

**Call for 7 places for postgraduate courses (Ph.D.) at the Scuola Normale Superiore for the academic year 2024-2025 (40<sup>th</sup> cycle).**

**Art. 1. Number of scholarships, subject areas, educational objectives**

1.1 The Scuola Normale Superiore (SNS) announces a call for the academic year 2024-2025, based on qualifications and tests, for a total of 7 places for Ph.D. courses in the Faculties of Sciences and Political and Social Sciences in the following subjects and locations:

**Faculty of Sciences - Pisa site**

Ph.D. Course	Total number of places	of which funded through specific programmes
Chemistry	1	- 1 D.M. 630/2024 – in collaboration with GAUSSIAN (CUP 53C24001200008)
Quantum Technology and Nanoscience	4	- 2 D.M. 630/2024 – in collaboration with Fondazione Pisana per la Scienza (CUP 53C24001200008) - 1 D.M. 630/2024 – in collaboration with Planckian (CUP 53C24001210008) - 1 D.M. 630/2024 – in collaboration with ECOPOL (CUP E53C24001230008)

**Faculty of Political and Social Sciences - Florence site**

Ph.D. Course	Total number of places	of which funded through specific programmes
Political Science and Sociology	2	- 2 D.M. 629/2024 – Pubblica Amministrazione (CUP E53C240010000001)

1.2 All successful candidates will be awarded scholarships and additional resources for their study and research activities as specified in article 6 below; enrolment and attendance on the courses are free of charge.

1.3 Additional places in collaboration with external institutions may be made available for this call before the deadline for submission of applications.

1.4 The places activated in the framework of the restricted topics and in compliance with the eligibility criteria set out in the Ministerial Decrees n. 629/2024 and 630/2024 aim at carrying out specific research topics. The research topics of the scholarships are listed in Annex A to this provision.

- 1.5 The Ph.D. courses have a duration of four years. All courses will start on 1 November 2024. In consideration of the time necessary for the verification of eligibility for the scholarships relating to the call herein by the Italian Ministry of University and Research in accordance with the Ministerial Decree 630/2024, the start of the activities of the Ph.D. programmes may be postponed until 13<sup>th</sup> December 2024 at the latest.
- 1.6 The teaching activities of the courses are in English.
- 1.7 The call is aimed at assessing, by assessment of qualifications and of the research project and with an oral exam, the applicant's preparation, talent, motivations and aptitude for scientific research.
- 1.8 Applicants' admission to the oral exam is based on the assessment of qualifications and of a research project written in Italian or English (not exceeding the maximum limit of 20,000 characters, including spaces). The research project must enable the assessment of the applicant's scientific interests and his/her adherence to the scientific lines promoted by the SNS, but does not influence the subsequent choice of the thesis topic. The project must demonstrate the applicant's full knowledge of the state of the art in the sector, as well as mastery of the research methodologies within the subject; it must also include an adequate bibliography.
- 1.9 The courses are divided into lectures, seminars and research activities: the teaching programmes, geared to the individual student, are intended to broaden the students' cultural base and to prepare them for research activity with the aim of achieving a particularly high specialisation in their scientific field. The students of the courses carry out their studies according to plans approved annually and they may be authorised, possibly with financial help, to spend study or research periods in other high-level universities or scientific institutes, in Italy or abroad.
- 1.10 In accordance with D.M. No. 226 of 14 December 2021, Ph.D courses can be activated only after accreditation, or if the accreditation requirements are deemed valid by the Ministry of Education, University and Research and by the ANVUR. Therefore, after the publication of the merit ranking, the SNS will be able to enroll the successful candidates only if the accreditation for the 40th cycle has been received. Enrolment and conferment of the scholarships to the winners of the places are thus subject to the confirmation of the ministerial funding and company funding according to the eligibility and evaluation procedures indicated by Ministerial Decrees 629/2024 and 630/2024.

## **Art. 2. Admission requirements.**

- 2.1 The Scuola Normale welcomes applications for admission from young applicants who are highly motivated towards research.
- 2.2 The application can be submitted by students with any citizenship who:
- a. have an Italian master's degree or an equivalent non-Italian qualification, awarded no more than five years before the deadline of the first session of the call for access to the 40th cycle PhD courses, that is, by 7<sup>th</sup> March 2024. All those planning to obtain the qualification required for

admission by 31<sup>th</sup> October 2024 can also apply: if their application is successful, failure to obtain their qualification by that date will invalidate their admission. The eligibility of the non-Italian qualification is ascertained by the call commission, for the sole purpose of selection, in compliance with the regulations in force in Italy and in the country where the qualification was issued and with the international treaties or agreements regarding the recognition of qualifications for the continuation of studies.

- b. have no res judicata convictions for a term of imprisonment of more than three years;
- c. have not been subject to "expulsion", a disciplinary sanction as specified in the teaching regulations of the SNS;
- d. are not in possession of a Ph.D. qualification issued by an Italian university, and in any case have not benefited from a scholarship to attend a Ph.D. programme in Italy;
- e. have not forfeited a PNRR scholarship granted for attending a either 38th or 39th cycle PhD programme.

### 3. Participation in the selection process

3.1 Applications for participation in the selection process must be registered online using the online procedure activated at the section dedicated to the call on the SNS website at the address <https://www.sns.it/it/concorso-phd> by the following deadlines:

<b>Courses</b>	<b>Deadline</b>
Courses pertaining to the Faculty of Sciences	26th July 2024
Courses pertaining to the Faculty of Political and Social Sciences	22nd August 2024

3.2 Applications registered by the system after the aforementioned deadlines will not be taken into consideration, regardless of the cause of the delay.

We recommend that you check that you have received the notification via e-mail regarding the definitive completion of your application; the SNS is not responsible for any online application not properly completed by applicants.

The SNS is not responsible for any malfunctions due to technical problems and/or overload of the communication line and/or of the application systems; applicants are therefore advised not to wait until the last days before the deadline for submission of their applications.

The SNS is not responsible for any loss of mail due to incorrect information relating to the applicant's address or to delayed notification of changes of the address provided in the application, nor for any errors attributable to third parties, accidents or force majeure.

3.3 Applications must include:

- a. personal details and contact addresses;
- b. proof of possession of the requirements specified in Art. 2;

c. the course – or the courses - for which the applicant intends to apply. Applicants interested in more than one the scholarship with specific research topics and sites referred to in Article 1.4 above must state their preference at the application stage.

d. their level of linguistic competence in Italian and in English, with reference to the EUROPASS grid;

<https://europass.cedefop.europa.eu/en/resources/european-language-levels-cefr>

e. any need to take advantage of assistance and extra time to take the tests, in accordance with Article 20 of Law No. 104, dated 5<sup>th</sup> February 1992, "Framework Law for the assistance, social integration and rights of disabled persons";

f. any need to take advantage of assistance and extra time to take the tests, in accordance with Law No. 170, dated 8<sup>th</sup> October 2010 and subsequent modifications thereto (applicants with a diagnosis of specific learning disabilities demonstrated by valid certification issued no more than three years previously by the SSN (the Italian national health system) or by specialists or structures recognised by the latter).

3.4 Applicants may also state the name and e-mail address of at least one scholar, from whom the SNS will request, via the application platform, a reference letter to support their application. The reference letter/s must be submitted exclusively via the application platform, no later than the deadline for the call session for which the applicant is applying. The absence of reference letters does not constitute a reason for exclusion from the application procedure.

3.5 Applicants must attach the documents specified below, in PDF format, to their application. The attachments must be written in English or Italian; if attachments are submitted in a different language, they must include, under the responsibility of the applicant, a translation into Italian or English:

a. a copy of a valid identity document (citizens of countries not belonging to the European Union are advised to attach a copy of their passport, with reference to the pages with photograph, personal details, number, place and date of issue);

b. a curriculum vitae et studiorum written in the Europass-CV format, available at the following web site: <http://europass.cedefop.europa.eu/documents/curriculum-vitae/templates-instructions>

c. the full text of their master's degree thesis, including an abstract written in English (maximum limit around 15,000 characters, including spaces); applicants who have not completed their master's degree by the application deadline are required to submit an extended abstract in Italian or English (maximum limit around 25,000 characters, including spaces); the extended abstract is also mandatory if the thesis is written in a language other than Italian or English;

d. the "diploma supplement" or other equivalent documentation relating to the exams taken and the degree results attained (transcripts);

e. a copy of any publications;

f. the research project as described in Article 1.8 of the call herein (maximum limit around 20,000 characters, including spaces) including an abstract in English (maximum limit around 3,000 characters, including spaces);

g. a separate research project must be submitted for each course and for each scholarship with specific topic for which the applicant intends to apply.

3.6 Applicants are admitted with reserve, and exclusion from the call due to lack of requisites can be decided by the person in charge of the application procedure at any time during the procedure. The

applicants in question will be notified of their exclusion from the call and of the reasons for their exclusion.

#### **4. Assessment of qualifications and examinations**

4.1 For the assessment, aimed at ascertaining the applicants' aptitude for scientific research and their basic preparation for the course programme, each admissions commission has one hundred points at its disposal: sixty points for the assessment of qualifications and forty points for the oral exam. Applicants who have obtained at least forty points in the assessment of qualifications will be admitted to the oral exam. In order to pass the oral exam applicants must obtain at least thirty points. Applicants must pass the oral exam in order to enrol in the Ph.D. course.

4.2 In the assessment of qualifications, the latter are considered as a whole.

4.3 The selections will take place in accordance with the following timetable:

<b>Courses</b>	<b>Publication of results of qualification assessment</b>	<b>Start of oral tests</b>	<b>Publication of oral test results and classifications</b>
Courses pertaining to the Faculty of Sciences	5th August 2024	12th September 2024	20th September 2024
Courses pertaining to the Faculty of Political and Social Sciences	4th September 2024	10th September 2024	12th September 2024

4.4 The oral test will be held in person at the SNS sites; at the request of applicants, the oral test may be taken online with procedures guaranteeing the identification of the applicant and the public nature of the test. Requests to take the test online may be submitted after the publication of the results of the qualification assessment and the research project, with the procedures specified by the Offices of the Scuola Normale. Applicants must attend the oral test with a valid identification document. Failure to participate in the oral test, for whatever reason, will entail exclusion from the call.

4.5 The oral exam will in any case be taken online by applicants with restricted mobility, in Italy or abroad, as a consequence of an epidemic. An online oral exam can be requested by individual applicants or else may be arranged by the SNS for all applicants.

4.6 Italian language courses at different levels will be available for any non-Italian students admitted.

4.7 The results of the assessment of the qualifications and the list of candidates admitted to the oral test will be published, together with the date and time of the exams, on the SNS website and on the SNS official online register. Inclusion in the list of admitted applicants implies that the interested parties should attend the exam on the day and time indicated, without further notice being given. This publication fulfils the obligation to publicize the documents.

4.8 On the basis of the assessment of the qualifications and research project and the results of the oral exam, the admissions commission will declare the suitability of the applicants and arrange them in descending order of ranking.

4.9 In the event that two or more applicants obtain the same results at the end of the exam session, the youngest applicant will be placed first in the ranking.

4.10 Applicants who qualify to take the exams in person upon positive assessment of their qualifications will be reimbursed for documented travel expenses in accordance with the following table:

	Minimum threshold	Maximum threshold
Residents in Italy	50.00 €	350.00 €
Residents abroad	50.00 €	700.00 €

Reimbursement will be granted exclusively for the following travel expenses:

- a. train (second class)
- b. public bus
- c. ferry
- d. plane (tourist class and solely for distances between the SNS sites and the applicant's place of residence greater than 600 km).

For applicants residing in Sicily or Sardinia, reimbursement of air travel expenses is always allowed.

For the calculation of the reimbursement, the place of departure/ return is considered to be the applicant's place of residence or, if this is less costly for the Scuola Normale, the place of actual departure.

Applications for reimbursement, together with the original travel documentation, including boarding passes, must be submitted by 15th November 2024. All requests will be subject to a deductible of 50 euros.

## **5. Nomination of successful applicants, loss of eligibility and renouncement**

5.1 The Director of the SNS approves the final merit rankings created by the commissions and nominates the successful applicants in accordance with the number of places available.

5.2 Successful applicants lose their eligibility if they do not accept their place by the deadline set by the SNS.

5.3 Successful applicants who do not obtain a qualification suitable for admission as described in Article 2.2 of the call herein by October 31st, 2024 will lose their eligibility.

5.4 Successful applicants must submit to the SNS, by the deadline they will be given, the following documentation:

- a. a declaration of acceptance of the terms of the Statute and regulations of the SNS, exempting the SNS from any responsibility for any consequences deriving from their non-compliance with them;
- b. a digital passport-size photo;
- c. certification regarding the details declared in the application, in the cases as specified by Italian legislation;
- d. Successful applicants must also provide an e-mail address which can be used by the SNS for activities dedicated to students after the end of their academic career.

5.5 Successful applicants with a non-Italian qualification must, at the time of enrolment, produce their qualifications translated into Italian and legalised together with the Declaration of Value issued by the relevant Italian diplomatic authorities in the country where the qualification was attained (<https://www.miur.gov.it/dichiarazione-di-valore>). As an alternative, applicants may submit the Attestato di comparabilità del titolo universitario estero (the attestation of the equivalence of the university degree attained abroad) issued by the ENIC-NARIC centre in Italy (CIMEA), containing all the information necessary for the assessment of the qualification. For qualifications attained in a member country of the European Higher Education Area – EHEA, the Diploma Supplement is sufficient.

5.6 In accordance with Article 71 of President of the Republic's decree No. 445 of 28<sup>th</sup> December 2000 (Consolidated text of the legislative and regulatory provisions on administrative documentation) and subsequent amendments thereto), the SNS reserves the right to verify the veracity of the details declared in applications. Should any of the said details be declared not valid, the applicants in question will lose their place.

5.7 For social security purposes and in accordance with Article 2, paragraph 26 of Law No. 335 of 8<sup>th</sup> August 1995 and subsequent amendments and additions thereto, successful applicants will also have to contribute to the "Gestione Separata" social security fund managed by the INPS.

5.8 Successful applicants are required to pay the regional tax for the Diritto allo Studio Universitario (the right to university study) (DSU) to the Azienda Regionale per il Diritto allo Studio Universitario della Toscana (the Tuscany region office for the right to university study) or to submit a request for exemption from payment following the procedure specified by the said Office. (for further information regarding the regional tax, please visit the website <http://www.dsu.toscana.it>.) For the academic year 2024-2025 a total refund of the aforementioned tax is payable if actually due and paid; to obtain the reimbursement, the students must have completed the procedures for exemption as specified by the Azienda Regionale per il Diritto allo Studio Universitario della Toscana, or submit to the SNS the documentation attesting to their economic status (the ISEE certificate)

5.9 Successful applicants from non-EU countries are required to comply with Italian and EU immigration rules and to regularize their position; for this purpose, they will be able to refer to the relevant offices of the SNS, adopting a procedure of which they will be promptly notified.

5.10 The successful applicants must be present at the SNS for the beginning of the course starting from the date indicated in the nomination notice. Otherwise, in the absence of a request to the SNS for valid reasons, they will be considered as having forfeited their place.

5.11 In the case of renunciation or forfeiture on the part of a successful applicant, the SNS reserves the right to proceed with a new assignment of the place within the limit of thirty days from the beginning

of the course, respecting the order of the final ranking of the successful applicants, as well as the specific lists prepared for the assignment of scholarships with a specific research topic.

## **6 PhD scholarship and grants**

- 6.1 The scholarship is paid in twelve deferred monthly instalments of the same amount; the payment is, however, subject to the fulfilment of the student's study obligations.
- 6.2 For the academic year 2024-2025 the scholarship amounts to € 18,283.00, inclusive of a lodging allowance. Students are also entitled to free board at the SNS facilities or affiliated facilities for the entire duration of the course, with the exclusion of academic vacation periods.
- 6.3 The students can request to obtain lodgings at the residences of the SNS, subject to availability of the facilities.
- 6.4 In addition to the scholarship, the SNS contributes to the expenses incurred by course students for formally authorised study and research activities, in Italy and abroad.
- 6.5 Students of the Faculty of Sciences can participate in the selection procedures for admission to the "Science and Management" (sMBA) program, carried out in collaboration with the Collège des Ingénieurs - Italy. The program aims to provide participants with theoretical and practical management training. More information on the sMBA programme is available at the web page <https://www.sns.it/en/science-management-mba-programme>
- 6.6 Non-European Union students are reimbursed for travel expenses incurred for the start of the course, up to a maximum limit of € 1,000 and upon submission of original and valid travel documents, including boarding passes. They can also submit a valid request for early payment of the first instalment of the PhD scholarship.
- 6.7 Non-European Union students can request, within one year from the discussion of their Ph.D. thesis, the reimbursement of expenses incurred for returning to their country of origin, up to a maximum limit of 1,000 euros and upon submission of original and valid travel documents, including boarding passes. This request can also be made by those who do not complete the course due to loss of place, provided that at least one year has elapsed since the beginning of the course.

## **7. Obligations and rights of students; incompatibilities**

- 7.1 Students' status, obligations and rights are governed by the SNS Statute and regulations, and in particular by the Ph.D. course regulations.
- 7.2 As set out in Article 11 of the Ph.D. course regulations of the SNS, admission to the course implies an exclusive full-time commitment and is not compatible with employment or self-employment, nor with the exercising of professional activities. However, with the permission of the Board of Lecturers, which assesses compatibility with study and research commitments, the following activities and their due remuneration are allowed: a) collaboration with newspapers, magazines, encyclopaedias and similar; b) the economic use by the author or inventor of intellectual works and industrial inventions; c) participation in conferences and seminars. On the proposal of the Board of Lecturers, Ph.D. students may be authorised to carry out paid activities limited to those relating to the acquisition of skills related to their field of Ph.D. study.
- 7.3 The scholarships as part of the resources made available by the D.M. 629/2024 involve mandatory periods of study and research abroad for a minimum of six months and for a maximum

of twelve months, extendable to eighteen months for doctorates with co-tutorship, and study and research periods in firms, centres of research or Public Administration for a minimum of six months and for a maximum of twelve months.

- 7.4 The scholarships as part of the resources made available by the D.M. 630/2024 involve mandatory periods of study and research abroad for a minimum of six months and for a maximum of twelve months, extendable to eighteen months for doctorates with co-tutorship, and study and research periods in the company, for a minimum of six months and for a maximum of eighteen months.
- 7.5 The applicable law regarding leave and special leave applies to public employees who win a Ph.D. place at the SNS.
- 7.6 Attendance on SNS Ph.D. courses is incompatible with simultaneous enrolment in other PhD courses in Italy or abroad except in cases of specific international agreements. Upon nomination, the successful applicants who are enrolled in one of the aforementioned courses must regularise their position within fifteen days under penalty of forfeiture. In any case, successful applicants must declare any enrolment in study courses other than the PhD course, including those effected subsequent to their acceptance of the place.
- 7.7 Acceptance of the places funded with the resources specified by D.M. 629/2024 and D.M. 630/2024 involves the submission of reports on the activities carried out, with the deadlines and procedures to be defined by the Ministry of Universities and Research.

## **8. Processing of personal data**

- 8.1 EU Regulation 2016/679 on General Data Protection Regulation is applicable to the applicants' personal data processing.
- 8.2 The Data Controller of the personal data provided by the interested parties is the Scuola Normale Superiore, a public university institute, located in Piazza dei Cavalieri, 7 Pisa - 56126, in the person of its Director and pro tempore legal representative.
- 8.3 Personal data will be collected by the Scuola Normale as part of the applicant selection/admission procedure and processed for the completion of the latter and, for the successful applicants, the subsequent management of their career and all related activities.
- 8.4 Personal data are thus processed by the SNS for the performing of tasks of public interest or in any case connected to the exercising of its public powers, including the purposes of archiving, historical research and analysis for statistical purposes. Personal data will be processed, also with automated tools (software and databases administered by the Scuola Normale and hosted by the contracting entities SERSE and CINECA), in compliance with the principles of accountability, lawfulness, correctness, minimisation, transparency, integrity, accuracy, confidentiality and proportionality.
- 8.5 The personal data collected will be communicated or transferred to third parties (public and / or private parties) in the context of institutional relations, for the fulfilment of legal obligations or regulations or of contracts, within the services required at the Scuola Normale (such as placements, tutoring and access to facilities).

- 8.6 The personal data collected may be communicated or transferred to parties established in third countries, only if suitable data protection guarantees and conditions have been ascertained.
- 8.7 The personal data collected will be published on the official online register and on the SNS web site if specified by the law or by the regulations of the Scuola Normale.
- 8.8 The personal data collected will be processed and stored for the time strictly necessary to achieve the purposes for which they have been collected, with the application of the regulations concerning documentation storage by public institutions.
- 8.9. Data subjects may at all times exercise the following rights:
- a. access to personal data, in compliance with Art. 15 of the Regulations;
  - b. the rectification, erasure or restriction of the processing of personal data, in compliance with Articles 16-18 of the Regulations; erasure is not permitted for data included in the documents that must be kept by the Scuola Normale;
  - c. the portability of data, in compliance with Art. 20 of the Regulations;
  - d. the right to object to the processing of their data, under Article 21 of the Regulations;
  - e. the right to submit a complaint to the Italian Data Protection Authority, by sending a request via e-mail to the e-mail address [privacy@sns.it](mailto:privacy@sns.it) or via PEC mail to the e-mail address [protocollo@pec.sns.it](mailto:protocollo@pec.sns.it). For further information they can contact the Data Protection Officer (DPO) at the e-mail address [dpo@sns.it](mailto:dpo@sns.it).

## **9. Final provisions and referral; information**

- 9.1 The Head of the Didactic Area of the SNS is also responsible for the administrative procedure of the call.
- 9.2 For anything not specified in this call, the provisions of the SNS Statute and regulations are valid, and are available on the institutional website <http://www.sns.it>.
- 9.3 The call herein will be published on the [www.sns.it](http://www.sns.it) website, on the European Euraxess web site and on the MUR web site.
- 9.4 For information, interested parties can consult the web page <https://www.sns.it/it/concorso-phd>, or contact:
- a. for the Ph.D. courses based in Pisa, the staff of the Student Office: [phd@sns.it](mailto:phd@sns.it), or by telephone: +39 050 509237, +39 050 509218, +39 050 509026;
  - b. for the Ph.D. courses based in Florence, Teaching and Student Service of the Florence site: [didattica.firenze@sns.it](mailto:didattica.firenze@sns.it), or by telephone: +39 055 2673317, +39 055 2673319;.

Annex A - Research topic of scholarships co-financed by D.M. 630/2024

Corso Ph.D.	QUANTUM TECHNOLOGY AND NANOSCIENCE 40° Cycle – a.y. 2024-2025
Type of scholarship	Missione 4 “Istruzione e ricerca”, Componente 2 “Dalla Ricerca all’Impresa” - Investimento 3.3 “Introduzione di dottorati innovativi che rispondono ai fabbisogni di innovazione delle imprese e promuovono l’assunzione dei ricercatori da parte delle imprese – DM 630/2024
Number of Scholarship	1
CUP	E53C24001210008
Co-financed by	<a href="#">Planckian Srl</a>
Scholarship Title	Innovative superconducting quantum technologies applied to quantum computation and to the energy management of quantum systems.
Brief description of the educational project	The scholarship will be intended to train a scholar capable of tackling the development of innovative superconducting quantum technologies applied to quantum computation and to the energy management of quantum systems. In particular, the activities relating to the doctoral scholarship in question will be inherent to the theoretical study of the effects of noise and quantum decoherence of the systems developed by the Company and to the development of error correction techniques based on the optimization of quantum computation. The training project therefore provides integrated preparation, with the aim of training young scientists who can carry out competitive research, consistent with the objectives and purposes of Regulation (EU) 2021/241, with the general strategy and the detailed sheet of the PNRR Component and the principle "do not cause significant harm" (DNSH) pursuant to art. 17 of Regulation (EU) 2020/852 in accordance with the technical guidelines prepared by the European Commission (Communication from the European Commission 2021/C58/01).
Research period abroad	It is mandatory to carry out periods of study and research abroad, even if not continuous, from a minimum of six (6) months up to the maximum limit provided by DM 14 December 2021, n. 226 and DM 21 February 2024, n. 470 and as required by the Regulations of the Phd courses of the Scuola Normale Superiore. The foreign locations will be agreed upon by the teaching board with the students who will be holders of the scholarship, consistently with the training and research activities planned at the Scuola Normale Superiore.
Research period at the company	It is mandatory to carry out study and research periods in the company from a minimum of six (6) months to a maximum of eighteen (18) months, even if not continuous, scheduled consistently with the training and research activities provided at the Scuola Normale Superiore.

Annex A - Research topic of scholarships co-financed by D.M. 630/2024

Corso Ph.D.	QUANTUM TECHNOLOGY AND NANOSCIENCE 40° Cycle – a.y. 2024-2025
Type of scholarship	Missione 4 “Istruzione e ricerca”, Componente 2 “Dalla Ricerca all’Impresa” - Investimento 3.3 “Introduzione di dottorati innovativi che rispondono ai fabbisogni di innovazione delle imprese e promuovono l’assunzione dei ricercatori da parte delle imprese – DM 630/2024
Number of Scholarship	1
CUP	E53C24001230008
Co-financed by	<a href="#">Ecopol Spa</a>
Scholarship Title	Research on the development and use of "bio-based" materials
Brief description of the educational project	The scholarship will be intended to train a scholar capable of tackling complex research on the development and use of "bio-based" materials, which is fundamental for ascertaining the effective use of organic materials containing carbon coming from renewable sources and therefore of non-renewable origin. -fossil, such as carbon of vegetal origin, or from enzymatic synthesis. "Bio-based" materials, also called "bio-materials", are products of biological origin, which have the primary advantage of being obtainable from a renewable source. The training project in this area has the objective of training young scientists who can carry out competitive research, consistent with the objectives and purposes of Regulation (EU) 2021/241, with the general strategy and the detailed sheet of the PNRR Component and at the beginning "do not cause significant harm" (DNSH) pursuant to art. 17 of Regulation (EU) 2020/852 in accordance with the technical guidelines prepared by the European Commission (Communication from the European Commission 2021/C58/01).
Research period abroad	It is mandatory to carry out periods of study and research abroad, even if not continuous, from a minimum of six (6) months up to the maximum limit provided by DM 14 December 2021, n. 226 and DM 21 February 2024, n. 470 and as required by the Regulations of the Phd courses of the Scuola Normale Superiore The foreign locations will be agreed upon by the teaching board with the students who will be holders of the scholarship, consistently with the training and research activities planned at the Scuola Normale Superiore.
Research period at the company	It is mandatory to carry out study and research periods in the company from a minimum of six (6) months to a maximum of eighteen (18) months, even if not continuous, scheduled consistently with the training and research activities provided at the Scuola Normale Superiore.

Annex A - Research topic of scholarships co-financed by D.M. 630/2024

Corso Ph.D.	<a href="#">QUANTUM TECHNOLOGY AND NANOSCIENCE</a> 40° Cycle – a.y. 2024-2025
Type of scholarship	Missione 4 "Istruzione e ricerca", Componente 2 "Dalla Ricerca all'Impresa" - Investimento 3.3 "Introduzione di dottorati innovativi che rispondono ai fabbisogni di innovazione delle imprese e promuovono l'assunzione dei ricercatori da parte delle imprese – DM 630/2024
Number of Scholarship	1
CUP	E53C24001220008
Co-financed by	<a href="#">FONDAZIONE PISANA PER LA SCIENZA ONLUS</a>
Scholarship Title	Synthesis and characterization of Nanosystems in diagnostic and therapeutic fields.
Brief description of the educational project	The scholarships are aimed at training scholars capable of tackling complex research on nanosystems for theranostics, applicable for the targeted delivery of drugs in nanomedicine and/or for the early diagnosis of diseases, e.g. in the oncology field. The training project involves integrated activities, from the study of the synthetic identity of the nanosystem up to its application in cellular and tissue model-systems, with the use of advanced optical spectroscopy and microscopy techniques at high spatiotemporal resolution. The project will also benefit from using quantitative molecular "omics" techniques (genomics, transcriptomics, proteomics, etc.), with a translational perspective and attention to clinical, regulatory and toxicological aspects. The project has the ambition of preparing young scientists to succeed in competitive research, consistent with the objectives and purposes of the Regulation (EU) 2021/241, with the general strategy and the detailed sheet of the PNRR Component and the principle "do not cause significant harm" (DNSH) pursuant to art. 17 of Regulation (EU) 2020/852 in accordance with the technical guidelines prepared by the European Commission (Communication from the European Commission 2021/C58/01).
Research period abroad	It is mandatory to carry out periods of study and research abroad, even if not continuous, from a minimum of six (6) months up to the maximum limit provided by DM 14 December 2021, n. 226 and DM 21 February 2024, n. 470 and as required by the Regulations of the Phd courses of the Scuola Normale Superiore. The foreign locations will be agreed upon by the teaching board with the students who will be holders of the scholarship, consistently with the training and research activities planned at the Scuola Normale Superiore.
Research period at the company	It is mandatory to carry out study and research periods in the company from a minimum of six (6) months to a maximum of eighteen (18) months, even if not continuous, scheduled consistently with the training and research activities provided at the Scuola Normale Superiore.

Annex A - Research topic of scholarships co-financed by D.M. 630/2024

Corso Ph.D.	Chemistry – 40° Cycle (a.y. 2024-2025)
Type of scholarship	Missione 4 “Istruzione e ricerca”, Componente 2 “Dalla Ricerca all’Impresa” - Investimento 3.3 “Introduzione di dottorati innovativi che rispondono ai fabbisogni di innovazione delle imprese e promuovono l’assunzione dei ricercatori da parte delle imprese – DM 630/2024
Number of Scholarship	1
CUP	E53C24001200008
Co-financed by	<a href="#">Gaussian, Inc</a>
Scholarship Title	Development and marketing software for simulation of chemical systems and properties.
Brief description of the educational project	The scholarship will be intended to train a scholar capable of tackling the development of software to be used to simulate the material and energy balances of chemical process plants. Applications for this include high-profile upskilling studies, particularly in the areas of Key Enabling Technologies. The training project therefore provides integrated preparation, the aim of training young scientists who can carry out competitive research in different fields of molecular sciences using various simulation techniques ranging from multiscale methods to virtual and augmented reality. consistent with the objectives and purposes of the Regulation (EU) 2021/241, with the general strategy and the detailed sheet of the PNRR component and the principle "do not cause significant harm" (DNSH) pursuant to art. 17 of Regulation (EU) 2020/852 in accordance with the technical guidelines prepared by the European Commission (Communication from the European Commission 2021/C58/01).
Research period abroad	It is mandatory to carry out periods of study and research abroad, even if not continuous, from a minimum of six (6) months up to the maximum limit provided by DM 14 December 2021, n. 226 and DM 21 February 2024, n. 470 and as required by the Regulations of the Phd courses of the Scuola Normale Superiore The foreign locations will be agreed upon by the teaching board with the students who will be holders of the scholarship, consistently with the training and research activities planned at the Scuola Normale Superiore.
Research period at the company	It is mandatory to carry out study and research periods in the company from a minimum of six (6) months to a maximum of eighteen (18) months, even if not continuous, scheduled consistently with the training and research activities provided at the Scuola Normale Superiore.

Attachment A - Research topic of scholarships co-financed by D.M. 629/2024

Corso Ph.D.	POLITICAL SCIENCE AND SOCIOLOGY – 40th Cycle a.y. 2024/2025
Type of scholarship	M4C1 “Potenziamento dell'offerta dei servizi di istruzione: dagli asili nido alle università” - Linea di investimento 4.1 “Estensione del numero di dottorati di ricerca e dottorati innovativi per la pubblica amministrazione e il patrimonio culturale”
Number of Scholarship	2
CUP	E53C24001000001
Area CUN / SSD	Area 14 – Scienze politiche e sociali / SPS/04, SPS/07, SPS/08, SPS/09, SPS/10,
Scholarship Title	Democracy and social movements in the international and political scenario
Brief description of the educational project	The Doctorate in Political Science and Sociology has a multidisciplinary and methodologically pluralist profile. The programme, entirely in English and highly internationalized in terms of student origin and teacher experience, combines structured teaching with careful supervision of research projects. The duration of the course and the related grants is four years. Following European best practices in the sector, it closely combines theoretical and empirical work, with attention to historical, institutional and cultural specificities.
Research period abroad	It is mandatory to carry out periods of study and research abroad, even if not continuous, from a minimum of six (6) months up to the maximum limit provided by DM 14 December 2021, n. 226 and DM 21 February 2024, n. 470 and as required by the Regulations of the Phd courses of the Scuola Normale Superiore. The foreign locations will be agreed upon by the teaching board with the students who will be holders of the scholarship, consistently with the training and research activities planned at the Scuola Normale Superiore.
Period to be carried out in PA, companies or research centres	It is mandatory to carry out study and research periods in public administrations, companies or research centers from a minimum of six (6) months to a maximum of twelve (12) months, even if not continuous, programmed consistently with the training and research activities planned at the Scuola Normale Superiore premises, as implementing body.