from your first enrolment in the Italian university system : for full-time students the duration corresponds to the number of academic years of enrolment; for part-time students every year of enrolment is counted as half year.

Applicants who do not have the required average grade, i.e.:

- students who completed their Bachelor's degree programme in more than 4 years but less than 5 years[2], with a weighted average grade[3] lower than 21/30;
- students who completed their Bachelor's degree programme in more than 5 years, with a weighted average grade between 21/30 and 24/30;

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[2] The last Graduation Period available to meet the average requirement is the December Graduation

[3] The weighted average is calculated as follows: $\sum$ (grade$*$credits) / $\sum$ credits.

provided that they have a weighted average grade of minimum 24/30 in all the exams of the following fundamental Scientific Disciplinary Fields: FIS/01-02-03 e ING-INF/01

during the oral interview they will be specifically examined on the disciplines of the following **Scientific Disciplinary Fields:** FIS/01-02-03 e ING-INF/01

Applicants from other universities

Applicants from other universities must have a weighted average grade equal to or greater than 24/30, regardless of the number of years it took them to graduate. The weighted average grade is calculated on all accrued course credits (graded on a scale of 30) counting towards the achievement of the Bachelor's degree, after having subtracted the worst 28 credits (these 28 credits will not be subtracted in case of credit transfer)

Applicants with a weighted average grade between 21/30 and 24/30 who have a weighted average grade of minimum 24/30 in all the exams of the fundamental **Scientific Disciplinary Fields** (FIS/01-02-03 e ING-INF/01) will be specifically examined on the disciplines of the following Scientific Disciplinary Fields: FIS/01-02-03 e ING-INF/01 during the oral interview.

4.2 Applicants with a non-Italian Bachelor's degree
Applicants with a non-Italian Bachelor's degree must meet the admission requirements specified at the following link:

https://international.polito.it/admission/prospective_students/master_of_science/2023_24:

Applicants must also:

- meet the curricular requirements of the Master's degree programme and have a suitable academic performance: an Academic Board will assess the quality of the applicant's academic performance and the consistency of his/her prior academic studies with the present programme.
- have an English language certificate - B2 level of the Common European Framework of Reference for Languages (CEFR)- that must be submitted while filling out the application on the Apply@polito platform as explained in article 5. The certificate must be included in the list of accepted certificates and scores: https://didattica.polito.it/inte/en/apply_msc_lang. .

5 Application submission
Starting from the publication of this Call, students interested in the international major of the Master's degree programme in Nanotechnologies for ICTs can apply for admission on the Apply@polito platform.

The application must be submitted by **5th June 2023**. (23.59)

5.1 Applicants from other Italian Universities
To apply for admission to the programme, these applicants need to:

- have earned at least 100 ECTS by **25th February 2023**;

- fill in the online application form. Applicants who have more than one Bachelor's degree must specify which degree they want to present for evaluation and admission to the programme;
- enter all the information on the Bachelor's exams (included incomplete exams) for a minimum of 180 credits in the Apply@polito platform – "Educational background" section.
- select the Master's degree programme in Nanotechnologies for ICTs from the "Select your programme" section of the Apply@polito platform;
- enter the information on the English language certificate in the "Language skills" section. To verify the language certificate (see 4.1.2):
  - Applicants who have an IELTS certificate must enter their TFR number. You can find this number on your certificate or in the message you received by e-mail when the results were published.
  - Applicants who have a Cambridge certificate must log in to their Cambridge personal page and select the option that allows Cambridge to share your results with Politecnico di Torino (follow the instructions available at https://support.cambridgeenglish.org/hc/en-gb/articles/360021664771-Sending-your-results-to-a-recognising- organisation). Enter the Candidate's ID number – or – if this is not possible – upload the certificate or Statement of results.
  - Applicants who have a TOEFL certificate must enter the code of Politecnico di Torino (C285) when they register for the exam. On the Apply@polito platform, it is necessary to indicate the Appointment Number. Those who do not indicate the Politecnico di Torino through the unique code must attach the scan of the certification for verification purposes
  - Applicants who have a different English certificate (included in the list of accepted certificates published on the CLA website) must upload a scanned copy of their certificate to the Apply@polito platform.
- submit the application from the "Save and submit" section;
- Pay an application fee of €100 (this amount will be deducted from the tuition fees at the time of enrolment, but will not be refunded under any circumstances in other cases).

Payment methods are the following:

- Credit cards (or other payment methods available on the PagoPA platform) generating an immediate payment;
- Pre-printed notice of payment (MAV on the PagoPA platform), generating a deferred payment.

Applicants who pay using a deferred payment must go back to the Apply@polito platform and submit a self-declaration of the payment date certifying that the payment was made before the deadline and in Italian territory. This declaration must be submitted by the same deadline **(June 5 th, 2023).**

Should the self-declaration be found to be false or incorrect, the first phase of online enrolment will be cancelled and the applicant will lose the right to compete for the selection process.

5.2 Applicants from Politecnico di Torino
To apply for admission to the programme, these applicants need to:

- have earned at least 100 ECTS by **25th February 2023**;
- log in to the Apply@polito platform from their personal page of the Teaching Portal. Applicants who have more than one Bachelor's degree must specify which degree they want to present for evaluation and admission to the programme.
- select the Master's degree programme in Nanotechnologies for ICTs from the "Select your programme" section;
- enter in the 'Language skills' section the language certification, if missing

N.B. A passing grade in the English language exam organized by the University Language Centre in academic year 2019/20 during the Covid-19 emergency (registered under your personal information as LANGUAGE DECLARATION FOR COVID-19) DOES NOT qualify you for admission to the Master's degree programme in Nanotechnologies for ICTs.

- Submit the application form the "Save and submit section".

5.3 Applicants with a non-Italian Bachelor's degree

To apply for admission to the programme, these applicants need to:

- complete the online application form https://didattica.polito.it/inte/en/apply_msc_step1
- upload the required documents https://didattica.polito.it/inte/en/apply_msc_step1_docs

6. Evaluation criteria

Applicants who meet the requirements referred to in point 4 will be evaluated considering:

- the academic performance achieved during their university studies (exam grades)
- the result of an interview.

6.1 Academic achievements

Applicants with an Italian Bachelor's degree

Applicants can be assigned up to a maximum of 70 points for their academic achievements.

Applicants with the highest weighted average grade[4] on **25th February 2023** are assigned up to 70 points, while applicants with lower average grades are assigned proportional lower scores.

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[4] The weighted average is calculated as follows: $\sum$ (grade$*$credits) / $\sum$ credits.

For the purpose of this calculation, Politecnico considers also the courses recognized from previous academic paths. Courses that students have advanced from their Master's degree programme are not considered in this calculation.

Applicants with a non-Italian Bachelor's degree

The Evaluation Board evaluates the academic performance of applicants with a non-Italian Bachelor's degree. The Board verifies if these applicants meet the curricular requirements and have a proper academic performance to be admitted to the Master's degree programmes of Politecnico di Torino. The score will be calculated using parameterization criteria (maximum 70 points).

6.2 Interview

Applicants can be assigned up to a maximum 30 points for their performance in the oral interview. Applicants are expected to talk about their previous studies (Bachelor) and to comment on their motivation to join Nanotech for ICTs.

Applicants are considered eligible for admission to the programme and are included in the merit-based ranking list if they score at least 18 points in the oral interview.

The interviews will take place online between 12th and 16th June 2023. Applicants will receive the invitation by e-mail.

7. Publication of the ranking list

The overall score is expressed on a scale of 100 points. Student places are assigned in compliance with the provisions referred to in article 2. The ranking list will be published on the General Notice Board of Masters Degree courses, in the news on the site dedicated to candidates with foreign degrees and in the section Education > Applying, studying, graduating> Admissions and Enrolment > Master's Degree programmes

: https://didattica.polito.it/bacheca/area_ing2/

https://www.polito.it/en/education/applying-studying-graduating/admissions-and-enrolment/master-s-degree-programmes

The ranking list classifies the applicants in the following categories:

ADMITTED: an applicant who is admitted to the programme and can enrol online, since he/she meets all the admission requirements.

ELIGIBLE: an applicant who qualifies for admission but is not offered a place in the programme because he/she is not in the top 20 positions of the ranking list. He/she may be offered a place if some admitted students fail to enrol in the programme.

NOT ADMITTED: an applicant who has scored less than 18/30 in the oral interview (minimum admission score).

Admitted and eligible applicants must confirm their intention to enrol in the programme by sending a ticket from the Ticketing Support System (selecting the topic "Admission to Master's degree programmes) before the deadlines that will be published together with the ranking list. **Failure to do so entails permanent exclusion from the admission process.**

After receiving the above-mentioned confirmations, Politecnico di Torino will publish the final ranking list with the names of the students who are admitted to the programme. These students must reserve their place by paying the first instalment of the tuition fees before the deadline that will be announced at a later date. The amount of the first instalment is a standard amount (161 euros), except for reductions or revisions, as indicated in the Tuition Fee Guide for a.y. 2023/2024, which is going to be approved by the University bodies at a later date. The amount paid will be deducted by the overall amount of the tuition fees upon enrolment but cannot be refunded under any circumstances. Applicants from other universities who have already paid 100€ for the submission of their application form must pay the difference between the first instalment of the tuition fees and the application fee.

Payment methods are the following:

a. Credit cards (or other payment methods available on the PagoPA platform) generating an immediate payment;
b. Pre-printed notice of payment (MAV on the PagoPA platform), generating a deferred payment.

Applicants who pay using the method illustrated under letter b) must go back to the Apply@polito platform and specify the payment date (with a self- declaration). Failure to do so entails that their payment is not valid. Should the self-declaration be found false or incorrect, the applicant will lose the right to enrol in the programme for a.y. 2023/2024.

8. Enrolment process

8.1 Applicants with an Italian Bachelor's degree

To complete the enrolment process, applicants need to click on "Procedi con l'immatricolazione/Enrol" from the "Evaluations" section of the Apply@polito platform. At the end of the payment phase, the system will show the student ID number and password to log in to the personal page.

Applicants must enrol no later than **24th November 2023**

Applicants from other Italian Universities must complete the enrolment process with the identification and verification of their personal data.

The system will inform students if the enrolment has not been completed successfully with a message shown on the student's personal page of the Teaching Portal – Message: "Immatricolazione da completare / Enrolment to be completed". The deadline to complete the enrolment process is 19th December 2023. These students will have limited access to the

services available on the personal page of the Teaching Portal (e.g. they cannot request enrolment certificates and cannot register for any exam, etc.) until they complete the enrolment process.

How to make the identification and verification of personal data (enrolment to be completed)

For the identification and verification of personal data students must book an in-person appointment using the Booking Tool available on the student's personal page (My academic progress – Booking Tool - Office of the University Registrar-Registrar's Office services - Online help desk – Collecting or replacement Smart Card). On the day of the appointment students will be able to collect their Smart Card.

8.2 Special instructions for students with a non-Italian Bachelor's degree

The enrolment process has two phases and is considered completed upon conclusion of both phases. Failure to complete both phases entails the cancellation of enrolment.

- First phase - online enrolment: students need to click on "Procedi con l'immatricolazione/Enrol" from the "Evaluations" section of the Apply@polito platform, according to the procedure and deadlines set in art. 7 "Publication of the ranking list".
- Second phase – at the Office: Completing the payment phase does NOT mean that students have concluded the enrolment process. They still need to go through the second phase of the enrolment process. The second phase of the enrolment process consists in the identification and verification of the student's personal data, which must be completed no later than **4th October 2023.** Failure to do so, entails permanent exclusion from the enrolment process.

After the payment phase, students with a non-Italian Bachelor's degree will see a calendar from which they need to book an appointment to go in person to the Recruitment and Admissions Unit Operational details will be published on this page: https://international.polito.it/admission/prospective_students/master_of_science/2023_24/enrolment/enrolment_in_the_1st_term

Students will have limited access to the services available on your personal page of the Teaching Portal (e.g. they cannot request enrolment certificates and cannot register for any exam, etc.) until they complete the enrolment process.

In order to complete the enrolment process, Politecnico needs to verify that the students meet the enrolment requirements and have the necessary academic documents. For this reason, students must upload their academic documents and language certificate required for admission to the programme by **4th October 2023.** Operational details will be published at: https://international.polito.it/admission/prospective_students/master_of_science/2023_24/enrolment/enrolment_in_the_1st_term

Failure to submit the documents by the deadline entails permanent exclusion from the enrolment process and permanent cancellation of any academic progress made up to the date.

9. Mobility scholarships

Mobility scholarships are offered to all students who are admitted to the Master's degree programme in Nanotechnologies for ICTs international major MNIS - Micro and Nanotechnologies for Integrated Systems, provided that they complete the enrolment process by **19th December 2023** (for students with an Italian Bachelor's degree) and by **4th October 2023** (for students with a non-Italian Bachelor's degree).

After this date, admitted students must sign the mobility contract for the period of study abroad during a.y. 2023/24 at the School of Engineering in Physics, Applied Physics, Electronics & Materials Science (PHELMA) at INPG. At the beginning of a.y. 2024/25, students will sign the mobility contract for the period of study abroad during a.y. 2024/25 at the École Polytechnique Fédérale de Lausanne (EPFL).

By signing this contract, each student confirms his/her participation in the mobility programme and accepts the scholarship and its terms of payment. Failure to sign this contract by the deadlines entails permanent renunciation of the scholarship.

Politecnico has established a minimum monthly scholarship amount for mobility projects to ERASMUS+ PROGRAMME COUNTRIES (including France and Switzerland). The scholarship amount is 300 euro/month for mobility projects to France and 350 euro/month for mobility projects to Switzerland, plus a further amount financed by other sources (including Politecnico internal funds). For a.y. 2023/24, Politecnico established that the minimum monthly scholarship amount for mobility projects to ERASMUS+ eligible countries (including France and Switzerland) is 470 euro/month. At present the governing bodies of Politecnico are deciding about the possibility to increase the scholarship monthly amount using ministerial or university funds. Higher scholarships may be awarded to the students who have a lower income (ISEE value).

Please note: the possible additional monthly amount will be calculated by Politecnico taking into account the ISEE/ISEEU value that the student declared when he/she applied for the reduction of the tuition fees due for a.y. 2023-24 (see "Tuition Fes Guide – 2023/24).

The final scholarship monthly amount for mobility projects to France will be communicated through an Executive Decision.

The maximum amount of each mobility scholarship for both destinations will be calculated on a monthly basis according to the planned dates of stay at the host University. The actual amount will be calculated at the end of the mobility project on a daily basis and will cover exclusively the period of stay at the partner university (in person attendance) in compliance with the procedures defined by Politecnico in line with EU rules stated in the mobility contract.

10. Exclusions

Applicants included in the following categories will lose the right to be admitted to the Master's degree programme in Nanotechnologies for ICTs international major MNIS - Micro and Nanotechnologies for Integrated Systems and to receive the scholarship:

- students with an Italian Bachelor's degree who do not graduate and do not obtain the English language certificate by **24th November 2023**;
- students from other Italian Universities who do not complete the enrolment process by **19th December 2023**;
- students with a non-Italian Bachelor's degree who:
    - do not have the required language certificate when they apply online on the Apply@polito platform https://didattica.polito.it/inte/en/apply_msc_lang
    - do not meet the specific requirements and do not present the documents listed at: https://international.polito.it/admission/prospective_students/master_of_science/2023_24/admission_requirements https://didattica.polito.it/inte/en/apply_msc_step1_docs
    - do not complete the enrolment process by 4th October 2023 https://international.polito.it/admission/prospective_students/master_of_science/2023_24/enrolment/enrolment_in_the_1st_term

Applicants with an Italian Bachelor's degree who are not admitted to the international path of the Master's degree programme in Nanotechnologies for ICTs MNIS - Micro and Nanotechnologies for Integrated Systems can be considered for admission to the national major of the same Master's degree programme or for admission to other Master's degree programmes offered by Politecnico di Torino, provided that they reach the 140-credit threshold, as provided for by the general admission rules.

11. Contacts

For further information about the programme curriculum please contact:

Prof. Carlo Ricciardi

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e-mail carlo.ricciardi@polito.it

For more information on application submission, please send your inquiries through the Ticketing Support System, available on your Apply@polito personal page, by selecting the topic "Admissions to Master's degree programmes" or "Admissions to Master's degree programmes – students with a foreign degree

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