CALL OF SELECTION FOR RESEARCH PHD COURSES
XXXIX CYCLE

Academic Year 2023/2024

APPLICATION DEADLINE: 14 NOVEMBER 2023 AT 01 pm (Italian time)

Issued whit Rector’s Decree 1907/2023 Prot. n. 0270351 – 15.10.2023

ARTICLE 1 - PURPOSES AND GENERAL PROPOSITIONS

Public selections are held at the University of Parma, for qualifications and exams, for for supplementary admission to the XXXIX cycle – academic year 2023/2024 of the PhD courses of University of PaRma reported in the forms attached to the announcement and an integral part of this announcement.

The PhD Research programmes have a three-year duration starting from 1st January 2024.

For each phd courses, research topics, vacancies, admission requirements, procedures and criteria for the selection and assessment of candidates are specified in the attached Forms. Forms are integral part of this announcement. Any additions to this announcement may concern any PhD course with administrative headquarters at the University and accredited for the XXXIX cycle.

Available positions shall be assigned based on the score lists as per Article 9 of this public Announcement and available on the page http://www.unipr.it/dottorati-iscrizione.

In case of funds transferred by public or private institutions, the availability of scholarships, research grants, interships or other forms of similar support may increase, including positions available compared to what already provided by in this call. Regardless of the chance, everything shall happen without any disruption or alteration to the current terms and conditions of submission.

This announcement is to be considere an official notification.

Any change and integration will be published exclusively on the web site http://www.unipr.it/dottorati-iscrizione.

This call is available in Italian and English in accordance whit Italian laws and University of Parma Regulations.

ARTICLE 2 - ADMISSION REQUIREMENTS

Regardless of age and origin, in the selection may participate all candidates in posses of:

- "laurea magistrale" or "laurea specialistica" [Italian academic degree equivalent to a Master’s Degree] or "laurea" attained pursuant to the university degree system applicable before Italian Ministerial Decree No. 509 of 3 November 1999, came into force, as amended with Italian Ministerial Decree No. 270 of 22 October 2004, as well as second-level degrees equivalent to the above;
- a second level academic qualification issued by institutions belonging to the AFAM sector (Higher Education for Art, Music and Dance);
- an academic degree attained abroad. The degree will have to be comparable to an Italian one that grants admission to the PhD programme, in terms of length, level and if possible of field of education.
This degree must also be recognized as eligible even for the sole purpose of admission to the selection, as pursuant to Article 3 below.

The attached Forms, which are integral part of this announcement, specify for each PhD course the type of academic qualifications or additional requirements necessary for the admission in the selection.

Candidates that already hold a research doctoral degree may be admitted to attend, granted that the selection tests are sat and passed, another research doctorate program without any scholarship coverage.

In compliance with the terms set in Article 5, undergraduate students may also apply for admission, granted that they attain the necessary degree within 1st January 2024 (enrolment deadline), under penalty of exclusion. These candidates shall have to communicate to “UO Formazione Post Lauream – Dottorati di Ricerca” (dottorati@unipr.it) date, final mark attained and the University that issued the relevant academic degree by sending a self-certification, dated and hand-signed, with a copy of a valid identification, within 1st January 2024.

ARTICLE 3 – ACADEMIC DEGREE ATTAINED ABROAD

The eligibility of foreign academic degrees shall be verified by the Examination Board in charge of admission, in compliance with the applicable legislation in Italy and in the Country where the academic degree has been issued, as well as in compliance with any international agreements or treaties concerning the recognition of educational degrees for higher education.

Applying for admission entails an implicit request to assess the eligibility of the academic degree attained abroad. To this end, candidates must submit the following documents to their on-line application:

a) a certificate of their academic degree listing the exams sat and passed with the relevant mark, specifying the minimum and maximum vote provided for in the educational system of your country. EU citizens may use a statutory declaration in lieu of the certificate, pursuant to Italian Presidential Decree No. 445/2000 as amended;

b) English translation of the certificate as per item a), signed by the candidate under their responsibility, only where this document is not originally in English;

c) any other documents useful to assess the academic degree eligibility (Diploma Supplement, etc.)

Candidates in posses of a foreign degree that have passed the selection, shall be admitted conditionally until they submit the “dichiarazione di valore in loco del titolo posseduto” [declaration of local value of the degree held] along with the certificate of the relative exams and marks, translated and certified by the Italian diplomatic representation in the Country where the degree was attained. The declaration of value shall certify that the held degree is valid, in the Country where it was issued, for admission to an academic programme similar to a PhD Research.

If the above declaration of value is not available at the time of enrolment, a document shall be provided giving evidence that the application for its issue has been submitted to the competent diplomatic representation and it shall be turned in as soon as possible. As an alternative to the declaration of value, a Diploma Supplement can be attached issued by higher education institutions belonging to the EU or a certificate of comparability issued by CIMEA Center (further information at https://www.cimea.it/EN/pagina-attestati-di-comparabilita-e-verifica-dei-titoli).

Candidates in possession of a foreign qualification are invited to observe the provisions of the Ministerial Circular “Procedures for entry, stay, enrolment of international students and the related recognition of
In fact candidates will have to complete the pre-enrolment procedures using the UNIVERSITALY portal. Admission remains subject to the suitability assessment of qualifications by academic bodies for the sole purpose of admission, as well as for the passing of entrance exams, where required.

ARTICLE 4 – QUALIFICATIONS

In order to be admitted to any of the PhD Research Programme dealt with in this call, candidates shall submit the following mandatory documentation:

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<tr>
<td>1</td>
<td><strong>Curriculum Vitae et studiorum</strong></td>
<td>Preferably in European format and including a brief description of the degree thesis topic. It may also be written in English. Check in the respective course Form if any specific action is required (language and/or format).</td>
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<tr>
<td>2</td>
<td><strong>Abstract of the second cycle Master’s degree thesis</strong></td>
<td>Abstract of the second cycle Master’s degree thesis. Undergraduates applicants may submit the draft of the thesis approved by their supervisor (Abstract/draft: approximately 10,000 characters including spaces)</td>
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| 3 | **Documents attesting that the applicant holds both the necessary first and second level degrees.** | Graduate candidates:  
1. applicants granted of the above academic degrees by Italian Universities must submit a self-certification, duly filled and signed, attesting the completion of their studies (both the first and second level master’ degree);  
2. applicants awarded by the above academic degrees by other foreign Universities must submit a certificate attesting the completion of their studies (i.e. first and second level master’ degree), and the transcript of records. The latter must include the full list of the exams taken and the related marks. In case of documents drawn up in languages other than Italian or English, the official translation in Italian/English of both the documents is required. Only official translations issued by the University which has awarded the degree or by other competent authorities in the State in which the title has been awarded shall be accepted. Applicants holding a degree awarded in the other EU Member States can submit a self-certification (see previous point) or the Diploma Supplement as an alternative to the certificate. |
|   | **1. university that has awarded the degree** |   |
|   | **2. type of degree awarded, whether second level master degree/single cycle’ second-level degrees/pre-reform degree** |   |
|   | **3. denomination of the degree awarded** |   |
|   | **4. “Classe di Laurea” (only for degree awarded in Italy)** |   |
|   | **5. date in which the degree has been awarded** |   |
|   | **6. final mark** |   |
|   | **7. academic transcript of records, including the full list of the exams taken and the related marks** |   |
For applicants who are yet to obtain their second cycle degree by the date they apply:

**Academic transcript of records**, including the full list of the exams taken and the related marks. Please also indicate the related CFU or ECTS (if provided by education system of the Country in which the degree will be awarded). The record must include the "media ponderata dei voti degli esami" (Weighted Average Mark WAM), only for graduate students enrolled in Italian Universities.

To calculate the **media ponderata** (the weighted average mark, only for graduate students enrolled in Italian Universities):
1. Multiply the marks obtained by the number of CFUs (please, note that 30 with honours is regarded as 30);
2. Add all the obtained results;
3. Divide the result by the total of the CFUs.

**Research Project** (when required by the course specific Form)

Preferably according to the format attached to this selection call. It can also be written in English. Check in the Forms of the individual courses if there are any specific requirements (language and/or format).

According to current legislation, the University must reject certifications issued by other Italian public administrations. Therefore, academic degrees must be attested only using self-certification if awarded by Italian public universities.

At [http://www.unipr.it/dottorati-iscrizione](http://www.unipr.it/dottorati-iscrizione) applicants may download a self-certification fac-simile to be used in the case the academic qualifications attained in other Italian public universities.

After verification, if the qualifications do not comply with the requirements, pursuant to art. 2, or the declarations produced are not truthful, the University may dispose for the exclusion from the selection or from the PhD course, with a provision of the Rector, at any time, even after enrolment and the beginning of the course.

For each PhD Research programme, in the attached Forms are also specified the additional documents required. Candidates shall attach copy of such qualifications during the online application, for assessment purpose. All titles written in a language other than Italian will have to be translated into English, otherwise they will not be evaluated.

All documentation will have to be submitted in accordance with Article 5 below.

**ARTICLE 5 - APPLICATIONS ADMISSION**

Applications for selection shall be submitted from 24 October 2023, 12 pm (Italian time) to 14 November 2023, 1pm (Italian time, final deadline). Candidates must apply online only, under penalty of expulsion, following the procedure at [https://unipr.esse3.cineca.it/Home.do](https://unipr.esse3.cineca.it/Home.do). Please remember to have a valid ID and proof of tax identification number at hand during the procedure.

The candidate shall:
- Connect to [https://unipr.esse3.cineca.it/Home.do](https://unipr.esse3.cineca.it/Home.do);
- Register by entering the required data (or login, if already registered);
- Click on menu > REGISTRAR'S OFFICE > ADMISSION TEST > ADMISSION TO RESTRICTED DEGREE COURSES – DEGREE WITH ADMISSION IN CHRONOLOGICAL ORDER > select the desired PhD Course;
- Proceed with completing the online application, submitting the required information and attaching the necessary documents as required in Article 4 (in addition to the additional ones listed in the Forms). Please remember the documents must be in pdf format (maximum size limit of 5Mb for each...
attachment) and the file will have to state the name of the candidate (for example: surname_namefile.pdf). It is also mandatory to attach copy of the ANNEX A “ADMISSION TO RESEARCH DOCTORATE COURSES” and one of a valid ID of the applicant.

To properly upload the documents, please follow the instructions [http://www.unipr.it/dottorati-iscrizione](http://www.unipr.it/dottorati-iscrizione).

N.B. Italian candidates who have never been registered at the University of Parma will MUST register using their SPID credentials. For more information, consult [https://www.unipr.it/registrazione](https://www.unipr.it/registrazione)

The form ANNEX A, compulsorily loaded during the online application procedure, PENALTY NOT EVALUATION, will have to state the candidate’s personal information, address, phone number, email address as well as citizenship for the purpose of the selection. Furthermore it will have to state:
• the exact denomination of the desired selection;
• the chosen Research Area, selected among those indicated in the courses attached Forms and with relating research project, if required;
• the reserved position, if any, for which they intend to apply;
• the type of degree attained (or to be attained), the name of the University issuing the degree, the graduation date and the final mark.
It is also possible to indicate, in the appropriate section, an expression of interest in the assignment of one or more Scholarships with "SPECIFIC TOPIC", as specified in the following art. 7.

To this end, candidates shall provide a certificate stating that the submitted documentation is identical to its original, under their responsibility and pursuant to Articles 46 and 47 of Italian Presidential Decree No. 445 of 28 December 2000, aware of forfeiture of any benefits obtained, as well as of the criminal penalties provided for by Articles 75 and 76, respectively of the above Decree, for false declarations and for forgery or use of forged documents.

The candidates with online application declare:

a) to grant attendance to the PhD programme as instructed by its Academic Board;
b) that they are not enrolled in Postgraduate Schools of Specialization or in Undergraduate or Graduate courses of studies of any kind. Should they be enrolled in any of the above courses, they undertake to suspend attendance/enrolment, or they declare to be enrolled in the Postgraduate Medical School of Specialization at the same educational center (in the latter case, a copy of the authorization given by the School of Specialization Board must be attached);
c) that they do not hold a research doctor qualification. If they already hold a research doctor qualification, they will have to state the PhD title in their possession, the institution that issued the title and the date of attainement (in the latter case, the winner of the selection shall not receive any scholarship, pursuant to Article 6 of Italian Law No. 398/1989 and to Article 5 of the University Regulations for the attainment of the PhD research title);
d) that they have never benefited or are not currently benefiting from any scholarship for a PhD programme.

Candidates suffering from impairments or learning disabilities may express their specific needs, by filling in form A38-5 or form A39-1, which can be downloaded from the website [https://www.unipr.it](https://www.unipr.it), and by including such form in their application for registration. The form, filled in and signed, shall be sent via e-mail to the address: dottorati@unipr.it.

At any time, within the call deadline, candidates shall be able to access their applications to integrate or edit the data and attachments inserted.
The submission of the application to the University shall be completed automatically at the end of the procedure. Therefore, candidates do not have to deliver or send any printed material to the offices. Through the online procedure candidates must also attach the documents proving the qualifications required for the admission to the desired PhD course.

**Online submission is the only means of presentation accepted for the qualifications, no other shall be accepted.**

Please note that at the end of the online admission procedure, no payment slip will be issued as there is no admission fee for the selection.

Applications that at 1 pm (Italian time) of 14 November 2023 are incomplete and/or lack the required attachments, will be excluded.

Applications that are incomplete, irregular or not submitted in the manner and within the terms specified in this article will not be accepted.

The deadline is peremptory, at its expiration the informatic system will no longer allow the submission or editing of any application. The informatic system will moreover work as means of certification for the time of submission and deadline expiration.

In any case, additions to the documentation attached to the application will not be admitted after the deadline of the call, with the exception of those requested by the University.

Candidates applying for more than one PhD programme selection shall submit more than one application, attaching the required documentation to each one of them.

In case the attached forms require research topics for the chosen Doctorate program, candidates shall set forth the specific topic chosen in their application for admission in Annex A.

Candidates already in possession of login credentials for the [https://unipr.esse3.cineca.it/Home.do](https://unipr.esse3.cineca.it/Home.do) application will have use the latter. In case of loss or prolonged inactivity of the access credentials, it is possible to proceed with the password recovery, following the procedure indicated. Please note that if you have previously participated, even once, in a selection procedure or attended a course at the University of Parma you are already in possession of the credentials and will not be able to register again with the same personal data. It will therefore be necessary to reactivate the credentials, in the manner described.

Candidates are strongly encouraged to complete their application well in advance of the deadline, in order to avoid any possible crashing of the informatic system and subsequent failure of the submission process – due to the high number of last-minute applicants.

**It is not possible to guarantee the fulfillment of requests to recover/duplicate the access credentials to our informatic system within 5 days of this call deadline.**

**It is the candidates’ responsibility to verify the correct conclusion of the procedure and the correct loading of all the documents.** No complains will be accepted for any malfunctions of the informatic system due to overload close to the deadline.

**ARTICLE 6 – RESERVED POSITIONS**
Reserved positions are available in those PhD courses that have expressed provision for it. Be the candidates with foreign degrees, holding scholarships founded by foreign countries, holding scholarships in the field of specific programmes with international mobility or benefitting from EU/international collaboration projects, they may compete for the positions. In this case special separate selections will be held though.

Any reserved position is stated in the attached Forms of each PhD programme, which are an integral part of this call.

Reserved positions may also be provided to employees of companies having agreements in place for “Industrial PhD Programmes”.

The candidates intending to apply for the above reserved positions, when provided for in the Forms of the courses, must attach alongside ANNEX A, additional documents to their application for selection, more precisely:

- **Candidates holding scholarships funded by foreign Countries**: in addition to the documents listed in the Form for the specific PhD programme, they shall attach a certificate stating that they are holders of a scholarship or of similar support.

- **Candidates under specific international mobility programmes**: in addition to the documents listed in the Form for the specific PhD program, they shall attach a certificate stating that they are holders of a scholarship or similar support provided as part of a specific international mobility programme.

- **Candidates employed by companies or public institute and research centers engaged in highly qualified activities**: in addition to the documents listed in the Form of the relevant PhD programme, they shall attach documents giving evidence of their being employees of the company. This shall automatically entail their eligibility for the positions reserved for their category.

- **Candidates holding Research Scholarship**: in addition to the documents listed in the Form of the relevant PhD programme, they shall attach a self-certification stating that they hold a research fellow position, its duration and the granting institution or a document stating the awarding of such position. This shall automatically entail their eligibility for the positions reserved for their category. In the event that a certification of the hold position can not be presented, as the selection procedure has not yet been completed on the date of this announcement deadline, candidates shall be admitted under the condition of procuring said documentation before 31.12.2023.

For reserved positions, the Examination Board shall prepare a separate ranking in accordance with the category of the reserved positions.

The positions that are reserved to holders of scholarships funded by foreign Countries; pertaining to specific international mobility programmes; reserved to research fellows or employees of companies having industrial PhD agreements; reserved for high educational and research internship contracts and that have remained vacant shall not be awarded to other candidates.

Should there be no winning candidates for positions reserved for graduates from foreign universities, the vacancies will be added to the general ranking of each research PhD course.

**ARTICLE 7 - ADMISSION EXAMINATION**

Admission shall consist on a comparative selection based on qualifications and possibly an oral test. The selection, intended to ascertain the candidate's ability and aptitudes for scientific research, may consist, in addition to the evaluation of qualifications and/or of a research project, in a public oral test.
The oral exam will take place in the presence. Within the limits and only and exclusively if provided for by the individual course Forms, the oral exam may, at the request of the candidate, be taken remotely using the Microsoft Teams platform. Applicants are responsible for providing adequate audio and video equipment for the use this platform.

The selection procedures and the assessment criteria for the admission to the PhD Programmes are described in the PhD Programme Tables in attachment and are integral part of the present Call for applications. Such information are also available in the webpage of each PhD Programme at http://www.unipr.it/dottorati-iscrizione.

The publication of a calendar shall amount to a formal notification for all purposes convening candidates for the exams, if any. Therefore, candidates shall present themselves, with any notice or communication whatsoever related to the admission exams, at the examination venue, on the day and at the time set forth in the Forms. Please note the candidates will have to exhibit a valid identification that has a photograph of the holder, issued by an official Public Administration, under penalty of exclusion.

Only and exclusively, if provided in the relative Form of the chosen PhD programme, the test may be held in a language other than Italian.

The Examination Board may award a total of 120 points. The attribution of points to qualifications and projects, including the minimum score required to be admitted to the oral test, is set forth in the Forms relating to the single PhD programme.

To qualify, a total score not lower than 70 points is required. The final score shall be the sum of the points obtained in the qualifications and in each oral test.

In case of scholarships linked to specific topics, during the oral test, the candidates will have the possibility to express their interest for one or more scholarships linked to the specific topics. The Examination Board will express a suitability assessment for the allocation of the scholarships linked to specific topics, taking into account specific skills, experiences and aptitudes of the candidates.

The expression of interest can be presented by filling in the dedicated section of Annex A and by confirming it during the oral test before the interview begins. This declaration does NOT preclude the possibility of applying for other ordinary scholarships.

In the event of winning a useful position covered by a scholarship in the general ranking of merit, any expression of interest does not entail the automatic assignment of the scholarship for a restricted subject.

Candidates can view the results of the qualifications assessment, of each test and of the final ranking by accessing the reserved webpage of the online students' office services at https://unipr.esse3.cineca.it/Home.do. The results of the qualifications assessment will be displayed a few days before the date scheduled for the oral test.

Special provisions for remote oral test:
Candidates who reside abroad or temporarily abroad for study or work reasons can take the oral exam remotely, only and exclusively if explicitly provided for in the profile relating to the chosen PhD course. With reference to PhD courses that provide for the possibility of carrying out the oral exam remotely, the candidate who intends to make use of this operating method, must attach to the application for online admission the "DISTANCE ORAL EXAMINATION REQUEST FORM", completed and signed, specifying the e-mail address that will be used by the Commission oard should use for the video call. The candidate must be available...
at the provided personal address, on the day set for the oral test, in accordance with the calendar in the relating Form of the PhD programme, guaranteeing the use of a webcam to allow their identification. The Examination Board may choose together with the candidate a time for the beginning of the interview.

To take the distance Oral Test, candidates must connect to a Teams session using the link that will be sent to the e-mail they provided in the "DISTANCE ORAL EXAMINATION REQUEST FORM ".

For identification purposes and under penalty of exclusion from the selection procedure, each candidate shall identify themselves, before the interview begins, by showing the same identification that has been attached to the selection application.

In the event a candidate fails to communicate their personal address, fails to connect, or is not available on the day and time agreed or fails to show a valid identification, pursuant to the previous paragraph, all these shall be ground to exclude them from the selection procedure.

These causes of exclusion do not apply if the candidate, with a valid identification, presents themselves on the day set for the interview in order to sit for the oral exam “in person”.

Technical connection problems during the remote oral exam:

a) in the event that the connection problem concerns one or more committee members, the interview is postponed ex-officio to another date of which will be given appropriate and adequate publicity;

b) in the event that the connection concerns the candidate admitted to the interview, the committee may reasonably postpone the interview to another date, in compliance with the principles of non-discrimination and equal treatment between the candidates that will be given appropriate and adequate communication.

The acceptance of any requests to take the oral exam at a distance received after the expiry of the competition will be judged discretionally by the Examination Board, taking into account the particular needs expressed by the candidate who may go to preclude the possibility of taking the oral examination in attendance.

The University of Parma shall not be responsible for any technical causes which prevent the oral interview from being carried out regularly.

At the end of the selection the Examination Board, will draw up a ranking for merit based on the final score obtained during the assessment of qualifications and oral test. The ranking shall be approved by Rector's Decree.

The Examination Board shall be able to express a differentiated judgment for each individual position/scholarship also in relation to special skills required for conducting research on specific topics.

The Examination Board and the Academic Board are not bound by any options expressed by the candidates nor by any project presented at the time of the application.

**ARTICLE 8 – EXAMINATION BOARD**

Examination Boards shall be appointed by the Rector and composed in accordance with Article 5 of the Regulation concerning Research Doctorate degrees of the University of Parma.

The composition of the single Boards shall be published, before the expiry of the notice, on the University website: [http://www.unipr.it/dottorati-iscrizione](http://www.unipr.it/dottorati-iscrizione).

The Examination Boards will not send any personal communication to the candidates regarding the outcome of the selection tests: it will be the exclusive responsibility of the candidates to inform themselves through the methods described in art. 7 and the subsequent art. 9 of this notice.
ARTICLE 9 - ADMISSION TO THE PROGRAMS (Final short-lists)

Successful applicants will be admitted to the PhD programme, after the approval of selection deeds, in line with the ranking list until all positions available are covered, without prejudice to the specific procedures for the awarding of the positions set out in Arts. 6 and 7 of this call, concerning reserved positions and scholarships dedicated to specific research topics.

For the purposes of admission to each PhD Programme, only the rankings published shall be valid. Candidates can consult them in the reserved area, by logging in with the same methods used to register at the selection https://unipr.esse3.cineca.it/Home.do.

The beneficiaries of scholarships on the basis of specific topics, awarded by European and international institutions or other forms of financial support in which the University of Parma is a partner, may be admitted to the PhD courses. Provided they still perceive a scholarship or other form of financial support, they may participate in the selection procedures as described in the regulation of each programme.

The publication of the ranking on the website shall be the only official publications of the outcomes of the competitive selection and, therefore, no personal notifications shall be sent to the winning candidates.

In case a candidate ranks in a winning position in more than one short-list, he/she shall opt for only one Doctorate Program, concomitantly notifying his/her waiver of the other programs. The choice of the PhD program, carried out at the time of registration is final and you can not change it in any way.

The candidates that rank as winners in the final short-list, who are not over 29 years of age, may be selected in cooperation with any interested companies and based on each candidate’s specific skills, for a "high training and research internship contract" to cover any vacancies, where any are set forth in the forms attached hereto.

Postgraduate students enrolled in a Medical School of Specialization at the University of Parma, who win the selection for a PhD programme, may be allowed to attend jointly both programmes. It shall be allowed granted that the students are in the last year of the School of Specialization at the time of enrolment in the PhD programme, in compliance with the deadlines set down in Article 10 below.

Joint attendance shall be allowed also if compatible with the activities and commitment required by the same School and proved by an authorization issued by the School Board, also in consideration of the distance between the locations.

The PhD Board shall resolve on any request for a reduction in the PhD programme, after assessing the research activities already carried out during the postgraduate medical career of the student, as certified by the postgraduate medical school of specialization and may grant enrolment directly to the second year of the PhD programme.

In the year of joint attendance, the postgraduate student can not receive the PhD programme scholarship.

ARTICLE 10 – ACCEPTANCE OF THE POSITION AND MATRICULATION

The winning candidates will have to complete a pre-enrolment procedure EXCLUSIVELY ON-LINE, accessing the page “https://unipr.esse3.cineca.it/Home.do”. Candidates shall have time from 11 December 2023, 12 pm (Italian time) to 15 December 2023, 12 pm (Italian time) by accessing the dedicated restricted area and clicking on Registrar's office > enrolment, with your credentials (with SPID for Italian citizens or for those who have it) and by uploading a copy of the required documents.

OTHER MODALITIES, DIFFERENT FROM THE ONLINE PROCEDURE, SHALL NOT BE ACCEPTED.
Applicants who do not complete the enrolment procedure shall be considered as having tacitly refused their PhD position. Before starting the online procedure, the applicant should keep at hand:

- A device connected to the Internet;
- A printer;
- A valid ID;
- SWIFT CODE where any scholarship may be transfered;
- A valid e-mail address (where the enrolment confirmation shall be sent);
- A credit card (in case one plans to use this form of payment, taking into account that commission fees may be applied by their own Credit Institution);

After the pre-enrolment procedure, candidates will have to print the enrolment request form, complete it with date and signature, no later than 18 December 2023, and send the following documentations:

- enrolment request form (printed from online procedure) with indication of date and signature, as indicated above;
- payment receipt, as proof of having paid the tuition fee as pursuant Article 12 below. (only via PagoPA);
- scan of a valid ID (back and front);
- Declaration attesting the qualifications held (High School Diploma and Master’s/Specialist Degree) for applicants outside the University of PARMA, according to the model downloadable at http://www.unipr.it/dottorati-iscrizione
- copy of a valid residence permit (only for non-UE citizens). Those who do not hold a valid residence permit yet, they will have to request it within 8 days from their arrival in Italy, according to the Italian legislation on Immigration. They will also have to provide a document proving the insurance coverage for medical treatment and hospitalization.

Scholarship winners will also have to submit the following forms which can be downloaded from the website:

http://www.unipr.it/dottorati-iscrizione

- either the Scholarship Acceptance Form or Withdrawal Form for the entire duration of the course (those attending a school of specialization will have to fill in the scholarship acceptance form reserved for them);
- declaration certifying the INPS (Social Security Insurance) status by using the form included among those of the scholarship acceptance;
- Registration receipt for the separate management of contribution by INPS (Social Security Insurance) for the payment of the scholarship (if not available immediately, no later than 31.12.2023).

Foreign citizens results winners shall complete and submit the above-mentioned forms reserved for them and proceed immediately with registration on the UNIVERSITALY portal, sending notification by e-mail to doctorati@unipr.it of successful pre-registration, in order to validate and confirm the information entered, necessary for the issuance of the visa by the Italian Embassies abroad.

For information and assistance regarding the accommodation, foreign citizens may contact the CENTRO ACCOGLIENZA E INCLUSIONE (http://cai.unipr.it).

All the aforementioned documentation must be sent, by December 18, 2023, by email to doctorati@unipr.it or delivered, by appointment, directly to the UO Post Graduate Training - Research Doctorates - P.le San Francesco, 3 - 43121 Parma (open to the public: Monday, Tuesday, Wednesday, Friday from 09.00 to 12.00 - Thursday from 09.00 to 13.00).
Enrolment will become effective only after the presentation of all the above-mentioned documents within the specific deadline. Candidates who do not comply within the relating deadline will be considered forfeiters. Vacancies will be offered to the next available applicant as by final ranking.

Following a waiver by the winners of the selection, whether explicit or tacit, replacements will be made in line with the final ranking. A communication shall be sent to the applicant taking over the available position via e-mail. In this case, enrolment must be completed within the peremptory term of 5 days from the sending of the substitution notice. It will have to be done using the online procedure first and then by sending, or submitting by appointment, the enrolment request form together with the necessary attachments, within the same deadline, under penalty of revocation.

Candidates who received the notice of substitution, but intend to renounce the enrollment, must communicate their refusal without delay so that the available position can be offered to other applicants. The refusal must be notified via e-mail to dottorati@unipr.it, attaching the scanned front-back copy of a valid ID document. Eligible applicants who fail to complete the enrollment procedure by the deadline set in the notice of substitution shall be considered having refused the position tacitly.

In case of equality the following criteria will apply:
- for positions covered by scholarships, the assessment of the economic situation, determined in accordance with D.P.C.M. of 09.04.2001, published in the Official Gazette no. 172 of 26.07.2001, without prejudice to the specific procedures for the awarding of the position set out in Arts. 6 and 7 concerning reserved positions and scholarships dedicated to specific research topics;
- for positions not covered by scholarship precedes the youngest candidate.

For admission to the doctorate program, candidates with the same ranking shall submit a self-certification concerning their income situation, pursuant to the Decree issued by the Italian Prime Minister on 9 April 2001 published in the Italian Official Journal issue No. 172 of 26 July 2001.

At the beginning of the course an email will be sent confirming the enrolment and providing the student with the University credentials (i.e. student number and e-mail address). These data are essential for the PhD student’s career. In fact, the University of Parma will officially communicate with its students only via the institutional email account for any administrative information regarding the PhD course.

All enrolled PhD students are invited to create an ORCID profile (Open Researcher and Contributor. To register, visit the page https://orcid.org/register). ORCID is a unique and permanent identification number attributed to the individual researcher and which, thanks to the integration with Web of Science and Scopus, allows you to easily populate your author profile with all future publications, also in order to keep track of the different affiliations of the researcher during his/her professional life. The Code Number of the successful creation of the ORCID Profile must be communicated to the PhD Office (dottorati@unipr.it) no later than 31 December 2023.

For the duration of the course, students are required to edit, insert and promptly update any changes of personal details including IBAN/SWIFT CODE for the crediting of the scholarship, residence, domicile or any other number, connecting to the private area using the credentials received (https://unipr.esse3.cineca.it/Home.do).

In case of waiver by a person within two months of the beginning of the programme, the next eligible candidate on the ranking may take over the position, taking into account, if necessary, of the specific research field related
to funding. The new candidate shall start no later than the end of the third month from the beginning of the programme.

Non-EU nationals shall submit a photocopy of the application for an Italian stay permit, for study or otherwise, and shall commit to turn in later the stay permit issued by the Questura di Parma.

All deeds and documents in a foreign language shall be translated and certified by the competent Italian diplomatic representation or consulates, in accordance with the applicable legislation concerning the admission of foreign students to courses at Italian Universities.

**ARTICLE 11 - SCHOLARSHIPS**

The scholarships will be assigned, during the planning of the activities of the first year of the course, by the Academic Board according to the order in the final ranking, taking into account the indications contained in the PhD programme Forms, regarding reserved positions, positions with scholarships linked to specific topics and the assessment of suitability expressed by the Examination Boards during the selection.

The number of scholarships may increase to the maximum number of available positions stated in each course description Form as result of further funding from public and private institution interested in supporting research activities, even after the publication of this announcement, however, within the deadline for submitting the enrolment application.

The potential increase in the number of scholarships will be stated on the attached Form of each courses, available on line, without affecting the application deadline as indicated in art. 5 of this call.

The increase in scholarships determine the increase in the number of place available globally.

**Candidates who are assigned scholarships with a predetermined research activity will be bound to carry out that activity.**

Scholarships on specific topics are those financed under certain programmes, projects or agreements with external bodies which obligatorily provide for the performance of the activity on a specific research topic (indicated in the call Form) and which bind the assignees to carry out such research. Due to their particular nature, scholarships dedicated to specific research topics can not be assigned on the basis of the general merit ranking but require an additional specific assessment.

The Examination Board, possibly supplemented by an expert as referred to in the previous art. 5, shall express a suitability assessment for the assignment of scholarships linked to specific topics. In doing so they shall take into consideration specific competences, experiences and aptitudes of the candidates, as well as the type of profile sought, when indicated in the PhD programme Form.

In the modalities provided for by the PhD programme Form, each candidate can express their interest in the assignment of one or more scholarships with specific topics to the Examination Board. This expression of interest is not binding for the purpose of the suitability assessment.

All candidates, who apply for a specific topic PhD course, shall take part in the selection for the general positions as well.

For candidates with the same ranking, the assessment of their income situation will work as leading factor pursuant to the Decree issued by the Italian Prime Minister on 9 April 2001 and published in the Italian Official Journal issue No.172 of 26 July 2001.
The yearly gross amount of the scholarship is €16,243.00 as defined by the Ministerial Decree n. 247, 23.02.2022. Social-security contributions are deducted monthly from the gross scholarship by the University on behalf of the PhD candidates. Scholarships are paid to PhD candidates on a monthly basis, in arrears.

The scholarships are subject to the payment of the INPS social security contribution (gestione separata INPS) according to the relevant legislation into force. Such a contribution is paid as follow: two-thirds to be paid by the University and one-third to be paid by the scholarship holder. PhD candidates enjoy the related rights and tutelage.

In terms of taxes, the provisions of Article 4 of Italian Law No. 476, 13 August 1984 apply to scholarships for attendance to PhD programmes.

The scholarship shall not add to other research grants or other scholarships awarded on whatever ground, except for those awarded by Italian or foreign institution intended to integrate, with stays abroad, the training or research activities of the PhD Student.

The beneficiaries of research grants who are awarded scholarships as part of a PhD programme must irrevocably renounce their grant or scholarship by the start date of the course, 01.11.2023, by promptly contacting their administration.

Anyone who has already received a scholarship for a PhD course, even partially, cannot apply for a second one.

**ARTICLE 12 - TUITION FEES**

It is envisaged the total exemption from the payment of fees or grants to the University for the PhD students who have a scholarship and other forms of equivalent support under the D.M. 226/2021/2013.

It is also envisaged, pursuant to Law 11 December 2016, no. 232, paragraph 262, the total exemption from paying taxes or grants to the University for PhD students who are not scholarship beneficiaries.

All doctoral students enrolled in the programs shall be required in any case to pay €16.00 per year as revenue stamp duty and €140.00 per year as the Regional tax for the right to study.

As a result of termination of studies the installment paid for the registration is not refundable.

**Terms of payment**

To make the payment of the aforementioned amount of €156.00 you will have to connect to the University website [www.unipr.it](http://www.unipr.it). Click on Servizi > Servizi di segreteria online, log in with your credentials to access your personal page and click on SEGRETERIA > PAGAMENTI.

Payment can be made:
- by printing the IUV bulletin to be presented at any bank branch authorized in Italy or through another payment system accepted by PagoPA (bank branches, home banking, authorized stations, Sisal and Lottomatica points, Post Offices if account holders, as well as apps payment methods such as Bancomat Pay or Satispay, etc.).

For more information on the pagoPA payment system (IUV) you can consult the following web page: [https://www.unipr.it/pagoPA](https://www.unipr.it/pagoPA).
The amounts of the tuition fee for enrollment in the following years and their deadlines are determined annually by the competent Academic Bodies and published on the University web page at: http://www.unipr.it/dottorati-iscrizione. The PhD students are required to view it through the University web site.

ARTICLE 13 – DEGREE ATTAINMENT

The research doctor title, also referred to as: "Ph.D." ("Dott. Ric." In Italian), shall be achieved upon sitting for and passing the final exam. For all information on the appointment of Examination Boards for the final exam and on the procedures and requirements relating to the PhD thesis, reference is made to the Regulations of the University of Parma concerning the Programmes for PhD Research Degrees.

ARTICLE 14 - COMPATIBILITY REGIME

PhD students shall undertake to ensure attendance of the PhD programme based on the instructions given by the Academic Board. Admission to PhD research programmes shall entail full-time and exclusive commitment. The Academic Board shall have the power to include any extra-curricular activities to be performed along with the academic, educational and research activities of the programme.

The regimes of compatibility and incompatibility with the attendance of PhD courses are governed by Arts. 6 and 7 of the Regulations concerning PhD courses, to which reference is made.

Pursuant to and by effect of the Law of 12 April 2022, n. 33 and of the Ministerial Decree 29 July 2022, no. 930, simultaneous enrollment in a doctoral course and a first or second cycle degree course is permitted; pursuant to the same discipline, simultaneous enrollment in the doctoral course and in a non-medical specialization school is also permitted. Double enrollment is permitted subject to verification of the requirements established, in relation to the attendance obligations, by the general regulations referred to above.

ARTICLE 15 - APPLICABLE REGULATION

For anything not expressly provided for herein, reference is made to the "Regolamento dei Corsi per il conseguimento del Dottorato di Ricerca dell'Università degli Studi di Parma" [Regulation of the University of Parma concerning the Programs for Research Doctorate degrees], issued by Rector’s Decree no. 2275 of the 27.06.2013, as amended.

ARTICLE 16 – PERSON IN CHARGE OF THE PROCEEDING

Pursuant to Italian Law No. 241 of 7 August 1990, as amended and integrated, the person in charge of the proceeding dealt with herein shall be Ms. Sonia Rizzoli – Head of the Postgraduate Training Sector] - P.le S. Francesco, 3 - 43121 Parma, Italy, phone +390521 – 034214 fax +390521/347042 and e-mail dottorati@unipr.it.

The provisions set down herein and intended to ensure transparency in all phases of the proceeding, the criteria and procedures for the appointment of examination boards and persons in charge of the proceeding implement Italian Law No. 241 of 7 August 1990, as amended.

ARTICLE 17 – PERSONAL DATA PROTECTION
Personal and sensitive data provided by candidates will be used for administrative purposes and for possible proceedings for the management of the academic career of the winners only.

The treatment of the personal data according to art. 13 of EU art. 2016/679 – General Data Protection Regulation.

The communication regarding the request for personal data is obligatory in order to evaluate the prerequisites for participation, or exclusion of the candidate from the selection process. The personal data provided can be communicated to the Administration of the Università of Parma and to related external structures within the framework of the University of Parma authorised to manage personal data under the direct control of the Owner of the Service of the Data Protection officer, exclusively for the above-mentioned purposes.

The e-mail of Data Controller at the Università degli Studi of Parma, dpo@unipr.it or dpo@pec.unipr.it.

**ARTICLE 18 – OTHER INFORMATION**

This announcement of a competitive examination, written in Italian and in English, is published on the website of the University of Parma, [http://www.unipr.it](http://www.unipr.it); the relating notice is available on the website of the Italian Ministry of Education, University and Research and on the EU Euraxess website.

Additional information and regulation details may be asked to the Postgraduate Training – Ph.D Office, P.le San Francesco, 3 - 43121 Parma, Italy Phone: +39 0521/034214 dottorati@unipr.it.

Prof. Paolo Andrei

Digitally signed pursuant to Legislative Decree no. 82/2005

<table>
<thead>
<tr>
<th>U.O.R. - Unità Organizzativa Responsabile (Relevant Organizational Unit)</th>
<th>Area Dirigenziale Didattica,Internazionalizzazione e Servizi agli Studenti (Relevant Organizational Management -Teaching Area and Students’ Services)</th>
<th>Ms. Anna Maria Perta</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.P.A. Responsabile del Procedimento Amministrativo (Person in charge of the proceeding)</td>
<td>UO Formazione Post Lauream (Head in charge of the administrative proceeding of the Postgraduate Training)</td>
<td>Ms. Sonia Rizzoli</td>
</tr>
</tbody>
</table>
ECONOMICS & MANAGEMENT OF INNOVATION AND SUSTAINABILITY (EMIS)

**COORDINATOR**
Prof.ssa Beatrice LUCERI  
Department of Economics and Management  
email: Beatrice.luceri@unipr.it

**DURATION**
3 years

**STARTING DATE OF THE PHD PROGRAM**
01/01/2024

**PARTNER INSTITUTION**
- University of Ferrara  
- University Cattolica del Sacro Cuore

**TRAINING OBJECTIVES**
The PhD program is organized to educate scholars who will be able to apply analytical and computational tools to functional data for making complex decisions in economics and management. Participants can approach the doctoral research project either from the economic theory perspective or the business theory perspective, embracing the precipitous fields of study of the theoretical framework of reference: business administration, economics and business management, business organization, political economics, economic policy, public economics, applied economics, corporate finance, and economics of financial intermediaries, as well as the methods supporting the economic and business disciplines.

The learning objectives are achieved by integrating - as a particular specificity of the PhD program - economics, management and mathematical-statistical tools. The knowledge and skills learned enable a fruitful employability in academia or in companies or public administrations and international institutions in high skilled occupations in the regional, Italian and European job markets.

The PhD program offer both an interdisciplinary foundation and a cultural background suited to address the methodology of the research topic investigated, to identify an original research perspective and to develop an original PhD thesis that contributes to the advancement of knowledge. These outcomes are achieved by structuring the PhD program as follows:
- Year 1, foundations of scientific research and shaping of the PhD research project;
- Year 2, development of the PhD thesis, by conducting research activities and eventually spending a period abroad at qualified universities/research institutes;
- Year 3, completion of the PhD thesis by conducting research activities and presenting results to academic conferences.

The first year of the Ph.D. aims to provide all the knowledge and skills necessary for appropriately designing the research project. Research foundation courses are organized according to three pillars: Theories, Methods and Applications. The Theories pillar includes the theoretical courses in Micro-Macroeconomics and Management Theories. The Methods pillar includes courses in literature analysis, research design, quantitative and qualitative research techniques, and qualitative and quantitative data analysis tools. The Applications pillar is declined according to the teaching needs of PhD students through lectures and seminars consistent with the research topic investigated. Other activities, including courses aimed at the development of soft skills, language skills and computer skills, complete the training. Strongly recommended is a period of study abroad, starting in the second year of the PhD program, so that students can learn advanced research techniques and/or address emerging research issues with respect to the research topic investigated.

**RESEARCH AREAS** (The candidate MUST mandatorily indicate one research topic in the form ANNEX A and submit a RESEARCH PROJECT in the relevant field)
- Branding and value creation
- Consumer behavior and marketing management
- Determination and communication of value in businesses
- Knowledge economy, organization, human capital and labour
- Environmental and natural resources economics
- Economics and public management
- Economics and industrial policies: innovation, productivity, growth and convergence
• Finance and risk management
• Health care and health management
• Performance evaluation, balance analysis and business management auditing
• Entrepreneurship and business strategy
• Policies and economics for agri-food.
• Intangible resources and management systems, financial and non-financial assessment and reporting
• Economic decisions in uncertain contexts
• Another research topic

ADMISSION REQUIREMENTS

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:
− Laurea specialistica or Laurea magistrale (second cycle master’s degree)
− Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
− Second cycle Master’s degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023

POSITIONS PUT OUT TO COMPETITION 2

With Scholarship 2

Position with Scholarship

<table>
<thead>
<tr>
<th>No.</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Scholarship funded by University of Parma (Ministerial funds)</td>
<td>---</td>
</tr>
</tbody>
</table>

Position with Scholarship

LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)

<table>
<thead>
<tr>
<th>No.</th>
<th>Funding entity</th>
<th>Bound Research Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship funded by EMILIA ROMAGNA REGION</td>
<td>TALENTO: what are the most in-demand skills on the labour market? New analytical approach, data mining and policy implications</td>
</tr>
</tbody>
</table>

The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna

CUP F71J23000130009
students and workers in making learning and career decisions, for instance by identifying opportunities to build their own non-traditional path into high-demand occupations. Following a macroeconomic point of view, the results of the research may have a strong impact in understanding structural change and economic dynamics, focusing on skills and competences for sustainable development.

Scientific supervisors: Proff. Sandrine Labory e Patrizio Bianchi

The Po River basin, with its tributaries, represents the heart of the large area between the Alps and the Apennines, certainly the richest and most developed part of our country. However, the municipalities that line its banks, from Monviso to Taglio di Po, have over time become a kind of inland area, squeezed between the Milan-Venice axis and the Milan-Bologna axis, which today represent the dominant axes of national economic development (UNESCO Chair data, 2022). Such municipalities can be called MAiDAs, or Marginal Areas in Developed Areas, and constitute the analytical unit of the proposed study. The research is supported by the UNESCO Chair in Education, Growth and Equality at the University of Ferrara. Through the analysis, the aim is to explore the economic and social conditions of the municipalities that line the banks of the Po River up to the great Delta. The starting point will be an exploratory comparative analysis at the international level, in order to identify areas and territories characterized by similar conditions. Subsequent, the line of research will focus on current state assessment, current data analysis and the prospect of future scenarios. The final aim is to trace paths of development which are not only environmentally, economically and socially sustainable, but also able to generate conditions for reversing the repeatedly reported trend of depopulation and abandonment.

Scientific supervisors: Proff. Sandrine Labory e Patrizio Bianchi

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 75 points
(a minimum score of 50 points shall be required to be admitted to the Oral Exam)

ORAL EXAM: up to 45 points
Minimum score for ELIGIBILITY: 70/120

Foreign Language
Language the fluency of which shall be assessed during the Oral Exam
The evaluation of the knowledge of this language will be oral and will consist in presenting a part of the research project in English

ENGLISH

ORAL EXAMINATION INDICATION

THE ORAL EXAM TAKES IN THE PRESENCE and with the possibility of carrying out the interview REMOTELY for candidates residing abroad or temporarily abroad for study / work. To this end, candidates must submit a motivated REQUEST as per the model attached to the competition announcement.

THE INTERVIEW MAY BE HELD ALSO IN ENGLISH

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

ANNEX A
(art. 5 of the Competition notice)

Identification Document
Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<table>
<thead>
<tr>
<th>Curriculum Vitae et studiorum</th>
<th>No specific CV format is required (see art. 4 of the Competition notice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract of degree thesis</td>
<td>Abstract of the second cycle master’s degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10,000 characters including spaces)</td>
</tr>
<tr>
<td>Academic Qualifications</td>
<td>Certificates and academic transcript of records for both Bachelor’ and Master’ degrees containing the following details for each degree held: (art. 4 of the Competition notice): University that granted the degree - Type of degree (first cycle/second cycle/single cycle) Name of the degree program - Date of graduation - Final mark - List of exams and corresponding scores (academic transcript of records) - Translation into Italian or English (only for degrees issued in languages other than Italian or English).</td>
</tr>
<tr>
<td>Research Project</td>
<td>Written in Italian or in English, according to the format attached to the competition notice, max around 8,000 characters (bibliography and spacing included). It will have to focus on an original research topic (unpublished, developed personally by the candidate, PENALTY NOT EVALUATION. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project) It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board</td>
</tr>
</tbody>
</table>

**LIST OF EVALUABLE QUALIFICATIONS**

(only qualifications attested by a document drawn up in Italian or in English)

| Curriculum Vitae et studiorum | Score related to the final mark or to the average of the exam marks for graduands. | Up to 12 points |
| Graduation thesis             | Congruence with the research topics of the PhD course and quality of the research methodology | Up to 15 points |
| Research Project              | The project will be evaluated based on the scientific value, the originality of the proposal, the articulation, the feasibility of the proposal and the consistency with the themes of the doctorate. | Up to 24 points |
| Statement of Research Interest| Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD program and at describing her/his specific research interests | Up to 6 points |
| Scientific Publications       | The assessment will be carried out with a view to accessing the PhD course and taking into account the degree of maturity required for the specific position. Only publications of which a copy has been included among the qualifications presented will be evaluated and not any publications cited exclusively in the curriculum and / or in the form of a list. | Up to 6 points |
| Other qualifications          | Qualified professional experiences (in the case of professional experiences, continuous and lasting ones will be privileged - at least one semester - and will be evaluated only if they are recognized as functional to the acquisition of skills, experience and qualification in the research areas covered by the specific doctoral course ); other academic qualifications (masters, advanced courses, at least two-monthly training courses provided by university-level training institutions or bodies); didactic, seminar or university training experiences. | Up to 12 points |

**ORAL EXAM**

<table>
<thead>
<tr>
<th>Interview Program</th>
<th>Evaluation CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>

UNIVERSITÀ DI PARMA
Via Università, 12 - 43121 Parma
www.unipr.it

20
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course.

- knowledge of the foreign language: max 10 points
- research project presentation: max 35 points

Up to 45 points

**SCHEDULE OF THE ADMISSION EXAMS**

It is the candidate's responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page [http://unipr.esse3.cineca.it/Home.do](http://unipr.esse3.cineca.it/Home.do) in the days preceding the date of the Oral Exam.

<table>
<thead>
<tr>
<th>ORAL EXAM</th>
<th>DATE</th>
<th>24 November 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>09:00 AM (Italian Time)</td>
<td></td>
</tr>
<tr>
<td>PLACE</td>
<td>ROOM M Department of Economics and Management Via J.F. Kennedy, 6 43125 PARMA - ITALY</td>
<td></td>
</tr>
</tbody>
</table>

The choice of the Research Topic to be expressed in Annex A is not binding on the assignment of the research project, and it is intended to assess candidates skills during the admission exam. The PhD research topic will be assigned by the Academic Board.

For foreign candidates, the admission examinations may be held in English at the candidate’s choice.
# Civil Engineering and Architecture

## Cycle

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIX</th>
</tr>
</thead>
</table>

## Coordinator

Prof. Andrea SPAGNOLI  
email: andrea.spagnoli@unipr.it  
Department of Engineering and Architecture

## Duration

3 years

## Starting Date of the PhD Program

01/01/2024

## Training Objectives

To develop specialized skills in the following fields:

1. Infrastructure and Environmental Engineering: civil infrastructures for transport; survey, management, and analysis of land data, control and monitoring of displacements and deformations at all scales; issues related to surface waters and groundwater;
2. Structural and Geotechnical Engineering: mechanical behaviour of materials, structural components and structures; behaviour of soils and geotechnical structures;
3. Architecture and Urban Planning: theoretical, formal, distributional and functional aspects in architecture; the problems related to methods for survey and to computer-graphics in architecture; issues related to the implementation and the development of urban settlements; historical, artistic, technical and aesthetic themes in the architecture of the past.

## Research Areas of the Doctoral Course

The candidate must mandatorily select one research area in the ANNEX A and present a research project in the selected area:

- Infrastructure and Environmental Engineering
- Structural and Geotechnical Engineering
- Architecture and Urban Planning

## Admission Requirements

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:

- Laurea Specialistica or Laurea Magistrale (second cycle master's degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023

## Positions Put Out to Competition

<table>
<thead>
<tr>
<th></th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Scholarship</td>
<td></td>
</tr>
<tr>
<td>Position with Scholarship</td>
<td>1</td>
</tr>
</tbody>
</table>

## Linked to Specific Topics (art. 11 of the Competition notice)

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Department of Engineering and Architecture</td>
<td>FAME - Floods Active Management during Emergency</td>
</tr>
</tbody>
</table>
## ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 70 points  
(a minimum score of 40 points shall be required to be admitted to the Oral Exam)  
**ORAL EXAM:** up to 50 points  
**Minimum score for ELIGIBILITY:** 70/120

| Foreign Language | The language for which the fluency must be assessed during the Oral Examination. The assessment of knowledge of this language will be oral and will consist in reading and translating a scientific text. | ENGLISH |

### ORAL EXAMINATION INDICATION

Applicants admitted to the ORAL EXAM can take it either in PRESENCE or REMOTELY in Audio and Video Teleconference  
(Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)

### THE INTERVIEW MAY BE HELD ALSO IN ENGLISH

### LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

#### MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

<table>
<thead>
<tr>
<th>ANNEX A</th>
<th>(art. 5 of the Competition notice)</th>
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<td>Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests</td>
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</table>

**Research Project**

The research project shall consist of a maximum of 3 pages, be written in Italian or in English, and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results. The project must focus on an original research topic (unpublished, personally developed by the candidate) related to the topics listed in [https://dia.unipr.it/it/node/6470](https://dia.unipr.it/it/node/6470). It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project. It does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board.

### FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT

| Reference Letters | A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities. The reference letters must sent directly by the signer to the address e-mail: roberto.brighenti@unipr.it. Reference letters sent directly by the candidate or received in any other way will not be evaluated. |
Scientific Publications | A maximum of 2 articles on national and international journals, papers presented at conferences or symposia, book chapters etc.
--- | ---

**LIST OF EVALUABLE QUALIFICATIONS**
*(only qualifications attested by a document drawn up in Italian or in English)*

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark. Mandatory: Statement of Research Interest Not mandatory: Reference Letters</td>
<td>Up to 30 points</td>
</tr>
<tr>
<td>Graduation mark</td>
<td>---</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Average of the exam marks (if the candidate will attain the degree no later than 31st December 2023)</td>
<td>---</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Consistency of the Master’s Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae by attaching the abstract of the degree thesis or draft of the thesis approved by the supervisor)</td>
<td>Up to 6 points</td>
</tr>
<tr>
<td>Research Project</td>
<td>Up to 25 points</td>
<td></td>
</tr>
<tr>
<td>Scientific Publications</td>
<td>Up to 4 points</td>
<td></td>
</tr>
</tbody>
</table>

**ORAL EXAM**

<table>
<thead>
<tr>
<th>Interview Program</th>
<th>Evaluation CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ORAL EXAM includes the presentation of the research project and is intended to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of research areas related to the PhD course</td>
<td>o knowledge of the foreign language o research project presentation o general knowledge of research areas related to the PhD course</td>
<td>Up to 50 points</td>
</tr>
</tbody>
</table>

**SCHEDULE OF THE ADMISSION EXAMS**

It is the candidate’s responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page [http://unipr.esse3.cineca.it/Home.do](http://unipr.esse3.cineca.it/Home.do) in the days preceding the date of the Oral Exam.

<table>
<thead>
<tr>
<th><strong>ORAL EXAM</strong></th>
<th><strong>DATE</strong></th>
<th>24 November 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TIME</strong></td>
<td>09:00 AM (Italian Time)</td>
<td></td>
</tr>
<tr>
<td><strong>PLACE</strong></td>
<td>Department of Engineering and Architecture Room “MASTER” – Building 3 Parco Area delle Scienze, 181/A – Campus Universitario - 43124 PARMA</td>
<td></td>
</tr>
<tr>
<td><strong>ALTRE INDICAZIONI</strong></td>
<td>In the application form (Annex A), the Candidate must specify a single research area (Infrastructures, Geostructures, Architecture), and on this area the Candidate must carry out the Oral Exam. The choice of the research area to be indicated in Annex A does not have a binding character on the subsequent choice of the PhD research topic, but has the purpose of assessing the candidates’ skills during the admission exam. The PhD research topic will be agreed with the supervisor and approved by the Academic Board.</td>
<td></td>
</tr>
</tbody>
</table>
The admission oral exam can also be carried out in English at the candidate's choice. If the Candidate wishes to carry out the Oral Exam in English, he/she must state a formal request in the application form (Annex A).
For Candidates who will carry out the Oral Exam in Italian, the verification of the English language knowledge will take place in oral form and will consist in the reading and translation of a scientific text.
INDUSTRIAL ENGINEERING

CYCLE

XXXIX

COORDINATOR

Prof. Gianni ROYER CARFAGNI
email: gianni.royer@unipr.it
Department of Engineering and Architecture

DURATION

3 years

STARTING DATE OF THE PHD PROGRAM

01/01/2024

TRAINING OBJECTIVES

The Industrial Engineering PhD program aims at giving to the participants a deep knowledge in the main topics relevant to industrial engineering. The PhD course presents numerical, analytical and experimental techniques, in order to face any technical or scientific problem of the industrial engineering, with managerial skills, to provide autonomy in work and readiness of inclusion in a collaborative environment with other researchers and technicians. The internationalization phase, envisaged in the three-year curriculum, allows to forge links with other foreign realities by providing to the graduate student an additional tool to get into a scientific context, not just limited by national borders.

RESEARCH AREAS

• Theoretical and applied mechanics, mechanics of materials and structures, material technology, machine design, measurements and diagnostics;
• Economic, organizational, managerial, logistics, plants and legal aspects in the field of engineering;
• Energy systems, thermo-fluid dynamics, fluid machinery, applied physics;
• Industry 4.0 and future developments.

ADMISSION REQUIREMENTS

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:

− Laurea specialistica or Laurea magistrale (second cycle master’s degree)
− Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
− Second cycle Master’s degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program.

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023.

POSITIONS PUT OUT TO COMPETITION

5

With Scholarship

4

Reserved to holders of Research Grant

1

Position with Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship funded by University of Parma (University funds)</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
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</tr>
</tbody>
</table>
## Position with Scholarship

**LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)**

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship funded by EMILIA ROMAGNA REGION</td>
<td>A knowledge-based Design for Disassembly methodology to enhance the circular economy of mechatronic products</td>
</tr>
<tr>
<td></td>
<td>The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</td>
<td>CUP D92J23000030006</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship funded by EMILIA ROMAGNA REGION</td>
<td>Two-phase passive systems for cooling electronic devices: development and validation of numerical models for the thermal control of electric vehicle batteries</td>
</tr>
<tr>
<td></td>
<td>The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</td>
<td>CUP D92J23000420006</td>
</tr>
</tbody>
</table>

## Position reserved to HOLDERS OF RESEARCH GRANT

<table>
<thead>
<tr>
<th>N°</th>
<th>Subject area of the research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ING-IND/17 – Industrial Mechanical Systems Engineering</td>
</tr>
<tr>
<td></td>
<td>“Definition, validation and testing of a series of alternative conceptual circular supply chain solutions for effective recycling of textile waste from different sources”</td>
</tr>
</tbody>
</table>

## ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 70 points  
(a minimum score of 40 points shall be required to be admitted to the Oral Exam)  
**ORAL EXAM:** up to 50 points  
**Minimum score for ELIGIBILITY:** 70/120

| Foreign Language | Language the fluency of which shall be assessed during the Oral Exam  
The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text | ENGLISH |

**ORAL EXAMINATION INDICATION**

Applicants admitted to the ORAL EXAM can take it either in PRESENCE or REMOTELY in Audio and Video Teleconference  
(Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)

**THE INTERVIEW MAY BE HELD ALSO IN ENGLISH**

## LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

**MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION**

<table>
<thead>
<tr>
<th>ANNEX A</th>
<th>(art. 5 of the Competition notice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification Document</td>
<td>Scanned Copy of a valid identity document with photo (i.e. identity card, passport)</td>
</tr>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>No specific CV format is required (see art. 4 of the Competition notice)</td>
</tr>
</tbody>
</table>
**Abstract of degree thesis**

Abstract of the second cycle master’s degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10,000 characters including spaces).

**Academic Qualifications**

| Certificates and academic transcript of records for both Bachelor’ and Master’ degrees | containing the following details for each degree held: (art. 4 of the Competition notice): |
| University that granted the degree - Type of degree (first cycle/second cycle/single cycle) |
| Name of the degree program - Date of graduation - Final mark - List of exams and corresponding scores (academic transcript of records) - Translation into Italian or English (only for degrees issued in languages other than Italian or English). |

**Research Project**

Written in Italian or in English, according to the format attached to the competition notice, it will have to focus on an original research topic (unpublished, developed personally by the candidate. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project).

To identify the topic of the aforementioned project, the candidate may contact one of the Members of the Academic Board (available at: [https://dia.unipr.it/it/node/2834](https://dia.unipr.it/it/node/2834)).

It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board.

**LIST OF EVALUABLE QUALIFICATIONS**

(only qualifications attested by a document drawn up in Italian or in English)

| Curriculum Vitae et studiorum | Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark, both of the bachelor’s and master’s degrees |
| The marks of the exams and the graduation mark will be the most relevant element of the evaluation. |
| Graduation thesis | Consistency of the Master’s Degree thesis with the doctoral program research topics |
| Research Project | Points relating to the research project shall be allocated on the basis of the following criteria: |
| o Scientific value and or originality of the proposal |
| o description and structure of the proposal |
| o proposal feasibility |
| Statement of Research Interest | Evaluation of the candidate's motivations to attend the doctoral course and congruity of the research interests with the research topics of the doctoral course. |
| Scientific Publications | Articles on national and international journals, contributions presented at conferences or symposia, book chapters. It is necessary to attach a copy to online application |
| Reference Letters | A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities. They must be sent directly by the signor to folder [REFERENCE LETTER](#). The file must be named “Letter of presentation - Doctorate in Industrial Engineering” (The candidate, therefore, must not upload them through the procedure of the competition online registration) |
| Other Academic qualifications | First or second level Master’s degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program |
| Other experiences (training, work, research, teaching, etc.) | - Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covered by research grant, and as a staff member of research units |
| - Working activity |
| - Professional and/or training internship |

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**UNIVERSITÀ DI PARMA**

Via Università, 12 - 43121 Parma

www.unipr.it

28
− Language proficiency certificates
− Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)
− Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)

<table>
<thead>
<tr>
<th>Interview Program</th>
<th>Evaluation CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course</td>
<td>o research project presentation&lt;br&gt;  o general knowledge of issues connected to the PhD course&lt;br&gt;  o knowledge of foreign languages</td>
<td>Up to 50 points</td>
</tr>
</tbody>
</table>

**SCHEDULE OF THE ADMISSION EXAMS**

It is the candidate’s responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page [http://unipr.esse3.cineca.it/Home.do](http://unipr.esse3.cineca.it/Home.do) in the days preceding the date of the Oral Exam.

<table>
<thead>
<tr>
<th>ORAL EXAM</th>
<th>DATE</th>
<th>22 November 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>09:00 AM (Italian Time)</td>
<td></td>
</tr>
<tr>
<td>PLACE</td>
<td>Meeting Room – Building 7&lt;br&gt;Department of Engineering and Architecture&lt;br&gt;Parco Area delle Scienze, 181/A - Campus&lt;br&gt;43124 PARMA - ITALY</td>
<td></td>
</tr>
</tbody>
</table>

**ALTRE INDICAZIONI**

The choice of the Research Topic to be expressed in Annex A is not binding on the assignment of the research project, and it is intended to assess candidates skills during the admission exam. The PhD research topic will be assigned by the Academic Board.

For foreign candidates, the admission examinations may be held in English at the candidate’s choice.
### NEUROSCIENCES

<table>
<thead>
<tr>
<th>CYCLE</th>
<th>XXXIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>COORDINATOR</td>
<td>Prof. Luca BONINI</td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:luca.bonini@unipr.it">luca.bonini@unipr.it</a></td>
</tr>
<tr>
<td></td>
<td>Department of Medicine and Surgery</td>
</tr>
<tr>
<td>DURATION</td>
<td>3 years</td>
</tr>
<tr>
<td>STARTING DATE OF THE PHD PROGRAM</td>
<td>01/01/2024</td>
</tr>
<tr>
<td>CURRICULA</td>
<td>1. Neuroscience</td>
</tr>
</tbody>
</table>

#### TRAINING OBJECTIVES

- Provide a global and interdisciplinary view of the proposed research sectors, offering a high degree of specialization in these research fields
- Acquire skills and abilities in the autonomous use of at least one neuroscientific investigation technique
- Promote the development of networks of national and international relations and exchanges aimed at sharing and deepening the investigated research topic

#### RESEARCH AREAS

- **Integrated neuroscience**: comparative neurophysiology and neuroethology, cognitive and social neuroscience, cognitive psychology, psychology of perception and action, psychobiology, psychophysiology

#### ADMISSION REQUIREMENTS

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:
- Laurea specialistica or Laurea magistrale (second cycle master’s degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- Second cycle Master’s degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023

### POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
<th>2</th>
</tr>
</thead>
</table>

**Position with Scholarship**

**LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)**

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship funded by Department of Medicine and Surgery (Project FARE “CIRCEM” Local circuitries and neuronal classes for emotional and social affordances processing in the freely moving monkey R20NJ7BBA7)</td>
<td>Analisys of neuronal dynamics from multielectrode recordings in the monkey</td>
</tr>
<tr>
<td>No.</td>
<td>Scholarship funded by Department of Medicine and Surgery (Project 2022SP5K99 PNRR-M4C2 - I.1.1 - PRIN 2022 “Motor resonance during action planning and social interaction: from single neurons to brain circuits” CUP D53D23009860001)</td>
<td>Neuroethological study of social facilitation phenomena in the monkey</td>
</tr>
</tbody>
</table>

**ADMISSION PROCEDURES**

**Assessment of QUALIFICATIONS**: up to 40 points  
(a minimum score of 20 points must be obtained to be admitted to the Oral Exam)  
**ORAL EXAM**: up to 80 points  
Minimum score for ELIGIBILITY: 70/120

| Foreign Language | Language the fluency of which shall be assessed during the Oral Exam  
The evaluation of this language will be oral and will consist in the discussion of the research project presented in English. | ENGLISH |

**ORAL EXAMINATION INDICATION**

**THE ORAL EXAM TAKES PLACE IN THE PRESENCE.** (The REMOTE ORAL EXAM is allowed for candidates residing abroad or temporarily abroad for study / work. To this end, candidates must submit a motivated REQUEST as per the model attached to the competition announcement)

**THE INTERVIEW MAY BE HELD ALSO IN ENGLISH**

**LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT**

**MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION**

| ANNEX A | (art. 5 of the Competition notice) |
| Identification Document | Scanned Copy of a valid identity document with photo (i.e. identity card, passport) |
| Curriculum Vitae et studiorum | No specific CV format is required (see art. 4 of the Competition notice) |
| Degree thesis | Abstract of the second cycle master’s degree thesis and the full thesis in pdf format. Undergraduate applicants must submit the draft of the thesis approved by their supervisor. |
| Academic Qualifications | Certificates and academic transcript of records for both Bachelor’ and Master’ degrees containing the following details for each degree held: (art. 4 of the Competition notice): University that granted the degree - Type of degree (first cycle/second cycle/single cycle) Name of the degree program - Date of graduation - Final mark - List of exams and corresponding scores (academic transcript of records) - Translation into Italian or English (only for degrees issued in languages other than Italian or English). |
| Research Project | Written in English, 3 pages with single spacing in Times New Roman 12, including bibliography, it must focusing on an original research topic (unpublished, developed personally by the candidate). It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project) and it shall be structured as follows: introduction of the problem in the scientific context, relevance of the problem, objectives, expected results. It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board. |

**LIST OF EVALUABLE QUALIFICATIONS**

(only qualifications attested by a document drawn up in Italian or in English)
# Curriculum Vitae et Studiorum

Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.

---

## Curriculum Vitae et Studiorum will be evaluated based on the following qualifications and scores:

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Score Related To</th>
<th>Maximum Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Graduation mark</strong></td>
<td>Score related to the final mark:  - 110 with honours (magna cum laude): 10 points;  - 110: 7 points  - From 108 to 109: 5 points  - From 106 to 107: 3 points  - 105-106: 1 point  - Under 105: 0 points</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td><strong>Average of the exam marks</strong> (if the candidate will attain the degree no later than 31 December 2023)</td>
<td>Score related to the average of the exam marks:  - From 29/30 to 30/30: 10 points  - From 28/30 to 28.99/30: 7 points  - From 27/30 to 27.99/30: 5 points  - From 26/30 to 26.99/30: 3 points  - Under 26/30: 0 points</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td><strong>Graduation thesis</strong></td>
<td>Congruence with the research topics of the PhD course and methodological quality of the experimental or bibliographic work.  o Experimental thesis related to the PhD program of Neuroscience: 10 points  o Non-experimental and relevant thesis: 5 points  o Thesis not relevant: 0 points</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td><strong>Research Project</strong></td>
<td>Project evaluation score:  o scientific value: 2.5 points  o structure of the proposal: 2.5 points  o proposal feasibility in relation to the specific research topics of the PhD course: 2.5 points  o originality of the proposal: 2.5 points</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td><strong>Statement of Research Interest</strong></td>
<td>Short text – maximum 1 page – in Italian or in English</td>
<td>Up to 2 points</td>
</tr>
<tr>
<td><strong>Scientific publications</strong></td>
<td>o Each article in a peer-reviewed international journal: 1 point  o Each book chapter: 0.4 points  o abstracts/papers/posters presented at conferences or symposia: 0.3 points</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td><strong>Other Academic qualifications</strong></td>
<td>Other academic qualifications consistent with the research topics of this PhD program</td>
<td>Up to 3 points</td>
</tr>
</tbody>
</table>
### Interview Program

The ORAL examination includes:

**A) Neurosciences: the oral report on 2 topics chosen by lot from those indicated in the list below:**

1. The origin of the nervous impulses
2. The synapses
3. The reflexes
4. Molecular and cellular bases of signal transduction
5. The motor system
6. The visual system
7. The somatosensory system
8. The autonomic nervous system
9. Neurobiology of language
10. Neurobiology of attention
11. Neurobiology of emotions
12. Memory and learning

**B) The presentation and discussion of the research project,** aimed at verifying the candidate's aptitude for scientific research. The discussion will take in English to evaluate the knowledge and the fluency of the language.

### Evaluation CRITERIA

- Up to 40 points for the oral report on the two topics extracted (up to 20 points per topic)
- Up to 20 points for the project presentation
- Up to 20 points for knowledge of the foreign language

### Schedule of the Admission Exams

It is the candidate's responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page [http://unipr.esse3.cineca.it/Home.do](http://unipr.esse3.cineca.it/Home.do) in the days preceding the date of the Oral Exam.

<table>
<thead>
<tr>
<th>ORAL EXAM</th>
<th>DATE</th>
<th>23 November 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>09:00 AM (Italian Time)</td>
<td></td>
</tr>
<tr>
<td>PLACE</td>
<td>Lecture Room – Institute of Physiology Department of Medicine and Surgery Integrated Biotechnological Plexus Via Volturno, 39 – 43125 PARMA - ITALY</td>
<td></td>
</tr>
<tr>
<td>ALTRE INDICAZIONI</td>
<td>For foreign candidates, the admission examinations may be held in English at the candidate’s choice.</td>
<td></td>
</tr>
</tbody>
</table>
MATERIALS SCIENCE AND TECHNOLOGY

CYCLE

XXXIX

COORDINATOR

Prof. Enrico DALCANALE
email: enrico.dalcanale@unipr.it
Department of Chemistry, Life Sciences and Environmental Sustainability

DURATION

3 years

STARTING DATE OF THE PHD PROGRAM

01/01/2024

PARTNER INSTITUTION

• The Italian National Research Council (C.N.R.)

TRAINING OBJECTIVES

The PhD program in Materials Science aims at the preparation of PhDs equipped with strong scientific background and wide research experience in materials science. Enrollment is open to MS laureates in Materials Science, Chemistry, Physics, Industrial Chemistry, Engineering and Biological Sciences. The Board provides a wide range of courses and seminars in different scientific areas, with particular focus on all aspects of materials science (synthesis, characterization, functions and devices). It also offers soft skills courses. The PhD program offers an interdisciplinary preparation through research activity, also in collaboration with foreign Institutions.

RESEARCH AREAS

• Photovoltaic devices
• Functional materials
• Nanodiagnostic
• Nanostructured materials
• Supramolecular sensors and devices
• Semiconductive massive crystals
• Low dimensionality semiconductive structures
• Self-healing and self-diagnostic polymers
• Ceramic and composite materials
• Magnetic materials and magneto-refrigeration
• Vitrimers

ADMISSION REQUIREMENTS

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:
− Laurea specialistica or Laurea magistrale (second cycle master's degree)
− Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
− Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023

POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>Position with Scholarship</th>
<th>6</th>
</tr>
</thead>
</table>

With Scholarship | 4 |
Reserved to holders of Research Grant | 1 |
Reserved to holders of scholarship within specific international mobility programs | 1 |

LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)
<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship partly financed with UNIVERSITY funds and co-financed by The Italian National Research Council C.N.R. - ISSMC</td>
<td>Synthesis, characterization and modeling of thin multifunctional ceramic coatings for industrial applications</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability (funds Project 202228SHC5 PNRR-M4C2- I.1.1 - PRIN 2022 “Self-assembly of bacteria-targeting materials across the mesoscale - SAMBA”) CUP D53D23010030006</td>
<td>Synthesis and self-assembly of organic materials for the detection and treatment of bacterial infections.</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability (funds Project 2022FPYZ2N PNRR-M4C2- I.1.1 - PRIN 2022 “CRISPR-Cas-based sensing platforms for the monitoring of clinically relevant antibodies - CRISPR-ABS”) CUP D53D23009090001</td>
<td>Biomolecular sensors harnessing synthetic nucleic acid systems and CRISPR-Cas technologies for the detection of clinically relevant antibodies and other biomarker proteins.</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability (funds Project 2022XZ2ZM8 PNRR-M4C2- I.1.1 - PRIN 2022 “Polymorph screening to enable electron-phonon coupling engineering in organic semiconductors - POLYPHON”) CUP D53D23009240006</td>
<td>Structural and spectroscopic study of advanced semiconducting materials</td>
</tr>
</tbody>
</table>

**Position reserved to HOLDERS OF RESEARCH GRANT**

<table>
<thead>
<tr>
<th>N°</th>
<th>Subject area of the research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IMEM-CNR Istituto dei Materiali per l’Elettronica ed il Magnetismo FIS/03 “Advanced in-operando studies of technologically scalable 2D materials during device operation” codice CUP B53D23004010006</td>
</tr>
</tbody>
</table>

**Reserved to HOLDERS OF SCHOLARSHIP WITHIN SPECIFIC INTERNATIONAL MOBILITY PROGRAMS**

<table>
<thead>
<tr>
<th>N°</th>
<th>Agreements/Cooperations/Mobility Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to holders under the mobility program Project UE HORIZON-MSCA-2022-DN-01-01 n. 101119852 - Heat4Energy ”Magnetic Materials and Machines for Heat Recovery”</td>
</tr>
</tbody>
</table>

**ADMISSION PROCEDURES**

**Assessment of QUALIFICATIONS:** up to 60 points
(a minimum score of 30 points shall be required to be admitted to the Oral Exam)

**ORAL EXAM:** up to 60 points

**Minimum score for ELIGIBILITY:** 70/120

**Foreign Language**
Language the fluency of which shall be assessed during the Oral Exam
The evaluation of the knowledge of this language will be oral and will consist in translating of a scientific text.

**ENGLISH**
**ORAL EXAMINATION INDICATION**

THE ORAL EXAM TAKES IN THE PRESENCE and with the possibility of carrying out the interview REMOTELY for candidates residing abroad or temporarily abroad for study / work reasons. To this end, candidates must submit a motivated REQUEST as per the model attached to the competition announcement.

**THE INTERVIEW MAY BE HELD ALSO IN ENGLISH**

**LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT**

**MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION**

<table>
<thead>
<tr>
<th>ANNEX A</th>
<th>(art. 5 of the Competition notice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification Document</td>
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<tr>
<td>Curriculum Vitae et studiorum</td>
<td>No specific CV format is required (see art. 4 of the Competition notice)</td>
</tr>
<tr>
<td>Abstract of degree thesis</td>
<td>Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10,000 characters including spaces)</td>
</tr>
<tr>
<td>Academic Qualifications</td>
<td>Certificates and academic transcript of records for both Bachelor’ and Master’ degrees containing the following details for each degree held: (art. 4 of the Competition notice): University that granted the degree - Type of degree (first cycle/second cycle/single cycle) Name of the degree program - Date of graduation - Final mark - List of exams and corresponding scores (academic transcript of records) - Translation into Italian or English (only for degrees issued in languages other than Italian or English).</td>
</tr>
</tbody>
</table>

**LIST OF EVALUABLE QUALIFICATIONS**

(only qualifications attested by a document drawn up in Italian or in English)

<table>
<thead>
<tr>
<th>Curriculum Vitae et studiorum</th>
<th>Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark. Up to 20 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation mark</td>
<td>Score related to the final mark: - 110 with honors (magna cum laude): 20 points - 110: 16 points - From 105 to 109: 12 points - From 100 to 104: 8 points - From 95 to 99: 4 points - Under 95: 0 points Up to 20 points</td>
</tr>
<tr>
<td>Average of the exam marks (if the candidate will attain the degree no later than 31 December 2023)</td>
<td>Score related to the average of the exam marks: - 30/30: 20 points - From 28/30 to 29/30: 16 points - From 26/30 to 27/30: 12 points - 25/30: 8 points - 24/30: 4 points - Under 24/30: 0 points Up to 20 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Consistency of the Master’s Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae) Up to 10 points</td>
</tr>
<tr>
<td>Statement of Research Interest</td>
<td>Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD program and at describing her/his specific research interests Up to 5 points</td>
</tr>
</tbody>
</table>
Scientific Publications

Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings

Up to 5 points

ORAL EXAM

<table>
<thead>
<tr>
<th>Interview Program</th>
<th>Evaluation CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| The ORAL EXAM will focus on the candidate’s motivation to attend the PhD, on the description of his specific research interests and on a discussion of the qualifications presented by the candidate. | o knowledge of foreign languages: 10 points  
o general knowledge of issue connected to the Master’s thesis: 25 points  
 o general knowledge of issues connected to the PhD course: 25 points | Up to 60 points |

SCHEDULE OF THE ADMISSION EXAMS

It is the candidate’s responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page http://unipr.esse3.cineca.it/Home.do in the days preceding the date of the Oral Exam.

ORAL EXAM

<table>
<thead>
<tr>
<th>DATE</th>
<th>22 November 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>09:30 AM (Italian Time)</td>
</tr>
</tbody>
</table>
| PLACE | Department of Chemistry, Life Sciences and Environmental Sustainability  
CHEMISTRY BUILDING  
Parco Area delle Scienze, 17/A – Campus  
43124 PARMA - ITALY |

ALTRE INDICAZIONI

The choice of the Research Topic to be expressed in Annex A is not binding on the assignment of the research project, and it is intended to assess candidates skills during the admission exam. The PhD research topic will be assigned by the Academic Board.

For foreign candidates, the admission examinations may be held in English at the candidate’s choice.
## CHEMICAL SCIENCES

<table>
<thead>
<tr>
<th>CYCLE</th>
<th>XXXIX</th>
</tr>
</thead>
</table>
| COORDINATOR | Prof.ssa Alessia BACCHI  
email: alessia.bacchi@unipr.it  
Department of Chemistry, Life Sciences and Environmental Sustainability |
| DURATION    | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/01/2024 |

## TRAINING OBJECTIVES

The training program aims to provide the PhD in Chemical Sciences the necessary skills to propose and manage research projects in the advanced fields of Analytical Chemistry, General and Inorganic Chemistry, Physical Chemistry, Industrial Chemistry, and Organic Chemistry. The PhD course in Chemical Sciences requires each student to work within one of the research groups active at the Chemistry Unit of the Department of Chemistry, Life Sciences and Environmental Sustainability (SCVSA), and to follow a specific training pathway in the chosen sector; this is achieved also through: participation in research activities at qualified centers both in Italy and abroad, participation to national and international schools and conferences, and through the publication of scientific results in international journals. Interdisciplinary training activities, aimed at developing PhD students the ability to exhibit, discuss and disseminate the subjects of their work both in the academic and industrial context and even more generally in society, are also part of the program.

## RESEARCH AREAS

- Analytical Chemistry
- General and Inorganic Chemistry
- Physical Chemistry
- Industrial Chemistry
- Organic Chemistry

## ADMISSION REQUIREMENTS

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:
- Laurea specialistica or Laurea magistrale (second cycle master’s degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- Second cycle Master’s degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023.

## POSITIONS PUT OUT TO COMPETITION

| 2 |

### Position with Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship funded by University of Parma (Ministerial funds)</td>
<td>Development of bioorthogonal methodologie for the realization of link-and-release system and their application to supramolecular protein realization</td>
</tr>
<tr>
<td>2</td>
<td>Scholarship funded by University of Parma (Ministerial funds e University funds) and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability</td>
<td>Multi-sensor platforms for the simultaneous determination of allergens for food safety</td>
</tr>
</tbody>
</table>
Environmental Sustainability (Project: PNRR - M4C2 -I. 1.3· Avviso MUR 341/2022“ON Foods - Research and innovation network on food and nutrition Sustainability, Safety and Security – Working ON Foods” (PE00000003) CUP D93C22000890001)

**ADMISSION PROCEDURES**

Assessment of QUALIFICATIONS: up to 40 points
(a minimum score of 20 points shall be required to be admitted to the Oral Exam)

**ORAL EXAM:** up to 80 points

Minimum score for ELIGIBILITY: 70/120

| Foreign Language | Language the fluency of which shall be assessed during the Oral Exam
|                 | The evaluation of the knowledge of this language will be oral and will consist in the discussion of part of the research topics in English. |
| ENGLISH         |                                                                                        |

**ORAL EXAMINATION INDICATION**

Applicants admitted to the ORAL EXAM can take it either in PRESENCE or REMOTELY in Audio and Video Teleconference

(Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)

**THE INTERVIEW MAY BE HELD ALSO IN ENGLISH**

**LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT**

**MANDATORY DOCUMENT, PENALTY NOT EVALUATION, S TO BE ATTACHED TO THE ON-LINE APPLICATION**

**ANNEX A**

(art. 5 of the Competition notice)

<table>
<thead>
<tr>
<th>Identification Document</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>No specific CV format is required (see art. 4 of the Competition notice)</td>
</tr>
<tr>
<td>Abstract of degree thesis</td>
<td>Abstract of the second cycle master’s degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10,000 characters including spaces)</td>
</tr>
<tr>
<td>Academic Qualifications</td>
<td>Certificates and academic transcript of records for both Bachelor’ and Master’ degrees containing the following details for each degree held: (art. 4 of the Competition notice): University that granted the degree - Type of degree (first cycle/second cycle/single cycle) Name of the degree program - Date of graduation - Final mark - List of exams and corresponding scores (academic transcript of records) - Translation into Italian or English (only for degrees issued in languages other than Italian or English).</td>
</tr>
<tr>
<td>Research Project</td>
<td>Written in Italian or in English, according to the format attached to the competition notice (maximum 2 pages). It will have to focus on an original research topic (unpublished, developed personally by the candidate. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project) It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board</td>
</tr>
</tbody>
</table>
## LIST OF EVALUABLE QUALIFICATIONS

(only qualifications attested by a document drawn up in Italian or in English)

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curriculum Vitae et studiorum</strong></td>
<td>Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark. Relevance of the academic career as well as postgraduate experiences and other research activities related to Chemical Sciences</td>
<td>Up to 16</td>
</tr>
<tr>
<td><strong>Graduation mark or Average of the exam marks</strong> (if the candidate will attain the degree no later than 31 December 2023)</td>
<td>Assignment of a score related to the final mark or, for candidates who will attain the degree by 31 October 2023, a score related to the average of the exam marks</td>
<td>Up to 5</td>
</tr>
<tr>
<td><strong>Graduation thesis</strong></td>
<td>Consistency of the Master’s Degree thesis with the doctoral programme research topics</td>
<td>Up to 10</td>
</tr>
<tr>
<td><strong>Research Project</strong></td>
<td>Score related to the evaluation of the Project based on originality, impact and scientific substantiation.</td>
<td>Up to 2</td>
</tr>
<tr>
<td><strong>Statement of Research Interest</strong></td>
<td>Short text – maximum 1 page – in Italian or in English, aimed at: 1) explaining the candidate’s reasons to attend the PhD programme; 2) research interests, with particular reference to topics of interest in the specific topics proposed; 3) skills that can contribute to a research project in the field of Chemical Sciences. Motivation and competence proved in the text presented</td>
<td>Up to 3</td>
</tr>
<tr>
<td><strong>Scientific Publications</strong></td>
<td>Articles on national and international journals, papers presented at conferences or symposia, book chapters etc. Impact and relevance of the qualifications presented related to Chemical Sciences</td>
<td>Up to 4</td>
</tr>
</tbody>
</table>

### ORAL EXAM

<table>
<thead>
<tr>
<th>Evaluation CRITERIA</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>o knowledge of the subject and skills of the candidate for the proposed research activities are assessed by a discussion on the qualifications submitted for evaluation</td>
<td>Up to 80</td>
</tr>
<tr>
<td>o knowledge of English is assessed by discussion of topics of research and by understanding of scientific texts.</td>
<td></td>
</tr>
</tbody>
</table>

### SCHEDULE OF THE ADMISSION EXAMS

It is the candidate’s responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page [http://unipr.esse3.cineca.it/Home.do](http://unipr.esse3.cineca.it/Home.do) in the days preceding the date of the Oral Exam.

<table>
<thead>
<tr>
<th>ORAL EXAM</th>
<th>DATE</th>
<th>TIME</th>
<th>PLACE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21 November 2023 (with possible extension in the following days)</td>
<td>10:00 AM (Italian Time)</td>
<td>Department of Chemistry, Life Sciences and Environmental Sustainability CHEMISTRY BUILDING Parco Area delle Scienze, 17/A – Campus 43124 PARMA - ITALY</td>
</tr>
</tbody>
</table>
### ALTRE INDICAZIONI

The choice of the Research Topic to be expressed in Annex A is not binding on the assignment of the research project, and it is intended to assess candidates skills during the admission exam. The PhD research topic will be assigned by the Academic Board.

It is possible to carry out the admission examination in Italian or in English at the candidate’s choice.
## FOOD SCIENCE

<table>
<thead>
<tr>
<th>CYCLE</th>
<th>XXXIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>COORDINATOR</td>
<td>Prof.ssa Chiara DALL’ASTA</td>
</tr>
<tr>
<td></td>
<td>Food and Drug Department</td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:chiara.dallasta@unipr.it">chiara.dallasta@unipr.it</a></td>
</tr>
<tr>
<td>DURATION</td>
<td>3 years</td>
</tr>
<tr>
<td>STARTING DATE OF THE PHD PROGRAM</td>
<td>01/01/2024</td>
</tr>
</tbody>
</table>

## TRAINING OBJECTIVES

The PhD candidates will acquire advanced theoretical and practical expertise to provide innovative approaches and methodologies in the agro-food sector, under a multidisciplinary perpective.

## RESEARCH AREAS

- Turning food waste into sustainable soil improvers for better soil health and improved food systems

## ADMISSION REQUIREMENTS

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:

- Laurea specialistica or Laurea magistrale (second cycle master's degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023

### POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position with Scholarship</td>
<td>1</td>
</tr>
</tbody>
</table>

#### LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship funded by Food and Drug Department (Project TEDE_T_22HORIZONEU_WASTE4SOIL_01 CUP D93C23000300006)</td>
<td>Turning food waste into sustainable soil improvers for better soil health and improved food systems</td>
</tr>
</tbody>
</table>

## ADMISSION PROCEDURES

### Assessment of QUALIFICATIONS: up to 50 points

(a minimum score of 30 points shall be required to be admitted to the Oral Exam)

**ORAL EXAM:** up to 70 points

**Minimum score for ELIGIBILITY:** 70/120

**Foreign Language**

Language the fluency of which shall be assessed during the Oral Exam

The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific test.

**ENGLISH**
For foreign candidates, basic knowledge of **ITALIAN LANGUAGE** will also be assessed.

**ORAL EXAMINATION INDICATION:** Applicants admitted to the ORAL EXAM can take it in **PRESENCE**.

**THE INTERVIEW MAY BE HELD ALSO IN ENGLISH**

**LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT**

**MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION**

<table>
<thead>
<tr>
<th>Annex A</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Research Project</td>
<td>The research project shall consist of a maximum of 2 pages, be written in English, according to the format attached to the competition notice. It will have to focus on an original research topic (<strong>unpublished, developed personally by the candidate, PENALTY NOT EVALUATION. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project</strong>), concerning one of the specific topic indicated in this notice and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board</td>
</tr>
<tr>
<td>Statement of Research Interest</td>
<td>Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD program and at describing her/his specific research interests</td>
</tr>
</tbody>
</table>

**LIST OF EVALUABLE QUALIFICATIONS**

(only qualifications attested by a document drawn up in Italian or in English)

| Curriculum Vitae et studiorum | Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark. The marks of the exams and the graduation mark and the consistency of the Master’s Degree thesis with the doctoral program research topics will be the most relevant element of the evaluation. |

**Up to 20 points**
Points relating to the research project shall be allocated on the basis of the following criteria:
- Scientific value and/or originality of the proposal: max 10 points
- Description and structure of the proposal: max 5 points
- Proposal feasibility: max 5 points

Up to 20 points

Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD program and at describing her/his specific research interests

Up to 2 points

Articles and/or reviews in scientific journals with peer reviewing, scientific book chapters with national or international circulation. The explicit indication of the candidate's contribution to the works presented for evaluation is a necessary requirement.
- International peer-reviewed papers: up to 2 points
- National peer-reviewed papers: up to 1 point

Up to 3 points

First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program

Up to 2 points

Language proficiency certificates
- Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)
- Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)

Up to 3 points

The ORAL EXAM includes the presentation of the research project and is intended to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course

- English reading and speaking and for foreign candidates also Italian language: up to 10 points
- Research project presentation: max 40 points
- General knowledge of issues connected to the PhD course: max 20 points

Up to 70 points

It is the candidate’s responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page http://unipr.esse3.cineca.it/Home.do in the days preceding the date of the Oral Exam.

<table>
<thead>
<tr>
<th>DATE</th>
<th>21 November 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>02:00 PM (Italian Time)</td>
</tr>
<tr>
<td>PLACE</td>
<td>ROOM D&lt;br&gt;Plexus “Aule delle Scienze”&lt;br&gt;Campus Universitario&lt;br&gt;43124 PARMA - ITALY</td>
</tr>
</tbody>
</table>
**The choice of the Research Topic to be expressed in Annex A is not binding on the assignment of the research project, and it is intended to assess candidates skills during the admission exam. The PhD research topic will be assigned by the Academic Board.**

For foreign candidates it is possible to carry out the admission examination exclusively in English, after checking the basic knowledge of Italian LANGUAGE. For Italian candidates it will be possible to take the admission examination in Italian or in English at the candidate's choice.

For foreign candidates it is possible to carry out the admission examination exclusively in English. For Italian candidates it will be possible to take the admission examination in Italian or in English at the candidate's choice.

For foreign candidates, the Oral Exam may be held in English at the candidate's choice.
The main aim of the Ph.D. Course in Earth Sciences is to provide highly qualified study and research paths within the large and multidisciplinary framework of Geosciences.

RESEARCH AREAS

- Palaeontology and Palaeoecology
- Stratigraphy and Sedimentology
- Structural Geology
- Physical Geography and Geomorphology
- Applied Geology
- Mineralogy
- Petrology and Petrography
- Geochemistry and Volcanology
- Geophysics and Applied Geophysics

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:

- "Laurea Magistrale" LM-11 Conservation and restoration of the cultural heritage
- "Laurea Magistrale" LM-35 Environmental engineering
- "Laurea Magistrale" LM-60 Natural sciences
- "Laurea Magistrale" LM-74 Geology
- "Laurea Magistrale" LM-75 Environmental and land sciences
- "Laurea Magistrale" LM-79 Geophysics

as well as the equivalent "laurea specialistica" or "laurea" achieved based on the university system in force before the entry into force of Italian Ministerial Decree No. 509/99

- Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programs

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023.

POSIIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Position with Scholarship</strong></td>
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</tr>
</tbody>
</table>

<table>
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<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship funded by University of Parma (Ministerial funds)</td>
<td>Geomorphological and geophysical modeling of debris flow source material in the Alps and in the Northern Apennines</td>
</tr>
</tbody>
</table>
- The late Miocene Sicilian outer foreland basin evolution and its implications with the Messinian salinity crisis
- Origin of refractory domains in the convective mantle: new insights from geochemical and Sr-Nd-Hf-Os isotope study of peridotites from modern oceanic basins
- Hydrogeological role of carbonate fault zones on regional flow system in Central-Southern Apennines, Italy
- Coseismic and aseismic fault rocks in volcanic bodies

### ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 50 points  
(a minimum score of 30 points shall be required to be admitted to the Oral Exam)

**ORAL EXAM:** up to 70 points  
**Minimum score for ELIGIBILITY:** 70/120

| Foreign Language | Language the fluency of which shall be assessed during the Oral Exam  
The assessment of knowledge of this language will be oral and will consist in reading and translating a paragraph of scientific text. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGLISH</strong></td>
<td></td>
</tr>
</tbody>
</table>

### ORAL EXAMINATION INDICATION

Applicants admitted to the ORAL EXAM can take it either in PRESENCE or REMOTELY in Audio and Video Teleconference  
(Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)

**THE INTERVIEW MAY BE HELD ALSO IN ENGLISH**

### LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

#### MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

**ANNEX A**  
(art. 5 of the Competition notice)

<table>
<thead>
<tr>
<th>Identification Document</th>
<th>Scanned Copy of a valid identity document with photo (i.e. identity card, passport)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>No specific CV format is required (see art. 4 of the Competition notice)</td>
</tr>
<tr>
<td>Abstract of degree thesis</td>
<td>Abstract of the second cycle master’s degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10,000 characters including spaces)</td>
</tr>
</tbody>
</table>

**Academic Qualifications**  
Certificates and academic transcript of records for both Bachelor’ and Master’ degrees containing the following details for each degree held: (art. 4 of the Competition notice):  
- University that granted the degree - Type of degree (first cycle/second cycle/single cycle)  
- Name of the degree program - Date of graduation - Final mark - List of exams and corresponding scores (academic transcript of records) - Translation into Italian or English (only for degrees issued in languages other than Italian or English).

**Research Project**  
Maximum 3 pages, written in Italian or in English, according to the format attached to the competition notice  
It will have to focus on an original research topic (unpublished, developed personally by the candidate, PENALTY NOT EVALUATION. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project)  
It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board
**LIST OF EVALUABLE QUALIFICATIONS**

(only qualifications attested by a document drawn up in Italian or in English)

<table>
<thead>
<tr>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curriculum Vitae et studiorum</strong></td>
</tr>
<tr>
<td>Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.</td>
</tr>
<tr>
<td>The marks of the exams and the graduation mark will be the most relevant element of the evaluation.</td>
</tr>
<tr>
<td>Up to 6 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduation thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congruence with the research topics of the PhD course and quality of the research methodology</td>
</tr>
<tr>
<td>Up to 8 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points relating to the research project shall be allocated on the basis of the following criteria:</td>
</tr>
<tr>
<td>- Scientific value and or originality of the proposal: max 8 points</td>
</tr>
<tr>
<td>- Description and structure of the proposal: max 3 points</td>
</tr>
<tr>
<td>- Proposal feasibility: max 3 points</td>
</tr>
<tr>
<td>- Consistency with the research themes of the PhD course: max 8 points</td>
</tr>
<tr>
<td>Up to 22 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement of Research Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests</td>
</tr>
<tr>
<td>Up to 1 point</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduation mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score related to the final mark:</td>
</tr>
<tr>
<td>- 110 and 110 with honours (magna cum laude): 5 points</td>
</tr>
<tr>
<td>- from 107 to 109: 4.5 points</td>
</tr>
<tr>
<td>- from 105 to 106: 3.5 points</td>
</tr>
<tr>
<td>- from 100 to 104: 2.5 points</td>
</tr>
<tr>
<td>- from 95 to 99: 1 point</td>
</tr>
<tr>
<td>- under 95: 0.5 points</td>
</tr>
<tr>
<td>Up to 5 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average of the exam marks (if the candidate will attain the degree no later than 31 December 2023)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score related to the average of the exam marks:</td>
</tr>
<tr>
<td>- from 28 to 30: 5 points</td>
</tr>
<tr>
<td>- from 27 to 27.99: 4.5 points</td>
</tr>
<tr>
<td>- from 26.5 to 26.99: 3.5 points</td>
</tr>
<tr>
<td>- from 26 to 26.49: 2.5 points</td>
</tr>
<tr>
<td>- from 25 to 25.99: 1 point</td>
</tr>
<tr>
<td>- under 25: 0.5 points</td>
</tr>
<tr>
<td>Up to 5 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scientific Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Abstract presented at a national or international congress: 0.5 point</td>
</tr>
<tr>
<td>- Articles on scientific journals (ISI/SCOPUS): 2 points</td>
</tr>
<tr>
<td>- Other publication (related to the topics of PhD program): 1 point</td>
</tr>
<tr>
<td>Up to 5 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Academic qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program</td>
</tr>
<tr>
<td>Up to 1 point</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other experiences (training, work, research, teaching, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Periods of study abroad: 1 point</td>
</tr>
<tr>
<td>- Scholarships, scientific associations awards: 1 point</td>
</tr>
<tr>
<td>Up to 2 points</td>
</tr>
</tbody>
</table>

**ORAL EXAM**

<table>
<thead>
<tr>
<th>Interview Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation CRITERIA</td>
</tr>
<tr>
<td>POINTS</td>
</tr>
</tbody>
</table>

**UNIVERSITÀ DI PARMA**

Via Università, 12 - 43121 Parma

www.unipr.it
The ORAL EXAM includes the presentation of the research project and is intended to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course.

- Knowledge of foreign languages: 5 points
- Research project presentation: 50 points
- General knowledge of issues connected to the PhD course: 15 points

Up to 70 points

**SCHEDULE OF THE ADMISSION EXAMS**

It is the candidate’s responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page [http://unipr.esse3.cineca.it/Home.do](http://unipr.esse3.cineca.it/Home.do) in the days preceding the date of the Oral Exam.

<table>
<thead>
<tr>
<th><strong>ORAL EXAM</strong></th>
<th><strong>DATE</strong></th>
<th>24 November 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TIME</strong></td>
<td>09:00 AM (Italian Time)</td>
<td></td>
</tr>
</tbody>
</table>
| **PLACE**     | Department of Chemistry, Life Sciences and Environmental Sustainability  
                EARTH SCIENCES BUILDING  
                Parco Area delle Scienze, 157/A – Campus  
                43124 PARMA - ITALY |

**ALTRE INDICAZIONI**

The choice of the Research Topic to be expressed in Annex A is not binding on the assignment of the research project, and it is intended to assess candidate skills during the admission exam. The PhD research topic will be assigned by the Academic Board.

For foreign candidates, the admission examinations may be held in English at the candidate’s choice.
## TRAVERSATIONAL MEDICAL AND SURGICAL SCIENCES

<table>
<thead>
<tr>
<th>CYCLE</th>
<th>XXXIX</th>
</tr>
</thead>
</table>
| COORDINATOR | Prof. Nicola SVERZELLATI  
email: nicola.sverzellati@unipr.it  
Department of Medicine and Surgery |
| DURATION    | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/01/2024 |

## TRAINING OBJECTIVES

The PhD Program in Translational Medical and Surgical Sciences is a multidisciplinary program, in which the common denominator of the various research activities conducted by the PhD students is represented by the application of the acquired knowledge to clinical practice. In fact, the close link between preclinical and clinical research will allow discoveries and methodological skills acquired through experimental studies to be transferred into medical practice. Such a link will enable PhD students to deal with real problems, ranging from diagnosis to therapy and from prevention to rehabilitation, all of which deeply connected with human diseases and patient care.

The bidirectional exchange between lab and clinical research will bring back to the lab the results of clinical and epidemiological observations, and at the same time it will anchor experimental research to issues that originate from real-world inputs and tests carried out directly on humans.

Therefore, the final goal of the PhD Program in Translational Medical and Surgical Sciences is to provide a highly qualifying training to the PhD students, offering them opportunities, skills and technological resources necessary to practice translational research at a high level in either public or private Institutions, national or international, including, but not limited to, Universities, Research Institutes and PharmaMed Industries.

## RESEARCH TOPICS (The applicant MUST indicate one research topic in the ANNEX A)

1. Stem cells in the diagnosis and treatment of neoplasms, chronic and degenerative disorders, cardiovascular diseases and musculoskeletal diseases;
2. Translational medicine and immunologic dysregulation of gastrointestinal, respiratory, infective, haematological, oncological, endocrinological, nephrological and dermatological diseases, and of vasculitis;
3. Plasticity, function and diagnostic-therapeutic use of genomic, transcriptomic, proteomic and metabolomic platforms of cells, organs and tissues to prevent or treat neoplasms, infections, chronic and degenerative diseases, metabolic dysfunctions, obstetrics and neonatal diseases as well as in response to environmental factors, lifestyles and drugs;
4. Development and “theragnostic” function of imaging and technologically advanced phenotyping platforms to prevent or treat neoplasms, infections, chronic and degenerative diseases, metabolic dysfunctions, obstetrics and neonatal diseases as well as in response to environmental factors, lifestyles and drugs;
5. Development and application of technologically advanced devices (i.e. biological devices), to measure and support and/or replace the function of cells, tissues or organs in medical and/or surgical diseases;
6. Advanced and innovative strategies for recovery and functional rehabilitation to prevent or treat neoplasms, infections, chronic and degenerative diseases, metabolic dysfunctions, obstetrics and neonatal diseases as well as in response to environmental factors, lifestyles and drugs;
7. Role of governance and organization of healthcare systems and services in the prevention and care of disorders with a potentially high social and economic impact, including, but not limited to, environmental and professional diseases;
8. Role of microbiota and microbiome in translational medicine and surgery;
9. Retrieval and role of “big data” in translational medicine and surgery;
10. Role of advanced technologies, including robotics, in translational surgery;
11. Role of qualitative and quantitative imaging in the diagnosis of neoplasms, infections and chronic degenerative diseases.
ADMISSION REQUIREMENTS

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:

- Laurea specialistica or Laurea magistrale (second cycle master’s degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- Second cycle Master’s degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023

POSITIONS PUT OUT TO COMPETITION

| With Scholarship | 5 |
| Reserved to holders of scholarship funded by foreign States | 4 |
| **Position with Scholarship** | |
| | **Funding entity** | **Research Topic, if any** |
| 2 | Scholarship funded by University of Parma (Ministerial funds) | --- |

**Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)**

<table>
<thead>
<tr>
<th></th>
<th><strong>Funding entity</strong></th>
<th><strong>BOUND RESEARCH TOPIC</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Medicine and Surgery (Prof. Lauretani funds PRIN2020 CUP D95F2200042001)</td>
<td>Sarcopenia and motoric frailty in older persons</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship funded by Department of Medicine and Surgery (funds Prof. Missale Project 2022STZ583 PNRR-M4C2-I.1 - PRIN 2022 CUP D53D23001930006 e funds Prof. Ferrari FERRARI_2021_CT_AOUFR_TOSCANALIFE)</td>
<td>Strategies for Natural Killer lymphocyte response enhancement in immunotherapy of hepatocellular carcinoma</td>
</tr>
</tbody>
</table>

**Position reserved to HOLDERS OF SCHOLARSHIP FUNDED BY FOREIGN STATES**

| | **University or Foreign State** |
| 1 | Reserved to holders of University of Rwanda |

ADMISSION PROCEDURES

**ASSESSMENT OF QUALIFICATIONS:** up to 45 points

**ORAL EXAM:** up to 75 points

**MINIMUM SCORE FOR ELIGIBILITY:** 70/120

**Foreign Language**

Language the fluency of which shall be assessed during the Oral Exam
The knowledge of the English language will be assessed orally and will consist in reading and translating a scientific text

**ENGLISH**

**ORAL EXAMINATION INDICATION:** Applicants admitted to the ORAL EXAM can take it in PRESENCE.
THE INTERVIEW MAY BE HELD ALSO IN ENGLISH

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

<table>
<thead>
<tr>
<th>ANNEX A</th>
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</tr>
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<td>Abstract of the second cycle master’s degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10,000 characters including spaces)</td>
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</tr>
<tr>
<td>Research Project</td>
<td>The research project, written in Italian or in English according to the attached format, shall be focused on an original research topic ([unpublished, developed personally by the applicant. It should be noted that the Examination Board can use IT tools to verify the originality of the submitted Project]) and structured as follows: scientific context, significance of the problem, expected results. The research project does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined with the supervisor and approved by the Academic Board.</td>
</tr>
</tbody>
</table>

LIST OF EVALUABLE QUALIFICATIONS

(only qualifications attested by a document drawn up in Italian or in English)

| Curriculum Vitae et studiorum | Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark |
| Graduation mark | Score assignable for the final mark: * 110 with honours (magna cum laude): 5 points * 110: 3 points * From 106 to 109: 2 points * From 102 to 105: 1 point |
| Average of the exam marks (if the applicant will attain the degree no later than 31st December 2023) | Score assignable for the average of the exam marks: * 30/30: 5 points * From 28/30 to 29/30: 3 points * From 26/30 to 27/30: 2 points * From 24/30 to 25/30: 1 point |
| Graduation thesis | Congruence with the research topics of the PhD course and quality of the research methodology |
| Research Project | Score assignable for the research project: • Scientific value and ground-breaking nature of the proposal: max 8 points • Description and structure of the proposal: max 2 points • Proposal feasibility: 1 point • Congruence with the training objectives of the PhD program: 1 point |
| Statement of Research Interest | Short text – maximum 1 page – in Italian or in English, aimed at explaining the applicant’s reasons to attend the PhD program and at describing her/his specific research interests. |
### Scientific Publications
Articles and/or reviews published on peer-reviewed scientific journals, abstracts of papers or posters presented at conventions or meetings; book chapters, etc. **Up to 9 points**

### Reference Letters
A maximum of 2 letters, written by Professors or Researchers from the applicant’s University or from other Universities or from experts in the research field working in public or private research facilities. The reference letters must be produced on the letterhead of the University/Operating Unit/Structure of the Referee and attached to the online application by the applicant. **Up to 3 points**

### Other Academic qualifications
- Second level Master’s degree and Specialization: 3 points
- First level Master’s degree and/or Advanced training and/or specialization and/or Higher Education course: 1 point **Up to 3 points**

### Other experiences (training, work, research, teaching, etc.)
- Research activities (basic, applied, translational, etc.) carried out in any way, including those covered by research grant, and conducted as a staff member of research units
- Working activity
- Activities at accredited laboratories
- Professional and/or training internship
- Language proficiency certificates
- Periods of study abroad, outside the country of origin (e.g. Erasmus or similar programmes) Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.) **Up to 3 points**

### ORAL EXAM

<table>
<thead>
<tr>
<th>Evaluation CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to argument the project proposal: up to 30 points</td>
<td>Up to 75 points</td>
</tr>
<tr>
<td>Discussion of the critical points of the project: up to 18 points</td>
<td></td>
</tr>
<tr>
<td>Ability to provide an adequate scientific context to the project proposal: up to 15 points</td>
<td></td>
</tr>
<tr>
<td>Ability to mitigate risks deriving from unexpected results: up to 10 points</td>
<td></td>
</tr>
<tr>
<td>Knowledge of the English language: up to 7 points</td>
<td></td>
</tr>
</tbody>
</table>

### SCHEDULE OF THE ADMISSION EXAMS
It is the candidate's responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page [http://unipr.esse3.cineca.it/Home.do](http://unipr.esse3.cineca.it/Home.do) in the days preceding the date of the Oral Exam.

### ORAL EXAM

| DATE | 21 November 2023 |
| TIME | 10:00 AM (Italian Time) |
| PLACE | Aula 9 c/o Aule Nuove – Polo Gramsci
Via A. Gramsci 14
43126 PARMA - ITALY |

### ALTRE INDICAZIONI
The choice of the research field to be expressed in Annex A does not have a binding nature on the assignment of the research project, but has the purpose of assessing the candidates' skills during the admission exam. The PhD research topic will be defined with the supervisor and approved by the Academic Board.
For foreign applicants it will be possible to carry out the oral exam in English, whereas for Italian applicants it will be possible to take it in either Italian or English.
# INFORMATION TECHNOLOGIES

## CYCLE

| XXXIX |

## COORDINATOR

Prof. Marco LOCATELLI  
email: marco.locatelli@unipr.it  
Department of Engineering and Architecture

## DURATION

3 years

## STARTING DATE OF THE PHD PROGRAM

01/01/2024

## TRAINING OBJECTIVES

The course aims at educating the future Ph.D.'s so that they will enter the research world with an active role, within both universities and industries.

## RESEARCH AREAS

- Electronics instrumentation and electrical drives
- Computer systems and automatic control
- Telecommunications and electromagnetic fields

## ADMISSION REQUIREMENTS

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:

- Laurea specialistica or Laurea magistrale (second cycle master’s degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- Second cycle Master’s degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.12.2023

## POSITIONS PUT OUT TO COMPETITION

| 1 |

## Position with Scholarship

**LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)**

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
</table>
| 1  | Scholarship funded by EMILIA ROMAGNA REGION  
  [Image]  
  The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna  
  CUP D92J23000420006 | Wave motion hydrogen production system: WEC4Hydrogen |

## ADMISSION PROCEDURES
| **Assessment of QUALIFICATIONS:** up to 70 points |
| (a minimum score of 40 points shall be required to be admitted to the Oral Exam) |
| **ORAL EXAM:** up to 50 points |
| **Minimum score for ELIGIBILITY:** 70/120 |

| **Foreign Language** | Language the fluency of which shall be assessed during the Oral Exam |
| The evaluation of the knowledge of this language will be oral and will consist of a brief interview on a technical topic (for example a translation of a scientific text). |
| **ENGLISH** |

### ORAL EXAMINATION INDICATION

**THE ORAL EXAM TAKES IN THE PRESENCE** and with the possibility of carrying out the interview **RELOCATED** for candidates residing abroad or temporarily abroad for study / work reasons. To this end, candidates must submit a motivated **REQUEST** as per the model attached to the competition announcement.

### THE INTERVIEW MAY BE HELD ALSO IN ENGLISH

### LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

### MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

| **ANNEX A** (art. 5 of the Competition notice) |
| **Identification Document** |
| Scanned Copy of a valid identity document with photo (i.e. identity card, passport) |
| **Curriculum Vitae et studiorum** |
| No specific CV format is required (see art. 4 of the Competition notice) |
| **Abstract of degree thesis** |
| Abstract of the second cycle master’s degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces) |
| **Academic Qualifications** |
| Certificates and academic transcript of records for both Bachelor’ and Master’ degrees containing the following details for each degree held: (art. 4 of the Competition notice): University that granted the degree - Type of degree (first cycle/second cycle/single cycle) Name of the degree program - Date of graduation - Final mark - List of exams and corresponding scores (academic transcript of records) - Translation into Italian or English (only for degrees issued in languages other than Italian or English). |
| **Research Project** |
| Max 10.000 characters, written in English, it will have to focus on an original research topic and structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. It does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board. However, this project must be prepared after having contacted and consulted one of the research groups related to the PhD course in Information Technologies (information on the research groups and their contacts can be found at [https://dia.unipr.it/en/node/3080](https://dia.unipr.it/en/node/3080)). Failure to submit the project will result in exclusion from procedure for admission to the course. |

| **LIST OF EVALUABLE QUALIFICATIONS** |
| (only qualifications attested by a document drawn up in Italian or in English) |
| **Curriculum Vitae et studiorum** |
| Evaluation of the marks of the exams and of the master’s degree mark (if available). The candidate is required to provide the average of the marks of all the exams of the master’s degree, in addition to the details of the same |
| It will also be evaluated the congruence of the degree obtained with the PhD themes. |
| **Up to 25 points** |
Abstract of the Master's degree thesis

It will be evaluated the congruence of the Master’s Degree thesis with the doctoral program research topics

Up to 5 points

Research Project

Points relating to the research project shall be allocated on the basis of the following criteria:
- Scientific value and originality of the proposal: max 10 points
- Description and structure of the proposal: max 10 points
- Proposal feasibility: max 10 points

Up to 30 points

Scientific Publications

Articles on national and international journals, papers presented at conferences or symposia, book chapters etc. Evaluation of the editorial position of the publication and its impact on the scientific community on the basis of the available indicators. It will be evaluated only publications from the past five years.

Up to 5 points

Reference Letters

Maximum 2 letters and must be sent directly by the signer to the address e-mail: marco.locatelli@unipr.it. (The candidate, therefore, must not upload them through the procedure of the competition online registration).
Evaluation of the judgments reported in the reference letters.

Up to 2 points

Other experiences and qualifications

- Periods of study abroad, outside the country of origin (e.g., Erasmus programme or other similar mobility programmes)
- Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)
Duration evaluation (for scholarships and internships), score (for the GRE test), prestige (for awards)

Up to 3 points

**ORAL EXAM**

<table>
<thead>
<tr>
<th>Interview Program</th>
<th>Evaluation CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course | o knowledge of the foreign language: max 5 points  
o research project presentation: max 25 points  
o general knowledge of issues connected to the PhD course: max 20 points | Up to 50 points |

**SCHEDULE OF THE ADMISSION EXAMS**

It is the candidate’s responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page [http://unipr.esse3.cineca.it/Home.do](http://unipr.esse3.cineca.it/Home.do) in the days preceding the date of the Oral Exam.

<table>
<thead>
<tr>
<th>ORAL EXAM</th>
<th>DATE</th>
<th>TIME</th>
<th>PLACE</th>
</tr>
</thead>
</table>
|           | 21 November 2023 (with possible extension in the following days) | 03:00 PM (Italian Time) | MEETING ROOM – Buinding 3  
Scientific Engineering Headquarters  
Parco Area delle Scienze, 181/A – Campus Universitario  
43124 PARMA - ITALY |

**ALTRE INDICAZIONI**

The choice of the Research Topic to be expressed in Annex A is not binding on the assignment of the research project, and it is intended to assess candidates skills during the admission exam. The PhD research topic will be assigned by the Academic Board.

For foreign candidates, the admission examinations may be held in English at the candidate’s choice.
For foreign candidates all documents written in a language other than Italian will have to be translated into English, otherwise they will not be evaluated.
“ADMISSION TO RESEARCH DOCTORATE COURSES”

(Articles 4, 19, 46 and 47 of Italian Presidential Decree No. 445 of 28 December 2000)

I, the undersigned

SURNAME ___________________________________________________________________________

NAME _______________________________________________________________________________

Birth Place ____________________________________________________________________________

Date of birth (gg/mm/aaaa) ______________________________________________________________

Tax ID ______________________________________________________________________________

Citizenship __________________________________________________________________________

Phone number _________________________________________________________________________

E-mail for correspondence ____________________________

DECLARE to participate in the public competition for admission to the PhD cycle XXXIX:

____________________________________________________________________________________

(INDICATE THE CORRECT COURSE)

RESEARCH AREAS: _________________________________________________________________

(It must indicate the research topic if expressly provided for in the schedule for the chosen course of Ph.D.)

also DECLARE admission to a reserved position (if provide in the form attached to the notice of the course) for:

☐ Holders of Research Grant

☐ Holders of scholarships funded by foreign States or recipients of specific international mobility programs

aware of the forfeiture by any obtained benefits and penalties provided for by Articles 75 and 76 of Italian Presidential Decree No. 445 of December 28, 2000 for the alleged false declarations regarding education or use of false documents

DECLARE under my responsibility:

a) Possess a degree (fill in one):

☐ Master Degree (Ministerial Decree No. 270/04) in ____________________________ Class: ___

☐ Master Degree (Ministerial Decree No. 509/99) in ____________________________ Class: ___

☐ Degree (ante Ministerial Decree No. 509/99 – system previously in force to the one introduced by Ministerial Decree No. 509/99) in: __________________________

obtained at the University of ___________________ on ______________ on the final vote ______ (or to obtain it on ___________ at the University of ____________________________)

☐ Degree obtain abroad: ______________________________________________________________ at the University of ____________________________ on ______________ on the final vote ______
(also DECLARES, in order to allow the recognition of the only purpose of participating in the qualification to the PhD program, attach the necessary documents to enable the declaration of equivalence, as required by art. 3 of the announcement).

b) that I undertake to hand in a self-certification relating on my academic degree to the Chair of the Examination Board at the competitive examination, if possible, or later to the Office "Dottorati di Ricerca" (for candidates that do not have an academic degree);

c) that I undertake to attend, on a full-time basis, the doctorate program, in accordance with the procedures to be set by the Program Board;

d) that I undertake to promptly notify any change in my residence or contact details;

e) to know the following foreign languages: ______________________

f) that I am not enrolled in postgraduate Specialty Schools or in courses of studies for Laurea or Laurea Specialistica/Magistrale, in University Master's Degree courses or, in case I am enrolled in the above courses, that I undertake to suspend attendance, or that I am enrolled in the ___________ YEAR of the Postgraduate Medical Specialty School in __________________________ with training center at the same training center of the Research Doctorate Course (in the latter case, attaching a copy of the authorization issued by the School Board to enrol in the specific Doctorate Program);

g) that presently I do not hold any doctorate degree and that I have not been nor I am currently the recipient of any scholarship for doctorate programs, or that I hold a doctorate degree in ______________________________________ obtained at the University of ___________________________ on ____________;

EXPRESS
(not mandatory)

EXPRESSION OF INTEREST in the assignment of one or more "BOUND RESEARCH TOPIC" Scholarships (if applicable):

☐ __________________________________________________________

(SPECIFY THE TITLE OF THE RESEARCH THEME INDICATED IN THE FORM OF THE PHD COURSE)

☐ __________________________________________________________

(SPECIFY THE TITLE OF THE RESEARCH THEME INDICATED IN THE FORM OF THE PHD COURSE)

I, the undersigned ________________________, also declares to be aware that the aforementioned expression of interest does not involve the automatic assignment of the scholarship with a restricted topic (articles 7 and 11 of the call for applications)

I, the undersigned ________________________, also state that I am aware of the provisions of Article 7 of the announcement of the competitive examination, concerning the procedures to convene candidates for the relevant examinations, as well as of the relevant forms; I state also that I undertake, where applicable, to check whether I have been admitted to the oral exams.

I, the undersigned ________________________, state that I am aware of the date set for enrolment in the Doctorate Program.

finally DECLARE

which as indicated in the documents accompanying an application on-line admission is true in accordance with articles. 46 and 47 of Presidential Decree 445/2000.

Place and date, ______________

Signature

________________________
DISTANCE ORAL EXAMINATION REQUEST FORM
(Article 7 of the Announcement)

NOTE: filling in this document shall not amount on its own to registration for the competitive examination. This form shall be filled in, signed and attached, together with a photocopy of an identity document, to the application for admission to the competitive examination.

I, the undersigned

Surname:  
Name:  
Sex: M F  
Birth: Date  
Town  
Country  
Residing in: Town  
Country  
E-mail:  
Home for:  
STUDY WORK (Mark)  
Town  
Country

ASK to be admitted to take the Oral Exam required for admission to the PhD in (name of the PhD course) electronically through the Microsoft Teams platform for the following REASON (specify if expressly requested in the PhD course form):  
I communicate the following e-mail address: E-mail:  

and, for this purpose, to which the Examination Board will send the invitation, for the performance of the Oral Exam on the day and time established for the interview and indicated in the form relating to the above mentioned course, attached to the Competition Notice.

HEREBY STATE

• to be equipped with audio and video equipment suitable for the use of Microsoft Teams;

• to have read the rules contained in the Announcement of competitive examination, specifically, those set down in Article 5 "Applications for admission" and in Article 7 "Admission exam".

_________________________  __________/________/______  ______________________
(place)  (date)  (Candidate’s signature)
<table>
<thead>
<tr>
<th>NAME and SURNAME of the CANDIDATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITLE (potential) OF THE RESEARCH PROPOSAL</td>
</tr>
</tbody>
</table>

MAX 10.000 character, bibliography and spacing included
brief description of the research proposed by the candidate thus structured: introduction of the problem in the international scientific context, relevance of the problem, method by which the problem will be addressed, objectives and expected results, bibliography.

CHECK IN THE COURSE FORM IF A DIFFERENT AND SPECIFIC STRUCTURE OF THE PROJECT (LANGUAGE AND / OR FORMAT) IS REQUIRED