



| BIOTECHNOLOGY AND LIFE SCIENCE | |
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| CYCLE | XXXIX |
| COORDINATOR | Prof. Marco VENTURA email: marco.ventura@unipr.it Department of Chemistry, Life Sciences and Environmental Sustainability |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| TRAINING OBJECTIVES | |
| <p>The PhD in Biotechnology and Biosciences aims to train experts who can carry out advanced research activities in the biological disciplines and biotechnology. The Doctor's research themes concern the study of the function, organization and expression of the genome of microbial, plant and animal organisms (including humans), to deepen their basic knowledge, also in view of possible applications in biotechnology. The methodologies used are mainly those of genetic, microbiology, molecular biology, biochemistry and applied biology. Starting from this common objective and from a highly cross-cutting advanced teaching activity, in order to train PhDs with highly qualified skills in specific areas of Biotechnology and Life Sciences, three main areas of research defined as such: 1) environmental; 2) genetics and microbiology; 3) biochemical-molecular. PhD students will be involved full-time in a research project, to which they will also make critical and proactive contributions. In this way, they will acquire a marked scientific and management autonomy, also thanks to the numerous scientific, national and international collaborations in which they will be involved.</p> | |
| RESEARCH AREAS | |
| <ul style="list-style-type: none">• Environmental• Biomolecular• Genetics and microbiology | |
| ADMISSION REQUIREMENTS | <p>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:</p> <ul style="list-style-type: none">– 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 <p>Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.10.2023</p> |

| POSITIONS PUT OUT TO COMPETITION* | | 10 |
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| (Modified by Rector Decree n. 1320 of 19.07.2023) | | |
| With Scholarship | | 10 |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | <ul style="list-style-type: none">• Environmental• Biomolecular• Genetics and microbiology |
| 1 | Scholarship funded by University of Parma (University funds) | <ul style="list-style-type: none">• Genetics and microbiology |
| 1 | Scholarship co-funded by Fondazione Cariparma | <ul style="list-style-type: none">• Genetics and microbiology |



| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) (Modified by Rector Decree n. 1320 of 19.07.2023) | | |
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| During the Oral Exam, applicants may express and/or confirm their interest of being assigned a scholarship linked to a specific research topic. The Examination Board will evaluate their eligibility based on specific competences, experience and specific aptitudes of the applicants | | |
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000150006 | Research Topics: Genetics and microbiology: Cardiovascular risk in a changing environment: identification of new biomarkers of genetic susceptibility and environmental risk. |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000150006 | Research Topics: Genetics and microbiology: Use of yeast as a model for the study of mutations associated with neuropathies and for the search for drugs with a potential therapeutic action. |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000150006 | Research Topics: Molecular Biology: CRISPR-Cas genome editing of hyperegulatory enhancers in hormone-sensitive tumours. |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Ri.Circola S.r.l. CUP D92J23000300004 | Research Topics: Environmental Biotechnology for circular economy. |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna “Bruno Ubertini” CUP D92J23000300004 | Research Topics: Biomolecular Bioinformatic analysis of Next Generation Sequencing data for infection control |

| ADMISSION PROCEDURES | | |
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| Assessment of QUALIFICATIONS: up to 40 points (a minimum score of 18 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 reading and translating of a scientific text. | ENGLISH |
| ORAL EXAMINATION INDICATION | | |



THE ORAL EXAM TAKES PLACE IN THE PRESENCE. (The REMOTE ORAL EXAM is allowed for candidates only in isolation / quarantine for COVID-19 virus infection or due to illness / hospitalisation certified by a medical report. 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

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| 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). |

LIST OF EVALUABLE QUALIFICATIONS

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

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| 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 will be the most relevant element of the evaluation. | Up to 5 points |
| Graduation mark | Score related to the final mark: - 110 with honours (magna cum laude): 20 points; - 110: 18 points; - From 103 to 109: points 4-16 (2 points for each mark unit); - Until 102: 3 points. | Up to 20 points |
| Average of the exam marks (if the candidate will attain the degree no later than 31 October 2023) | Score related to the average of the exam marks: - 30/30: 18 points; - From 22/30 to 29/30: points 2-16 (2 points for each unit average score) | Up to 18 points |
| Graduation thesis | Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae) | Up to 6 points |
| Scientific Publications | Publications in <i>peer-reviewed</i> international journals: 2 points for each publication (for evaluation purposes it is mandatory to attach a pdf copy of each publication to the application) | Up to 6 points |
| Communications to conferences, publication in indexed national journals, book chapters | 1 point for each conference abstract, publication in indexed national journals or book chapters (for evaluation purposes it is mandatory to attach a pdf copy of each term to the application) | Up to 3 points |



| ORAL EXAM | | |
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| Interview Program | Evaluation CRITERIA | POINTS |
| The ORAL EXAM is intended to assess the aptitude of the applicant to the research as well as the general knowledge of issues connected to the PhD course | <p>The Oral Exam will focus on critical reading and discussion of a scientific article chosen by the candidate among those proposed by the Committee within each of the three main research topics. Candidates will be asked by the Committee members to discuss and explain the contents of the scientific publication they have selected.</p> <p>During this Oral Exam and interview, knowledge of the English language will also be evaluated.</p> | Up to 80 points |

| SCHEDULE OF THE ADMISSION EXAMS | | |
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| 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 | DATE | 12 September 2023 (with possible extension in the following days) |
| | TIME | 09:30 AM (Italian Time) |
| | PLACE | AULE A + B PODERE AMBOLANA (Cascina Ambolana) Parco Area delle Scienze, 33/A - Campus Universitario 43124 PARMA - ITALY |
| ALTRE INDICAZIONI | <p>The applicant MUST indicate in the application his/her preference for one of the three main research topics proposed in the selection announcement (Environmental, Genetics and microbiology, Biomolecular).</p> <p>For foreign candidates, admission examinations may be held in English as per candidate's request.</p> | |



ECONOMICS & MANAGEMENT OF INNOVATION AND SUSTAINABILITY (EMIS)

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| CYCLE | XXXIX |
| COORDINATOR | Prof.ssa Beatrice LUCERI Department of Economics and Management email: Beatrice.luceri@unipr.it |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| PARTNER INSTITUTION | <ul style="list-style-type: none">• 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 PdD 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 **31.10.2023**

| POSITIONS PUT OUT TO COMPETITION * | | 21 |
|---|--|---|
| (Modified by Rector Decree n. 1320 of 19.07.2023) | | |
| With Scholarship | | 20 |
| With Scholarship reserved for candidates that have achieved degree abroad | | 1 |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 2 | Scholarship funded by University of Parma (Ministerial funds) | --- |
| 1 | Scholarship co-funded by Fondazione Cariparma | --- |
| 3 | Scholarship funded by University of Ferrara | --- |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) (Modified by Rector Decree n. 1320 of 19.07.2023) | | |
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000160006 | Management of sustainability and environmental, individual and collective well-being (no.1) The project intends to analyze the policies aimed at improving the degree of sustainability of the food supply chain both in environmental and social terms. Specifically, it will be investigated how the sustainable choices of companies translate into an advantage for both local communities and individuals who can benefit from products that are attentive to health and environmental balance. The various stakeholders of the supply chains will be analyzed, who, on the one hand, provide different resources (space, financial resources, human capital, infrastructures) and, on the other, benefit from the value generated in a specific territory. Particular attention is devoted to the role played by consumers, who represent the main reference point for sustainable policies. Therefore, the research will analyze the degree of consumer acceptance of sustainable choices aimed at guaranteeing individual and collective well-being. The analysis will focus on |



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| | | <p>consumer behaviour and perceptions as well as on the attitude towards the sustainability policies adopted by companies. Particular attention will be also given to the contribution offered by digital technologies to the green transition; in this context, the development and use of mobile apps in facilitating the adoption of consumers' virtuous behaviors will be analyzed. It is expected that the doctoral candidate will undertake a period of study and research abroad for a six-months period.</p> <p>Scientific supervisors: Proff. Donata Tania VERGURA, Guido CRISTINI, Sabrina LATUSI – University of Parma</p> |
| <p>1</p> | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000160006</p>  | <p>Digital Innovation Management: the metaverse (no.2)</p> <p>The research project aims to explore the methods and processes of digital transition in businesses, with a particular focus on the metaverse, a virtual world where users experience immersive activities through new technologies such as artificial intelligence (AI) and augmented/virtual reality (AR/VR). The analysis is focused on the study of the interaction between companies, brands and users to understand the role that the metaverse will play in complementing the physical relational dimension. Particular attention is given to the contribution it provides in enhancing customer experience and, more broadly, value creation.</p> <p>The project will expand knowledge and understanding of how relationships are reshaped in the virtual world and the implications for businesses and society. Concurrently, further research questions will be identified concerning the opportunities and challenges that the new virtual world offers in terms of market relationships, vertical and horizontal relationships among businesses participating in the value system, and internal organizational relationships. The research context focuses on the supply chain of consumer goods (durable and non-durable). It is expected that the doctoral candidate will undertake a period of study and research abroad for a six-months period.</p> <p>Scientific supervisor: Prof. Beatrice LUCERI – University of Parma</p> |
| <p>1</p> | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p>  | <p>The managerial role in the public healthcare organizations (no.3)</p> <p>Good performances in terms of services' quality and capacity to manage risks among public healthcare organizations are strictly related to competencies of people working within such organizations. Therefore, there's a strong need to develop and incentivize the improvement of these skills. The research project aims to define management and leadership competencies that will be needed in public healthcare organizations in the forthcoming years. The PhD student will have the chance to improve his/her knowledge of the Italian public healthcare system, through empirical and in-depth case studies analyses. He/she will also collaborate with major public hospitals across the whole national territory for a six-months period. Results of his/her work will be presented at national and international conferences. Furthermore, the PhD student will be entitled to spend six months abroad, in order to acquire new competencies and get to know new contexts.</p> <p>Scientific supervisor: Prof. Antonello ZANGRANDI - University of Parma</p> |





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| <p>1</p> | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p>  | <p>Managerial tools and performance in public healthcare organizations (no.4)</p> <p>The paradigm of New Public Management has emphasized the relevance for public entities to adopt tools and logics typical of the private sector to improve their performance. It is therefore strategic for public managers (and as such, for managers of public healthcare organizations) to know, disseminate and use these tools. The research project aims to deepen the organizational conditions under which management tools can generate better levels of efficiency and effectiveness in organizational processes. The PhD student will have the opportunity to study the management and organizational models of public hospitals. He/she will be called upon to investigate critical factors of management and actively contribute to the improvement of public administrations in the field of health care. Close collaboration with several public healthcare organizations throughout the whole national territory is planned for a six-months period, as well as the presentation of the results of studies at national and international scientific conferences. Furthermore, the PhD student will be entitled six months abroad, to acquire new competencies and get to know new contexts.</p> <p>Scientific supervisor: Prof. Antonello ZANGRANDI - University of Parma</p> |
| <p>1</p> | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p>  | <p>Managing sustainability actions in the National Health Service’s organisations: performance results and appraisal of innovation projects from the management accounting perspective (no.5)</p> <p>The project aims to analyze sustainable strategies adopted by the national Health Service’s organisations, considering the Triple Bottom Line approach related to environmental, social and financial dimensions of sustainability. The focus will be on factors driving the success of sustainability actions as well as on impediments. The research will allow us to identify best practices and effective managerial processes able to provide evidence of the contribution of the healthcare sector to the achievement of the SDGs. Special attention is devoted to identifying effective sustainability accounting tools and framework as well as to analysing how sustainability data and information contribute to the decision-making process.</p> <p>The PhD student/students must spend a six-months period of study and research abroad, plus an additional six months at the local healthcare company of Ferrara.</p> <p>Scientific supervisors: Prof. Emidia Vagnoni – University of Ferrara; Prof. Antonello Zangrandi – University of Parma</p> |
| <p>1</p> | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p>  | <p>Impact Evaluations in Public Administration (no.6)</p> <p>The research project aims to investigate economic and social impact assessment systems – as well as non-financial performance reporting models – in public entities and for-profit and non-profit companies. Through these systems, public companies can determine the effects of their activities on people and communities, health and the environment. They also have the information useful to improve their performance and to communicate transparently and reliably to stakeholders the goals and results obtained in terms of sustainability. Functional to the purpose are the non-financial performance reporting models of entities, with reference to ESG principles, which have become an increasingly important benchmark for companies and public</p> |





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| | | <p>administrations that want to show their commitment in favor of the society and the environment. The project, from a business economics perspective, aims to identify Italian and international best practices to define a path for reporting on the impact, and, in general, the sustainability of projects carried out by PA. It is expected that the doctoral candidate will undertake a period of study and research abroad for a period of six months. The duration of the study and research period in a company, research center or public administration is fixed at six months.</p> <p>Scientific supervisor: Prof. Marco FERRETTI - University of Parma</p> |
| <p>1</p> | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p>  | <p>Publicly owned companies and performance evaluation: Systems for evaluating the performance of publicly owned companies (no.7)</p> <p>The research project aims to investigate the performance evaluation systems with reference to the companies owned by PA. The performance of the publicly owned companies strictly depends on those who manage the services, as well as on the performance measurement systems adopted. The research project intends to develop systems aimed at defining effective management and leadership skills for public owned companies, as well as the set of KPIs that they need to develop a constant performance monitoring. Furthermore, in the light of the introduction of the new Code of Crisis and Insolvency, the research seeks to understand its impact on publicly owned companies. In fact, the condition of instability or pre-instability in which many public bodies find themselves is often attributable to the system of publicly owned companies and their impact on the financial statements of the shareholder bodies. Therefore, the purpose of the study is also to analyze the performance evaluation systems of public investee companies to predict the possibility of bankruptcy and/or possible debt restructuring. PhD students will have the opportunity to study the management and organizational models of publicly owned companies through empirical analysis and the development of case studies. Close collaboration is foreseen with various publicly owned companies present on the local and national territory for a six-months period and the presentation of the results of the studies conducted at national and international scientific conferences. The PhD student must spend a six-months period of study and research abroad, to acquire new skills and get to know different realities.</p> <p>Scientific supervisor: Prof. Pier Luigi Marchini - University of Parma</p> |
| <p>1</p> | <p>Scholarship financed by University Cattolica del Sacro Cuore under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p>  | <p>Primary care and community health management (no.8)</p> <p>The project is intended to investigate the managerial tools linked to primary care. The management of chronic diseases, the integration between hospitals and home care are goals that require a redefinition of the clinical settings and the use of performance measurement tools so to have efficient, effective and timeliness clinical pathways, with a specific focus on elderly people. Specifically, the project will analyze the role played by primary professionals in the management of home care services having a national and international perspective too. The Ph.D. candidate will spend a six-months period of study and research abroad, plus six months in public entities, companies or research centers.</p> <p>Scientific supervisor: Prof. Emanuele Antonio Vendramini – Catholic University of the Sacred Heart</p> |



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| <p>1</p> | <p>Scholarship financed by University Cattolica del Sacro Cuore under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p> <p></p> | <p>Public policies to address youth inactivity: the NEET challenge (no.9)</p> <p>The project is intended to investigate the phenomenon of the young people neither in employment nor in education or training (NEET) in the labour market (in Italy and Europe) with the aim of exploring the methodological aspects associated with the NEET definition, the determinants of the phenomenon, its duration, as well as possible policy interventions. Being a phenomenon with economic and social implications, it is important to investigate all possible definitions. The NEET represents a disadvantaged labour market category, and the causes of this phenomenon might be different. It is therefore important to carry out a critical investigation of the different definitions introduced by the institutions, as well as a specific econometric investigation to explore its determinants. Among these latter, we find both individual and household characteristics which prevent the inclusion of the NEETs into the labour market and in society. With respect to the duration, we will analyse whether it is a short- or a long-term phenomenon. In case it is a long-term phenomenon, we will pinpoint what are the factors that more strongly trap the youth in a disadvantaged condition. There is indeed a risk of marginalization of such youth. All the analyses will enable us to sketch the main policy implications. The Ph.D. candidate will spend a six-months period of study and research abroad, plus six months in public entities, companies or research centers.</p> <p>Scientific supervisor: Prof. Chiara MUSSIDA – Catholic University of the Sacred Heart</p> |
| <p>1</p> | <p>Scholarship financed by University of Ferrara under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p> <p></p> | <p>The impact of gamification on financial risk-taking propensity (no.10)</p> <p>The project aims to investigate the effects of gamification on financial investment and risk perception and propensity using evidence from an experimental survey. Specifically, the research aims to determine whether technology can affect the emotional and cognitive sphere and influence the propensity to take financial risks. The project is based on the development of an experiment consisting of three distinct phases:</p> <ol style="list-style-type: none">1. Participants complete a questionnaire to collect socio-demographic characteristics, basic financial knowledge, risk tolerance, impulsiveness, and other individual traits (such as overconfidence);2. Participants in Group 1 (the group subjected to treatment in a digital game context) simulate a certain number of investment choices using a specially developed application that offers the opportunity to experience investment in typically risky products often associated with abusive offers monitored by CONSOB, while Group 2 follows a specific protocol;3. Participants complete a questionnaire to assess perceptions associated with investment choice simulation and factors that may have influenced their choices during the simulation. <p>The study's results may also be used to develop financial education modules for young and adult learners. The doctoral candidate will spend eight months studying and researching abroad, followed by ten months at public administrations, companies, or research centers, such as CONSOB in this case.</p> <p>Scientific supervisors: Prof. Giuliana Birindelli and Dr. Mauro Aliano - University of Ferrara</p> |



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| <p>1</p> | <p>Scholarship financed by University of Ferrara under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p>  | <p>Measurement and Identification of Greenwashing under the Sustainable Finance Disclosure Regulation (no. 11)</p> <p>The project aims to identify possible measures and methods for identifying greenwashing, which is increasingly becoming a concern for financial regulatory authorities and policymakers in the sustainable finance market. Greenwashing can erode trust in sustainable finance and the financial system's ability to channel private capital into sustainable investments. For operators involved, greenwashing can pose financial and reputational risks and may drive away investors and clients, potentially impacting the performance of financial institution. The EU has been addressing greenwashing in the financial market for some time by promoting policies and laws on sustainable finance, strengthening transparency (EU, 2022), and making it easier for investors to identify credible investment opportunities and potential risks (EU, 2019; EU, 2020). The project's focus may be on transparency requirements related to the sustainability characteristics of managed savings products for managers, financial intermediaries, and financial advisors under the Sustainable Finance Disclosure Regulation (SFDR). The project proposes the use of machine learning methods (e.g., NLP) for data collection and analysis, which can be used to calculate a greenwashing score.</p> <p>The doctoral student is expected to spend eight months studying and researching abroad, followed by ten months working with public administrations, companies, or research centers, including CONSOB in this case.</p> <p>Scientific supervisors: Prof. Giuliana Birindelli and Dr. Mauro Aliano - University of Ferrara</p> |
| <p>1</p> | <p>Scholarship financed by University of Ferrara under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000240006</p>  | <p>Sustainability strategies in the healthcare organisations: managerial implications and impacts on financial performances (N° 12)</p> <p>This project aims to identify the extent to which sustainability dimensions are integrated into the management processes of healthcare organizations, considering system policies. The project will use quantitative and qualitative research methods to achieve the following objectives:</p> <ul style="list-style-type: none">- Identify key success variables and performance indicators (KPIs) related to monitoring strategic actions that align environmental and social sustainability strategies.- Estimate the impact that social and environmental sustainability performance has on economic and financial dimensions.- Identify the extent to which sustainability principles are incorporated into healthcare facility design. <p>Analyse how technological innovation (such as digitalisation and telemedicine) contributes to improving social and environmental sustainability performance.</p> <p>The contribution of healthcare to achieving sustainability goals is still heterogeneous and poorly investigated, despite the National Recovery and Resilience Plan repeatedly calling for the One Health approach (WHO, 2017). The sustainability of healthcare systems is also a relevant goal of the Sustainable Development Goals (SDGs) of the United Nations' 2030 Agenda. The doctoral student will spend six months studying and researching abroad, followed by an additional six months working with public administrations, companies, or research centers.</p> |



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| | | Scientific supervisor: Prof. Emidia Vagnoni - University of Ferrara |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 10 “Cultural Heritage”) CUP D92J23000280006</p> | <p>History of the construction of the culture of tradition (no.14)</p> <p>The research project aims to analyse the process of social change that, in the 1980s, introduced the 'right to taste' also for the working classes, overcoming the very clear distinction between popular and elite consumption and contributing to the 'democratisation' of the 'good' and the 'beautiful', a process that represented a change in habits that is still visible today and that created an important driver of consumption and economic growth. The research project will analyse this change as part of a broader social transformation that coincided with the end of the great ideological narratives and represented a hinge that ushered in the most recent years of our history, in which the relationship between territories, products and consumer behaviour became much closer than before. The research project will look at several emblematic examples of this process: the editorial experiences of Gambero Rosso and La Gola, as well as the birth of Slow Food and the experience of De.Co. (which is now being revived). The common denominator of all the research will be the study and understanding of the motivations that have made the relationship between territory and product such an important driver of the agro-food value chain. It is expected that the doctoral candidate will undertake a period of study and research abroad for a period of six months. The duration of the study and research period in a company, research center or public administration is fixed at six months.</p> <p>Scientific supervisor: Prof. Stefano MAGAGNOLI – University of Parma</p> |
| 1 | <p>Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Consorzio Tutela Aceto Balsamico di Modena CUP D92J23000310004</p> | <p>The history of food skills and professions as cultural heritage (no.15)</p> <p>The research project aims to investigate the role played by food skills and professions in the construction of the reputational capital of Italian food products. The affirmation of Italian products on international markets, based on the presence of a growing reputational capital, has been made possible by several factors including the role of techniques and professions, of knowledge and sensitivity, of the ability of places to create value and production ecosystems capable of economically enhancing production sectors that in some cases, such as agriculture and agro-industry, have suffered from systemic weaknesses. The research project reconstructs the historical evolution of these phenomena which, from the end of the Second World War to the present day, represent one of the most important factors in the success of Italian products. The research will also analyse the issue of sustainability, economic and social sustainability, as this will be one of the main challenges facing the Italian production system soon. The research project, co-funded by the PNRR and the Consorzio di Tutela dell'Aceto Balsamico di Modena (Consortium for the Protection of Balsamic Vinegar of Modena), aims to train a highly qualified person in the areas of study indicated, whose skills include both the scientific dimension of research and that which is closest to the expectations of the production world. It is expected that the doctoral candidate will undertake a period of study and research abroad for a period of six</p> |



| | | |
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| | | <p>months. The duration of the study and research period in the Consorzio is fixed at six months.</p> <p>Scientific supervisor: Prof. Stefano MAGAGNOLI – University of Parma</p> |
| 1 | <p>Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company IRES Piemonte – Istituto di Ricerche Economico Sociali CUP D92J23000310004</p>  | <p>Tax gap in local taxes: the role of intermunicipal cooperation and the IT service management (no.16)</p> <p>Tax gap in local taxes is usually higher than the gap in national taxes. In fact, when compared to central administrations, municipalities seem to be characterized by lower efficiency in combating tax evasion. It is likely that assessment and tax collection at the municipal level is more efficient and effective above a certain dimensional threshold. As a result, small-sized municipalities created a common and unique Tax Office to manage assessment and tax collection within the context of intermunicipal cooperations (such as Unioni di Comuni). The candidate is required to create a database including the tax gap of Italian local taxes and tariffs. The database will be merged with a database of Italian municipalities including socio-economic characteristics and the information on intermunicipal cooperation (and the exact dates of creation and dissolution). By means of appropriate econometric tools, the research work will investigate whether a municipality that joins an Unione di Comuni is successful in diminishing the tax gap of local taxes and tariffs, with a focus on the effect on the different local taxes and tariffs and socioeconomic characteristics of the municipality. Moreover, the database will differentiate between municipalities adopting pay-as-you throw systems against municipalities adopting conventional systems. The adoption of pay-as-you-throw systems might have helped municipalities in assessment and collection activities. The candidate will use appropriate econometric methods to test whether the pay-as-you-throw systems diminished the level of local tax or tariff evasion. The output of this research work is of utmost importance as it allows municipalities and local authorities to exert actual autonomy through the collection of adequate local fiscal resources. The PhD student is required to complete a study and research stay abroad of at least 6 months plus a period of additional six months at the research institute IRES Piemonte.</p> <p>Scientific supervisor: Prof. Leonzio RIZZO – University of Ferrara</p> |

| ADMISSION PROCEDURES | | |
|---|---|----------------|
| <p>Assessment of QUALIFICATIONS: up to 75 points (a minimum score of 50 points shall be required to be admitted to the Oral Exam)</p> <p>ORAL EXAM: up to 45 points</p> <p>Minimum score for ELIGIBILITY: 70/120</p> | | |
| Foreign Language | <p>Language the fluency of which shall be assessed during the Oral Exam</p> <p>The evaluation of the knowledge of this language will be oral and will consist in presenting a part of the research project in English</p> | 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 or in isolation / quarantine for COVID-19 virus infection. 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 | 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) <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , 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)

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|---------------------------------------|---|------------------------|
| 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 | Up to 12 points |



| | (masters, advanced courses, at least two-monthly training courses provided by university-level training institutions or bodies); didactic, seminar or university training experiences. | |
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| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | 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 | <ul style="list-style-type: none">o knowledge of the foreign language: max 10 pointso research project presentation: max 35 points | Up to 45 points |














| SCHEDULE OF THE ADMISSION EXAMS | | |
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| 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 | DATE | 18 September 2023 (with possible extension in the following days) |
| | TIME | 09:00 AM (Italian Time) |
| | PLACE | ROOM C Department of Economics and Management Via J.F. Kennedy, 6 43125 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. <u>The PhD research topic will be assigned by the Academic Board.</u> For foreign candidates, the admission examinations may be held in English at the candidate's choice. | |



| PHYSICS | |
|---|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof. Stefano CARRETTA email: stefano.carretta@unipr.it Department of Mathematical, Physical and Computer Sciences |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| TRAINING OBJECTIVES | |
| <p>The PhD in Physics, with a duration of 3 years, is established as a unifying element of the third-level University education in the Physics area. Besides their main commitment to the research activity, students are supposed to spend a substantial part of their training period in attending advanced courses as well as national and international schools. Students are encouraged to spend part of their time abroad, in order to participate in scientific collaborations in their fields of interest, and follow advanced courses in support of their research program. During the three years, teaching commitments are progressively reduced towards a full time engagement in the research activity. The evaluation of the training program is carried out - at the end of each year - through open seminars held by the students. The independent scientific research is expected to lead to publication of results in international, peer reviewed journals. The ultimate goal of the PhD in Physics is a highly specialized scientific training that opens professional carriers in academic institutions and research laboratories, either public or private. The PhD in Physics is divided into three areas corresponding to major groups of disciplines of Physical Sciences covered by the research activity of the Department of Mathematical, Physical and Computer Sciences: Condensed Matter and Materials Physics, Theoretical Physics, Biophysics and Applied Physics.</p> | |
| RESEARCH AREAS (The candidate MUST mandatorily indicate one research topic in the form ANNEX A and submit a RESEARCH PROJECT in the relevant field) | |
| <ul style="list-style-type: none">• Non-perturbative studies of the QCD phase diagram (Bound research topic)• Spin selectivity in chiral molecules and its applications to quantum technologies (Bound research topic)• Laser induced graphene for sensing and energy applications (Bound research topic)• Optoelectronic measurements to characterize and improve materials for photovoltaic applications (Bound research topic)• Emulsions and foams for space exploration• Large deviations and Big Jump effects in stochastic processes• Effect of complex networks sparsification methods on network robustness• Development of a model for RNA folding• A molecular platform for intracellular nitric oxide monitoring• Nonlinear dynamics and structure formation in quantum systems: from the laboratory to the universe• Theoretical models and quantum information processing protocols for molecular qubits | |
| ADMISSION REQUIREMENTS | Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none">– 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION* | |
|-----------------------------------|--|
| | 10 (Modified by Rector Decree n. 1320 of 19.07.2023) |
| With Scholarship | 10 |



| Position with Scholarship | | |
|---|--|---|
| N° | Funding entity | Research Topic, if any |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | --- |
| 1 | Scholarship funded by University of Parma (University funds) | --- |
| 1 | Scholarship co-funded by Fondazione Cariparma | --- |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) (Modified by Rector Decree n. 1320 of 19.07.2023) | | |
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Department of Mathematical, Physical and Computer Sciences Project ERC SYG "CASTLE" CUP D93C22001170006  | Spin selectivity in chiral molecules and its applications to quantum technologies |
| 1 | Scholarship funded by INFN – The Italian National Institute for Nuclear Physics | Non-perturbative studies of the QCD phase diagram |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000170006     | Laser induced graphene for sensing and energy applications |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000170006     | Optoelectronic measurements to characterize and improve materials for photovoltaic applications |
| 1 | PhD scholarship funded within the PNRR research program called "National Quantum Science and Technology Institute - NQSTI "Extended partnerships Investment 1.3 creation of " related to the notice Partnerships extended to universities, research centers, companies for the financing of basic research projects" - Notice 341 of 15/03/2022 - funded by the European Union – NextGenerationEU (CUP D93C22000940001)     | Theoretical models and quantum information processing protocols for molecular qubits |

| ADMISSION PROCEDURES | | |
|---|--|---------|
| Assessment of QUALIFICATIONS: up to 50 points (a minimum score of 20 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 | 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

| | |
|--|--|
| 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 countersigned 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 and Statement of Research interest | A brief text (max 3 pages) in English. The candidates must describe their research interests and indicate the preferred topic among those listed above, possibly suggesting a second choice theme. For the first choice theme, candidates must outlay an original research project including a concise state of the art, the relevance of the problem and the expected results. Candidates are warmly invited to contact the potential supervisors listed at http://smfi.unipr.it/it It <u>does not represent a constraint with respect to the following choice of the doctoral thesis</u> , 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 (only qualifications attested by a document drawn up in Italian or in English)

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|-----------------------------|--|
| Other qualifications | Any other document certifying the applicant's training and abilities. Publications, awards, presentations to scientific meeting, stages, fellowships, reference letters, etc |
|-----------------------------|--|

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. | Up to 25 points |
| Graduation thesis | Consistency of the Master' Degree thesis with the doctoral program research topics. The assessment will make use of the information contained in the abstract (max 1 page) of the thesis (although not yet discussed, in this case countersigned by the thesis supervisor) and in the curriculum, where a brief description of the thesis work should be reported. | Up to 5 points |
| Research Project and Statement of Research Interest | The project will be evaluated in relation to its scientific value and originality. The motivation expressed by the candidate in relation to the themes of the research doctorate will be evaluated | Up to 10 points |



| | | |
|---|---|------------------------|
| Other qualifications | Publications, awards, presentations to scientific meeting, stages, fellowships, reference letters, etc | Up to 10 points |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | POINTS |
| 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 | <ul style="list-style-type: none">○ preparation on the issues related to the Master's degree thesis○ research project presentation○ general knowledge of issues connected to the PhD course○ knowledge of the foreign language | 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> in the days preceding the date of the Oral Exam.



| | | |
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| ORAL EXAM | DATE | 12 September 2023 (with possible extension in the following days) |
| | TIME | 11:00 AM (Italian time) The schedule of oral examinations will appear at http://smfi.unipr.it/it |
| | PLACE | Department of Mathematical, Physical and Computer Sciences PHYSICS BUILDING Parco Area delle Scienze, 7/A – Campus 43124 PARMA - ITALY |
| ALTRE INDICAZIONI | The Oral Exam will focus on the description of the research work carried out to prepare the Graduation Thesis for the Laurea Magistrale/Specialistica, as well as on the research project that the candidate proposes to carry out within the research topics of the Research Doctorate Program in Physics at the Department of Mathematical, Physical and Computer Sciences of the University of Parma which are described at http://smfi.unipr.it/it In the application to participate in the competitive examination, the candidate must choose and specify one research topic. The candidate may indicate a second priority choice. For foreign candidates, the admission examinations may be held in English at the candidate's choice. | |



| CIVIL ENGINEERING AND ARCHITECTURE | |
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| CYCLE | XXXIX |
| COORDINATOR | Prof. Andrea SPAGNOLI email: andrea.spagnoli@unipr.it Department of Engineering and Architecture |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| TRAINING OBJECTIVES | |
| To develop specialized skills in the following fields: | |
| <ol style="list-style-type: none">(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) | |
| <ul style="list-style-type: none">• 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: <ul style="list-style-type: none">– 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION | | 9 |
|---------------------------------------|---|------------------------|
| With Scholarship | | 8 |
| Reserved to holders of Research Grant | | 1 |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | --- |
| 1 | Scholarship funded by University of Parma (University funds) | --- |
| 1 | Scholarship co-funded by Fondazione Cariparma | --- |



| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | |
|--|--|--|
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Department of Engineering and Architecture | FAME - Floods Active Management during Emergency |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 7 “Digital and environmental transitions”) CUP D92J23000110006  | Urban Strategic Design as a tool for planning scenarios for urban green infrastructure in Italy |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000180006  | Reliability aspects on the residual service life estimation of as built and repaired RC and PC structures subjected to corrosion phenomena |
| Position reserved to HOLDERS OF RESEARCH GRANT | | |
| N° | Subject area of the research | |
| 1 | Hydraulic structures, maritime engineering and hydrology (ICAR/02): Machine Learning Methods in Computational Fluid Dynamics for speedup of physically-based numerical solvers | |

| ADMISSION PROCEDURES | | |
|---|---|----------------|
| <p>Assessment of QUALIFICATIONS: up to 70 points (a minimum score of 40 points shall be required to be admitted to the Oral Exam)</p> <p>ORAL EXAM: up to 50 points</p> <p>Minimum score for ELIGIBILITY: 70/120</p> | | |
| 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 | | |
| <p>Applicants admitted to the ORAL EXAM can take it either in PRESENCE or REMOTELY in Audio and Video Teleconference</p> <p>(Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)</p> | | |
| 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) | |



| | | |
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| 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). | |
| Statement of Research Interest | 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 | |
| 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 . It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project. <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , 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) | | |
| 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. Mandatory: Statement of Research Interest Not mandatory: Reference Letters | Up to 30 points |
| Graduation mark | --- | Up to 5 points |
| Average of the exam marks (if the candidate will attain the degree no later than 31st October 2023) | --- | Up to 5 points |
| Graduation thesis | 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) | Up to 6 points |
| Research Project | | Up to 25 points |
| Scientific Publications | | Up to 4 points |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | POINTS |
| The ORAL EXAM includes the presentation of the research project and is intended to | <ul style="list-style-type: none"> ○ knowledge of the foreign language ○ research project presentation | Up to 50 points |



| | | |
|--|---|--|
| assess the suitability of the applicant to pursue scientific research as well as the general knowledge of research areas related to the PhD course | ○ general knowledge of research areas related to the PhD course | |
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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 | DATE | 11 September 2023 |
| | TIME | 9:00 AM (Italian Time) (with possible extension to the afternoon) |
| | PLACE | Department of Engineering and Architecture Meeting Room – Building 10 Parco Area delle Scienze, 181/A – Campus Universitario - 43124 PARMA |
| ALTRE INDICAZIONI | <p>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.</p> <p>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.</p> <p>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).</p> <p>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.</p> | |



| 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 | 01/11/2023 |
| 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 | |
| <ul style="list-style-type: none">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 physicsIndustry 4.0 and future evolution | |
| ADMISSION REQUIREMENTS | Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none">– 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION* | | 15 |
|---|---|------------------------|
| (Modified by Rector Decrees n. 1320 of 19.07.2023 and n. 1397 of 28.07.2023) | | |
| With Scholarship | | 12 |
| Reserved to holders of Research Grant | | 1 |
| Reserved for employees of affiliated companies or institutions engaged in highly qualified activities (with salary maintenance) | | 2 |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | --- |
| 1 | Scholarship funded by University of Parma (University funds) | --- |
| 1 | Scholarship co-funded by Fondazione Cariparma | --- |



| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) (Modified by Rector Decrees n. 1320 of 19.07.2023 and n. 1397 of 28.07.2023) | | |
|---|--|---|
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship funded by EMILIA ROMAGNA REGION  The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna | A knowledge-based Design for Disassembly methodology to enhance the circular economy of mechatronic products |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J2300019000  | Circular materials for eco-friendly packaging |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000190006  | Circular economy models, based on new patterns of collection, reuse, regeneration and recycling of textile waste, through the use of modern ICT technologies |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000190006  | Development of composites for multifunctional elements for aerospace applications, through the synergetic use of traditional and innovative materials, such as carbon nanotube fibres |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Casappa S.p.A. CUP D92J23000320004  | Development of experimental and numerical methodologies to increase the performance of positive displacement hydraulic machines |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company AIRBUS Operations SAS CUP D92J23000320004  | Value Driven Design Methodology in the Conceptual Development of Aircraft Architectures |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company GEA Mechanical Equipment Italia S.p.A. CUP D92J23000320004  | Development and study of an innovative predictive maintenance system for industrial plants and production lines based on the integration of local acquisition systems and sensor arrays by complex algorithms with target variables |



| Position reserved to HOLDERS OF RESEARCH GRANT | |
|---|--|
| N° | Subject area of the research |
| 1 | ING-IND/17 Mechanical Industrial Plants “Environmental Impact Analysis using LCA methodology of packaging technologies, with a main focus on the food sector, in order to find recyclable solutions with a low global impact in line with the principles and timelines dictated by the European Union” |
| Position reserved for EMPLOYEES of affiliated companies or institutions engaged in highly qualified activities (with salary maintenance) | |
| N° | Company/Institution |
| 1 | Reserved to employees of company Maffei Engineering S.p.A. for the project “Modelling and numerical implementation of advanced models for the calculation and testing of special structures characterised by non-linear behaviour, both geometric and constitutive” |

| 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 | | |
| 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 | <p>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).</p> <p>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).</p> <p><u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u>, which will be assigned by the Academic Board.</p> | |
| LIST OF EVALUABLE QUALIFICATIONS (only qualifications attested by a document drawn up in Italian or in English) | | |
| Curriculum Vitae et studiorum | <p>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</p> <p>The marks of the exams and the graduation mark will be the most relevant element of the evaluation.</p> | Up to 25 points |
| Graduation thesis | Consistency of the Master's Degree thesis with the doctoral program research topics | Up to 10 points |
| Research Project | <p>Points relating to the research project shall be allocated on the basis of the following criteria:</p> <ul style="list-style-type: none"> ○ Scientific value and or originality of the proposal ○ description and structure of the proposal ○ proposal feasibility | Up to 15 points |
| 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. | Up to 5 points |
| 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 | Up to 5 points |
| Reference Letters | <p>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.</p> <p>They must be sent directly by the signer to the address e-mail: elisa.pasquinelli@unipr.it indicating in the subject "Letter of presentation - Doctorate in Industrial Engineering (The candidate, therefore, must not upload them through the procedure of the competition online registration</p> | Up to 5 points |
| 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 | Up to 2 points |
| Other experiences (training, work, research, teaching, etc.) | <ul style="list-style-type: none"> – 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 – 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 |



| ORAL EXAM | | |
|---|--|------------------------|
| Interview Program | Evaluation CRITERIA | 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 | <ul style="list-style-type: none">○ research project presentation○ general knowledge of issues connected to the PhD course○ knowledge of foreign languages | 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 in the days preceding the date of the Oral Exam. | | |
| ORAL EXAM | DATE | 6 September 2023 (with possible extension in the following days) |
| | TIME | 09:00 AM (Italian Time) |
| | PLACE | Meeting Room – Building 10 Department of Engineering and Architecture Parco Area delle Scienze, 181/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. <u>The PhD research topic will be assigned by the Academic Board.</u> For foreign candidates, the admission examinations may be held in English at the candidate's choice. | |



| MOLECULAR MEDICINE | |
|---|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof. Prisco MIRANDOLA email: prisco.mirandola@unipr.it Department of Medicine and Surgery |
| DURATION | 3 years |
| TRAINING OBJECTIVES | |
| The Research Doctorate Course in Molecular Medicine aims to provide PhD students with the cultural and methodological skills necessary to carry out high-profile research in different scientific disciplines in the biomedical field, integrated in an interdisciplinary perspective. The acquired training will allow PhDoctors in Molecular Medicine to employ themselves in high level research and development activities in Universities, research centers and industries engaged in the medical, biological and biotechnological sectors.) | |
| RESEARCH AREAS | |
| <ul style="list-style-type: none"> • Oral sciences with a specific interest in innovative diagnostic techniques (e.g. saliva evaluation) for dental, periodontal, oral mucosal and jawbone diseases) • Molecular mechanisms of tumor progression. • Cross-species translational development of a multimodal tumor microenvironment-/cancer cell-directed immunotherapeutic agent for sarcoma treatment • Oral microbiology • Theranostics in gastric cancer through immunotargeting of the CSPG4 cell surface proteoglycan • Inflammatory signaling in hematopoiesis: morphology, phenotype and molecular markers • New approaches to tissue regeneration in the oro-maxillofacial region, with emphasis on the hard and soft tissues of the oral cavity and peri-oral area. • Synthesis and characterization of three-dimensional composite and implantable biomaterials enriched with bioactive molecules • Telemedicine App able to connect all the Breast Unit specialists with the patient using smartphone, PC and tablet. • Growth, maturation, training load and risk of injury in young soccer players • Testing and evaluation of implantable surfaces regarding inflammatory cytokines release during implant integration. • Genetics of channelopathies | |
| ADMISSION REQUIREMENTS | Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"> – 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION | | 12 |
|----------------------------------|---|--|
| With Scholarship | | 12 |
| Position with Scholarship | | |
| N° | <i>Funding entity</i> | <i>Research Topic, if any</i> |
| 4 | Scholarship funded by University of Parma (Ministerial funds) | 1. Oral sciences with a specific interest in innovative diagnostic techniques (e.g. saliva evaluation) for |



| 1 | Scholarship co-funded by Fondazione Cariparma | <p>dental, periodontal, oral mucosal and jawbone diseases)</p> <ol style="list-style-type: none"> 2. Molecular mechanisms of tumor progression. 3. Cross-species translational development of a multimodal tumor microenvironment-/cancer cell-directed immunotherapeutic agent for sarcoma treatment 4. Oral microbiology 5. Inflammatory signaling in hematopoiesis: morphology, phenotype, and molecular markers |
|--|---|---|
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | |
| N° | <i>Funding entity</i> | <i>BOUND RESEARCH TOPIC</i> |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Medicine and Surgery (Prof. Paolo Vescovi funds) | New approaches to tissue regeneration in the oro-maxillofacial region, with emphasis on the hard and soft tissues of the oral cavity and peri-oral area. |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Medicine and Surgery (Prof. Guido Maria Macaluso Funds) | Synthesis and characterization of three-dimensional composite and implantable biomaterials enriched with bioactive molecules |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by COMT – Interdepartmental Center for Molecular and Translational Oncology | Theranostics in gastric cancer through immunotargeting of the CSPG4 cell surface proteoglycan |
| 1 | <p>Scholarship funded by EMILIA ROMAGNA REGION</p>  <p>The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</p> | Telemedicine App able to connect all the Breast Unit specialists with the patient using smartphone, PC and tablet |
| 1 | <p>Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Parma Calcio 1913 S.r.l.</p>  | Growth, maturation, training load and risk of injury in young soccer players |
| 1 | <p>Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Myplant Italia S.r.l.</p>  | Testing and evaluation of implantable surfaces regarding inflammatory cytokines release during implant integration. |
| 1 | <p>Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company BIOTRONIK Italia S.p.A.</p>  | Genetics of channelopathies |



ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 60 points
(a minimum score of 10 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 by an oral examination and will consist in translating of a scientific text. | ENGLISH |
|-------------------------|---|----------------|

ORAL EXAMINATION INDICATION

THE ORAL EXAM TAKES PLACE IN THE PRESENCE. (*The REMOTE ORAL EXAM is allowed for candidates only in isolation / quarantine for COVID-19 virus infection or due to illness / hospitalisation certified by a medical report. To this end, candidates must submit a **motivated REQUEST** as per the model attached to the competition announcement)

* **Modified with the Rector Decree n. 1397 of 28.07.2023**

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 | 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) <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , 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 (up to 10 points). It will also be evaluated the exam marks and the graduation mark (up to 5 points). Score related to the final mark: - 110 with honours (magna cum laude): 5 points; - 110: 3 points; | Up to 15 points |
|--------------------------------------|--|------------------------|



| | | |
|---|---|------------------------|
| | <p>- From 100 to 109: 0,2 point for each mark unit</p> <p>Score related to the average of the exam marks (only for the candidate will attain the degree no later than 31 October 2023):</p> <ul style="list-style-type: none"> - > 28/30: 5 points - > 27/30: 3 points - > 25/30: 1 point | |
| Graduation thesis | Consistency with the research themes of the PhD course and quality of the research methodology | Up to 7 points |
| Research Project | <p>Points relating to the research project:</p> <ul style="list-style-type: none"> ○ Scientific value and originality of the proposal: max 2.5 points ○ articulation of the proposal: max 2.5 points ○ proposal feasibility: max 2.5 points ○ consistency with the research themes of the PhD course: max 2.5 points | Up to 10 points |
| Statement of Research Interest | 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 9 points |
| Scientific Publications | <p>Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.</p> <p>Evaluation of the candidate's contribution and the editorial location of the product.</p> | Up to 9 points |
| Reference Letters | A maximum of 3 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 candidate must uploading them through the procedure of the competition online registration | Up to 3 points |
| 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 | Up to 5 points |
| Other experiences (training, work, research, teaching, etc.) | <ul style="list-style-type: none"> – 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 – 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 2 points |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | 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 | <ul style="list-style-type: none"> ○ knowledge of the foreign language: max 4 points ○ ability to argue the project proposal: max 28 points ○ knowledge of chosen topic: max 28 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 | DATE | 14 September 2023 |
| | TIME | 10:00 AM (Italian Time) |
| | PLACE | Department of Medicine and Surgery Integrated Biotechnological Plexus Via Volturno, 39 – 43125 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. <u>The PhD research topic will be assigned by the Academic Board.</u> For foreign candidates, the admission examinations may be held in English at the candidate's choice. | |



| NEUROSCIENCES | |
|---|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof. Luca BONINI email: luca.bonini@unipr.it Department of Medicine and Surgery |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| CURRICULA | 1. Neuroscience 2. Behavioural Biology |
| TRAINING OBJECTIVES | |
| <ul style="list-style-type: none">• 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 | |
| <ul style="list-style-type: none">• Integrated neuroscience: comparative neurophysiology and neuroethology, cognitive and social neuroscience, cognitive psychology, psychology of perception and action, psychobiology, psychophysiology.• Behavioral biology: biological basis of social, competitive, and parental behavior, gene/environment interactions on the development of behavior, cognitive ethology and emotions in animals and humans | |
| ADMISSION REQUIREMENTS | Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none">– 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION * | | |
|---|---|------------------------|
| (Modified by Rector Decrees n. 1320 of 19.07.2023 and n. 1397 of 28.07.2023) | | 8 |
| With Scholarship | | 8 |
| Positions with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | --- |
| 1 | Scholarship funded by University of Parma (University funds) | --- |
| 1 | Scholarship co-funded by Fondazione Cariparma | --- |



| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) (Modified by Rector Decrees n. 1320 of 19.07.2023 and n. 28.07.2023) | | |
|--|--|---|
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | <p>PhD scholarship funded within the PNRR research program called "MNESYS - A multiscale integrated approach to the study of the nervous system in health and disease" related to the notice Extended partnerships Investment 1.3 creation of "Partnerships extended to universities, research centers, companies for the financing of basic research projects" - Notice 341 of 15/03/2022 - funded by the European Union – NextGenerationEU CUP D93C22000930002</p> | <p>Mother, placenta and foetus cross-talk in neonatal hypoxic ischemic injury: new biomarkers modulated during different heling time point.</p> |
| 1 | <p>Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Lombardini22 S.p.A. CUP D92J23000390004</p> | <p>Investigation of the neural activity to understand the effect of virtual environments on social cognition</p> |
| 1 | <p>Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Fondazione IRCCS Istituto Neurologico "Carlo Besta" CUP D92J23000390004</p> | <p>Structural and functional characterization with magnetic resonance imaging of neural mechanisms underlying neurological disease</p> |

| ADMISSION PROCEDURES | | |
|--|---|----------------|
| <p>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</p> | | |
| Foreign Language | <p>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.</p> | ENGLISH |
| ORAL EXAMINATION INDICATION | | |
| <p>THE ORAL EXAM TAKES PLACE IN THE PRESENCE. (The REMOTE ORAL EXAM is allowed for candidates residing abroad or temporarily abroad for study / work reasons or in isolation / quarantine for COVID-19 virus infection. To this end, candidates must submit a motivated REQUEST as per the model attached to the competition announcement)</p> | | |
| 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. <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , 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. | Up to 40 points |
| Curriculum Vitae et Studiorum will be evaluated based on the following qualifications and scores: | | |
| Graduation mark | 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 | Up to 10 points |
| Average of the exam marks (if the candidate will attain the degree no later than 31 October 2023) | 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 | Up to 10 points |
| Graduation thesis | Congruence with the research topics of the PhD course and methodological quality of the experimental or bibliographic work. ○ Experimental thesis related to the PhD program of Neuroscience: 10 points ○ Non-experimental and relevant thesis: 5 points ○ Thesis not relevant: 0 points | Up to 10 points |




| | | |
|---------------------------------------|---|------------------------|
| Research Project | Project evaluation score: <ul style="list-style-type: none">○ scientific value: 2.5 points○ structure of the proposal: 2.5 points○ proposal feasibility in relation to the specific research topics of the PhD course: 2.5 points○ originality of the proposal: 2.5 points | Up to 10 points |
| Statement of Research Interest | Short text – maximum 1 page – in Italian or in English | Up to 2 points |
| Scientific publications | <ul style="list-style-type: none">○ Each article in a peer-reviewed international journal: 1 point○ Each book chapter: 0.4 points○ abstracts/papers/posters presented at conferences or symposia: 0.3 points <p>The same categories are half valued if in Italian. The points of the publications are normalized for post-graduate years, that is, divided by the numbers of post-graduate years.</p> | Up to 5 points |
| Other Academic qualifications | Other academic qualifications consistent with the research topics of this PhD program | Up to 3 points |



| PSYCHOLOGY | |
|--|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof.ssa Ada CIGALA email: ada.cigala@unipr.it Department of Humanities, Social Sciences and Cultural Industries |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| TRAINING OBJECTIVES | |
| The main aim of the PhD course is to train qualified researchers capable of planning and carrying out basic research and research applied to clinical, social, educational, health and organizational contexts. | |
| RESEARCH AREAS | |
| <ul style="list-style-type: none"> • Psychosocial processes in complex societies • Development and learning processes in typical and atypical contexts • Processes involved in clinical and social intervention | |
| ADMISSION REQUIREMENTS | Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"> – 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION | | 4 |
|--|--|---|
| With Scholarship | | 4 |
| Position with Scholarship | | |
| N° | <i>Funding entity</i> | <i>Research Topic, if any</i> |
| 1 | Scholarship co-funded by Fondazione Cariparma | --- |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | |
| N° | <i>Funding entity</i> | <i>BOUND RESEARCH TOPIC</i> |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Humanities, Social Sciences and Cultural Industries | Modelling of interventions for the educational professions |
| 1 | Scholarship funded by EMILIA ROMAGNA REGION  | The Stories of Exclusion and Deviance. Re-thinking the Network of Services for the prevention and contrast of juvenile delinquency in the Parma area and Province (EDeRS) |



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| | The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna | |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000250006  | Processes of patrimonialization of migrant "cultures" in the context of the Parma Apennines, between old and new migrations. |

| ADMISSION PROCEDURES | | |
|---|--|----------------|
| <p>Assessment of QUALIFICATIONS: up to 60 points (a minimum score of 35 points shall be required to be admitted to the Oral Exam)</p> <p>ORAL EXAM: up to 60 points</p> <p>Minimum score for ELIGIBILITY: 70/120</p> | | |
| 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 |
| <p>ORAL EXAMINATION INDICATION</p> <p>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 or in isolation / quarantine for COVID-19 virus infection. To this end, candidates must submit a motivated REQUEST as per the model attached to the competition announcement)</p> | | |
| <p>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</p> | | |
| 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 | <p>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):</p> <p>University that granted the degree - Type of degree (first cycle/second cycle/single cycle)</p> <p>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).</p> | |



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| Research Project | <p>The research project shall consist of a maximum of 2500 words, be written in Italian or in English, and it must be an original research project (inedited, unpublished, personally developed by the candidate) and be structured as follows: theoretical introduction, relevance of the problem, research design and methodology, expected results and discussion, essential bibliography (maximum 5 bibliographic entries)</p> <p>The Research Project <u>does not represent a constraint with respect to the following choice of the doctoral thesis</u>, that shall be defined together with the supervisor and approved by the Academic Board.</p> | |
| LIST OF EVALUABLE QUALIFICATIONS (only qualifications attested by a document drawn up in Italian or in English) | | |
| Graduation mark Or Average of the exam marks (if the candidate will attain the degree no later than 31 October 2023) | <p>Score related to the final mark:</p> <ul style="list-style-type: none"> - 110 and 110 with honours (magna cum laude): 10 points; - From 100 to 109: 8 points - Under 99: 5 points <p>Score related to the average of the exam marks:</p> <ul style="list-style-type: none"> - 30/30: 10 points - From 27/30 to 29/30: 8 points; - Under 26/30: 5 points | Up to 10 points |
| Abstract of the Graduation thesis | Consistency with the research themes of the PhD course and quality of the research methodology | Up to 5 points |
| Research Project | <ul style="list-style-type: none"> ○ Scientific value and internal consistency: 20 points (aspects that will be considered: validity of the theoretical formulation, relevance of the problem faced, clarity of the objectives and appropriateness of the methodology, consistency of the expected results and relative discussion) ○ Formal and grammatical aspects: 4 points ○ Congruence with the research themes of the PhD course: 4 points | Up to 28 points |
| The candidate's Curriculum Vitae et Studiorum will be evaluated based on the following qualifications and scores: | | |
| Scientific publications | Articles on national and international journals, papers presented at conferences or symposia, book chapters etc | Up to 10 points |
| 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 programme | Up to 5 points |
| Other experiences | study or research experiences abroad, prizes, scholarships and research grants (documented) | Up to 2 points |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | POINTS |
| The ORAL EXAM focuses on the knowledge of the English language, on the discussion of the research project, on the knowledge related to the research themes of the PhD programme | <ul style="list-style-type: none"> ○ knowledge of foreign languages (English): 10 points ○ discussion and argumentation of the projec: 35 points ○ knowledge on at least one of the themes of the PhD programme: 15 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.

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| ORAL EXAM | DATE | 13 September 2023 |
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UNIVERSITÀ DI PARMA





| | | |
|--------------------------|---|---|
| | TIME | 09:30 AM (Italian Time) |
| | PLACE | ROOM A POLO DIDATTICO Via del Prato – 43121 PARMA - ITALY |
| ALTRE INDICAZIONI | <p>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. <u>The PhD research topic will be assigned by the Academic Board.</u></p> <p>For foreign candidates, the admission examinations may be held in English at the candidate's choice.</p> | |



| 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 | 01/11/2023 |
| PARTNER INSTITUTION | <ul style="list-style-type: none">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 | |
| <ul style="list-style-type: none">Photovoltaic devicesFunctional materialsNanodiagnosticsNanostructured materialsSupramolecular sensors and devicesSemiconductive massive crystalsLow dimensionality semiconductive structuresSelf-healing and self-diagnostic polymersCeramic and composite materialsMagnetic materials and magneto-refrigerationVitrimers | |
| ADMISSION REQUIREMENTS | Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none">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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION* | | 17 |
|---|----------------|------------------------|
| (Modified by Rector Decree n. 1320 of 19.07.2023) | | |
| With Scholarship | | 17 |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |



| 2 | Scholarship funded by University of Parma (Ministerial funds) | --- |
|--|--|---|
| 1 | Scholarship funded by The Italian National Research Council C.N.R. - IMEM | Study of the interaction of X-ray radiation on nanosystems for biomedical applications |
| 1 | Scholarship funded by The Italian National Research Council C.N.R. - ISSMC | Eco-design of hybrid ceramic materials for water treatment from vegetable matrices and waste biomass |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) (Modified by Rector Decree n. 1320 of 19.07.2023) | | |
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship funded by University of Parma (Ministerial funds) and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability (funds PRIN2022 COntrolled Shuttling inside artificial MOlecular tubes COSMO) | Controlling molecular and ionic transport across biomimetic membranes through artificial molecular tubes |
| 1 | Scholarship funded by University of Parma (Ministerial funds) and co-financed by The Italian National Research Council C.N.R. - IMEM | Drug delivery systems based on unconventional materials and releases mechanisms |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by The Italian National Research Council C.N.R. - ISSMC | Synthesis, characterization and modeling of thin multifunctional ceramic coatings for industrial applications |
| 1 | Scholaship funded by EMILIA ROMAGNA REGION  The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna | Nanostructured Hybrid Systems for the Encapsulation and Use of Microbiomes |
| 1 | Scholarship financed with funds under the PNRR–Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000200006  | Preparation of hierarchically porous polymers with adsorption and separation properties towards industrially relevant gases through the introduction of macrocycles with preorganized cavities. |
| 1 | Scholarship financed with funds under the PNRR–Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000200006  | Fiber-reinforced ceramic composites for aerospace applications |
| 1 | Cofinanziata con fondi a valere sul PNRR – Missione 4 componente 2 (D.M. 117/2023) e cofinanziata dall'Impresa MEMC Electronic Materials S.p.A. CUP D92J23000340004  | Energy and environmental valorization of sludge from the purification of industrial wastewater from the processing of silicon wafers |



| | | |
|---|--|--|
| 1 | Cofinanziata con fondi a valere sul PNRR – Missione 4 componente 2 (D.M. 117/2023) e cofinanziata dall'Impresa Industrie Bitossi S.p.A. CUP D92J23000340004 | High-efficiency sintering of B4C-based non-oxide ceramics for applications in severe environments |
| | | |
| 1 | Cofinanziata con fondi a valere sul PNRR – Missione 4 componente 2 (D.M. 117/2023) e cofinanziata dall'Impresa NanoPhoria S.r.l. CUP D92J23000340004 | Calcium phosphate nanoparticles for the development of formulations capable of selectively releasing cardio-specific biomolecules. |
| | | |
| 1 | Cofinanziata con fondi a valere sul PNRR – Missione 4 componente 2 (D.M. 117/2023) e cofinanziata dall'Impresa POLYGLASS S.p.A. CUP D92J23000340004 | Self-healing elastomeric polyolefins |
| | | |
| 1 | Cofinanziata con fondi a valere sul PNRR – Missione 4 componente 2 (D.M. 117/2023) e cofinanziata dall'Impresa ULISSE Biomed S.p.A. CUP D92J23000340004 | Molecular sensors based on programmable DNA nanotechnology for the detection of proteins of clinical interest |
| | | |
| 1 | Cofinanziata con fondi a valere sul PNRR – Missione 4 componente 2 (D.M. 117/2023) e cofinanziata dall'Impresa SABIC Global Technology B.V. CUP D92J23000340004 | Innovative flame retardants for polyolefins |
| | | |
| 1 | Cofinanziata con fondi a valere sul PNRR – Missione 4 componente 2 (D.M. 117/2023) e cofinanziata dall'Impresa Bormioli Pharma S.p.A. CUP D92J23000340004 | Development and characterization of strengthening technologies of pharma glass |
| | | |

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 or in isolation / quarantine for COVID-19 virus infection. 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). |

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. | Up to 20 points |
| Graduation mark | 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 |
| Average of the exam marks (if the candidate will attain the degree no later than 31 October 2023) | 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 |
| Graduation thesis | 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 |



| | | |
|---|---|------------------------|
| Statement of Research Interest | 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 |
| 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 | | |
| Interview Program | Evaluation CRITERIA | POINTS |
| 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. | <ul style="list-style-type: none">○ knowledge of foreign languages: 10 points○ general knowledge of issue connected to the Master's thesis: 25 points○ 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 | DATE | 15 September 2023 (with possible extension in the following days) |
| | TIME | 09:00 AM (Italian Time) |
| | PLACE | Department of Chemistry, Life Sciences and Environmental Sustainability CHEMISTRY BUILDING Parco Area delle Scienze, 17/A – Campus 43124 PARMA - ITALY |
| ALTRE INDICAZIONI | | <p>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. <u>The PhD research topic will be assigned by the Academic Board.</u></p> <p>For foreign candidates, the admission examinations may be held in English at the candidate's choice.</p> |



| CHEMICAL SCIENCES | |
|---|---|
| CYCLE | XXXIX |
| 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 | 01/11/2023 |
| 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 | |
| <ul style="list-style-type: none">• 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: <ul style="list-style-type: none">– 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION | | 13 |
|----------------------------------|---|--|
| With Scholarship | | 13 |
| Without Scholarship | | |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | <ul style="list-style-type: none">• Development of bioorthogonal methodologies for the realization of link-and-release systems and their application to supramolecular protein realization• A bio-inorganic approach to the design and development of substances with antibacterial, antifungal, antiviral, antiparasitic and anticancer properties |



| | | <ul style="list-style-type: none"> Development of innovative analytical methods for assessing the quality and stability of materials in contact with food to be proposed as new models for "sustainable food" |
|--|--|--|
| 1 | Scholarship funded by University of Parma (Ministerial funds) and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability | Characterization of Protein Aggregation with Linear-Non-Linear Optical Spectroscopy and Micro-Spectroscopy |
| 1 | Scholarship funded by University of Parma (Ministerial funds e University funds) and co-financed by the Department of Chemistry, Life Sciences and 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) | Multi-sensor platforms for the simultaneous determination of allergens for food safety |
| 1 | Scholarship funded by University of Parma (Ministerial funds e University funds) and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability (Project 21GRD07 PlasticTrace - Metrological traceability of measurement data from nano to small-microplastics for a greener environment and food safety, Call: European Partnership on Metrology Call 2021 – Green Deal programme of EURAMET. CUP: D53C22002870006) | Integrated analytical strategies for the characterization and determination of emerging contaminants of food safety concern |
| 1 | Scholarship co-funded by Fondazione Cariparma | Design and synthesis of multifunctional derivatives for inhibition, detection, transport of medically relevant biomacromolecules and investigation of their properties |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability (Investimento: PNRR – M2C2 Investimento 3.5 PNRR ART-2-HYDROGEN "ENZIMI ARTIFICIALI PER LA PRODUZIONE FOTOCATALITICA DI IDROGENO IN BATTERI FOTOSINTETICI" ID: RSH2A_000009, CUP F97G22000270006) | Artificial Redox-active Metalloproteins based on the SPY technology |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability (Investimento: PNRR – M2C2 Investimento 3.5 PNRR ART-2-HYDROGEN "ENZIMI ARTIFICIALI PER LA PRODUZIONE FOTOCATALITICA DI IDROGENO IN BATTERI FOTOSINTETICI" ID: RSH2A_000009, CUP F97G22000270006) | Development of photoactive systems for the production of hydrogen gas combining visible light and hybrid peptide mimics |
| | | |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | |
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 "PNRR Research") CUP D92J23000210006 | Innovative one-part alkaline activated materials (AAM) to be used as binder in sustainable constructions |



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| | | |
| 1 | Scholarship financed with funds under the PNRR – Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000210006 | Integrated approaches with low environmental impact for the design and preparation of responsive crystalline materials |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Chiesi Farmaceutici S.p.A. CUP D92J23000350004 | Exploration of amorphous and co-amorphous state of drugs to enhancing stability and solubility of APIs for pulmonary drug delivery |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Versalis S.p.A. CUP D92J23000350004 | Development of alternative processes for the synthesis of bulk chemicals from decarbonised feedstocks |

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) |
| 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 | 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) <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , 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. Relevance of the academic career as well as postgraduate experiences and other research activities related to Chemical Sciences | Up to 16 points |
| Graduation mark or Average of the exam marks (if the candidate will attain the degree no later than 31 October 2023) | 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 | Up to 5 points |
| Graduation thesis | Consistency of the Master's Degree thesis with the doctoral programme research topics | Up to 10 points |
| Research Project | Score related to the evaluation of the Project based on originality, impact and scientific substantiation. | Up to 2 points |
| Statement of Research Interest | 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 | Up to 3 points |
| Scientific Publications | 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 | Up to 4 points |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | POINTS |
| The ORAL EXAM takes place in Italian or in English for foreign candidates. It includes a discussion of the qualifications presented by the candidate and an assessment of their scientific profile and design skills. | <ul style="list-style-type: none"> ○ 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 ○ knowledge of English is assessed by discussion of topics of research and by understanding of scientific texts. | Up to 80 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 | DATE | 11 September 2023 (with possible extension in the following days) |
| | TIME | 10:00 AM (Italian Time) |
| | PLACE | Department of Chemistry, Life Sciences and Environmental Sustainability CHEMISTRY BUILDING Parco Area delle Scienze, 17/A – Campus 43124 PARMA - ITALY |
| ALTRE INDICAZIONI | <p>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. <u>The PhD research topic will be assigned by the Academic Board.</u></p> <p>It is possible to carry out the admission examination in Italian or in English at the candidate's choice.</p> | |



| FOOD SCIENCE | |
|---|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof.ssa Chiara DALL'ASTA Food and Drug Department email: chiara.dallasta@unipr.it |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| 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 perspective. | |
| RESEARCH AREAS | |
| <ul style="list-style-type: none"> Beneficial effects of fermented food: from raw material fermentation to microbiota and related post-digestion bioactive compounds Nudging targeted population groups towards more sustainable food choices Designing protein-based foods using sustainable processing and formulation strategies Evaluation of nutritionally relevant dietary food bioactives using in vitro and in vivo approaches Microbial ecosystems of foods as a model to study bacterial interactions Female nutrition - eating habits, nutritional status, and major sex-related risk factors at physiological stages of women's live A molecular approach to gluten digestibility: implications for celiac disease Merging untargeted mass spectrometry and advanced bioinformatics for diving into natural compounds chemodiversity and biological role Investigating the association between phenolic metabolites and cardiometabolic health in response to the chronic intake of (poly)phenols Predictive models for personalised dietary advice of (poly)phenol-containing foods Mapping the complexity of diet: circulating metabolites of plant bioactives and the food-microbiome-host interplay Diversity and innovation along the coffee value chain Use of integrated omics methodologies for the characterization of toxinogenic fungi, also in view of the climate change | |
| ADMISSION REQUIREMENTS | Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"> – 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION* | | 13 |
|--|---|---|
| (Modified by Rector Decree n. 1320 of 19.07.2023) | | |
| With Scholarship | | 13 |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | <ul style="list-style-type: none"> Human Nutrition Bioorganic chemistry |



| | | <ul style="list-style-type: none"> • Food Microbiology |
|--|---|--|
| 1 | Scholarship funded by University of Parma (University funds) | <ul style="list-style-type: none"> • Food Technology |
| 1 | Scholarship co-funded by Fondazione Cariparma | <ul style="list-style-type: none"> • Food Chemistry |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) (Modified by Rector Decree n. 1320 of 19.07.2023) | | |
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship funded by Food and Drug Department (Project ERC PREDICT-CARE (Developing tools for the PREDICTion, at individual level, of the CARDiometabolic REsponse to the consumption of dietary (poly)phenols) | Investigating the association between phenolic metabotypes and cardiometabolic health in response to the chronic intake of (poly)phenols |
| 1 | Scholarship funded by Food and Drug Department (Project ERC PREDICT-CARE (Developing tools for the PREDICTion, at individual level, of the CARDiometabolic REsponse to the consumption of dietary (poly)phenols) | Predictive models for personalised dietary advice of (poly)phenol-containing foods |
| 1 | Scholarship funded by Food and Drug Department (Project FARE CARE-DIET (CARDiometabolic REsponse to plant-based DIETs at individual level: deciphering the complexity of plant bioactives) | Mapping the complexity of diet: circulating metabolites of plant bioactives and the food-microbiome-host interplay |
| 1 | Scholarship co-funded by Food and Drug Department and by The Italian National Research Council C.N.R. - ISPA | Use of integrated omics methodologies for the characterization of toxinogenic fungi, also in view of the climate change |
| 1 | Scholarship financed with funds under the PNRR–Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000220006  | Nudging targeted population groups towards more sustainable food choices |
| 1 | Scholarship financed with funds under the PNRR–Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000220006  | Merging untargeted mass spectrometry and advanced bioinformatics for diving into natural compounds chemodiversity and biological role |
| 1 | Scholarship financed with funds under the PNRR–Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000220006  | Beneficial effects of fermented food: from raw material fermentation to microbiota and related post-digestion bioactive compounds |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Luigi Lavazza S.p.A. CUP D92J23000400004  | Phytochemical and genetic mapping of coffee leaves for the identification of nutraceutical compounds |



| 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. For foreign candidates, basic knowledge of ITALIAN LANGUAGE will also be assessed. | 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 or in isolation / quarantine for COVID-19 virus infection. 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 | 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 (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), 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. <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , which will be assigned by the Academic Board | |
| 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 | |
| LIST OF EVALUABLE QUALIFICATIONS | | |
| (only qualifications attested by a document drawn up in Italian or in English) | | |



| | | |
|--|---|------------------------|
| Curriculum Vitae et studiorum | <p>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.</p> <p>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.</p> | Up to 20 points |
| Research Project | <p>Points relating to the research project shall be allocated on the basis of the following criteria:</p> <ul style="list-style-type: none"> ○ 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 |
| Statement of Research Interest | <p>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</p> | Up to 2 points |
| Scientific Publications | <p>Articles and/or reviews in scientific journals with peer reviewing, scientific book chapters with national or international circulation.</p> <p>The explicit indication of the candidate's contribution to the works presented for evaluation is a necessary requirement.</p> <p>International peer-reviewed papers: up to 2 points National peer-reviewed papers: up to 1 point</p> | Up to 3 points |
| Other Academic qualifications | <p>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</p> | Up to 2 points |
| Other experiences (training, work, research, teaching, etc.) | <ul style="list-style-type: none"> – 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 |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | POINTS |
| <p>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</p> | <ul style="list-style-type: none"> ○ 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 |

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.

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|------------------|-------------|--|
| ORAL EXAM | DATE | 5 September 2023 (with possible extension in the following days) |
| | TIME | 10:00 AM (Italian Time) |








| | | |
|--------------------------|--------------|---|
| | PLACE | ROOM A Plexus "Aule delle Scienze" Campus Universitario 43124 PARMA - ITALY |
| ALTRE INDICAZIONI | | <p>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. <u>The PhD research topic will be assigned by the Academic Board.</u></p> <p>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.</p> <p>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</p> <p>For foreign candidates, the Oral Exam may be held in English at the candidate's choice.</p> |



| DRUG SCIENCES | |
|--|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof. Marco MOR email: marco.mor@unipr.it Food and Drug Department |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| TRAINING OBJECTIVES | |
| <p>The PhD programme "Drugs Sciences" is aimed at the preparation of "Dottori di ricerca" having scientific bases and research experience in the design, discovery, development, production and control of drugs and health products, as well as in the investigation of mechanisms of action for drugs and bioactive compounds. The Course offers multi-disciplinary formation in different scientific areas, mainly chemical and biological with particular focus on medicinal chemistry, pharmaceutical technology, pharmacology and biochemistry. All the contributions converge toward the education and research training of PhD students who, at the end of the course, are expected to produce innovation and new knowledge in the field of drugs, biomolecules, health products and their interaction with biological substrates.</p> | |
| RESEARCH AREAS | |
| <ul style="list-style-type: none">• Biochemistry and Molecular Biology• Biopharmaceutics – Pharmacokinetics• Bio-organic chemistry• Experimental Pharmacology and Toxicology• Drug Design and Synthesis | |
| ADMISSION REQUIREMENTS | Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none">– 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION | | 11 |
|----------------------------------|---|---|
| With Scholarship | | 11 |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 4 | Scholarship funded by University of Parma (Ministerial funds) | <ul style="list-style-type: none">• Biochemistry and Molecular Biology• Biopharmaceutics – Pharmacokinetics• Experimental Pharmacology and Toxicology• Drug Design and Synthesis |
| 1 | Scholarship co-funded by Fondazione Cariparma | <ul style="list-style-type: none">• Drug Design and Synthesis |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Food and Drug Department | <ul style="list-style-type: none">• Biopharmaceutics – Pharmacokinetics |
| Position with Scholarship | | |



| LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | |
|---|--|---|
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000230006  | In vitro and in vivo modulation of cholesterol metabolism as a novel pharmacological strategy to counteract neurodegeneration |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Chiesi Farmaceutici S.p.A. CUP D92J23000360004  | In vitro, ex vivo and in vivo characterizations of inhaled product pharmacokinetics focused on PK/PD correlations. |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Chiesi Farmaceutici S.p.A. CUP D92J23000360004  | Advanced models and novel formulations for the local management of chronic cough |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Medi Nova S.a.s. CUP D92J23000360004  | Novel formulations for artificial insemination for a sustainable pigmeat production |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Dompé Farmaceutici S.p.A. CUP D92J23000360004  | Development and characterization of drug delivery systems for site-specific and multi-kinetics release of one or more drugs for oral administration |

| 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 text. | ENGLISH |
| ORAL EXAMINATION INDICATION | | |
| THE ORAL EXAM TAKES PLACE IN THE PRESENCE. (*The REMOTE ORAL EXAM is allowed for candidates only in isolation / quarantine for COVID-19 virus infection or due to illness / hospitalisation certified by a medical report. To this end, candidates must submit a motivated REQUEST as per the model attached to the competition announcement) | | |



*** Modified with the Rector Decree n. 1397 of 28.07.2023**

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 | The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focused on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results. It should be noted that the Examination Board can use tools useful for verifying the originality of the submitted Project. <u>The research project does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved 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. | Up to 20 points |
| Graduation thesis | Consistency of the Master's Degree thesis with the doctoral program research topics | Up to 10 points |
| Research Project | Points relating to the research project shall be allocated on the basis of the following criteria: <ul style="list-style-type: none"> ○ Scientific value and ground-breaking nature of the proposal: 5 points ○ description and structure of the proposal: 5 points ○ consistency with the themes of the doctorate: doctorate proposal feasibility: 5 points | Up to 15 points |
| 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

| Interview Program | Evaluation CRITERIA | POINTS |
|-------------------|---------------------|--------|
|-------------------|---------------------|--------|



| | | |
|--|---|------------------------|
| <p>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</p> | <ul style="list-style-type: none">○ knowledge of the foreign language: max 10 points○ research project argumentation: max 30 points○ general knowledge of issues connected to the PhD course: max 30 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> in the days preceding the date of the Oral Exam.

| | | |
|--------------------------|--------------|---|
| ORAL EXAM | DATE | 12 September 2023 (with possible extension in the following days) |
| | TIME | 09:30 AM (Italian Time) |
| | PLACE | Food and Drug Department Parco Area delle Scienze, 27/A 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. |



| EARTH SCIENCES | |
|--|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof. Marco ROVERI email: marco.roveri@unipr.it Department of Chemistry, Life Sciences and Environmental Sustainability |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| TRAINING OBJECTIVES | |
| 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 | |
| <ul style="list-style-type: none"> • 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 | |
| ADMISSION REQUIREMENTS | Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"> – 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 31.10.2023 |

| | | POSITIONS PUT OUT TO COMPETITION | 4 |
|---------------------------|---|---|----------|
| | | With Scholarship | 4 |
| Position with Scholarship | | | |
| N° | Funding entity | Research Topic, if any | |
| 2 | Scholarship funded by University of Parma (Ministerial funds) | <ul style="list-style-type: none"> • Multi-scale fracture pattern analysis integrating field data and digital outcrop models: implications for fracture permeability modelling in faulted subsurface reservoir • Effects of hydraulic heterogeneities on subsurface contaminant migration • Geomorphological and geophysical modeling of debris flow source material in the Alps and in the Northern Apennines • The late Miocene Sicilian outer foreland basin evolution and its implications with the Messinian salinity crisis | |
| 1 | Scholarship funded by University of Parma (University funds) | | |
| 1 | Scholarship co-funded by Fondazione Cariparma | | |



| | | |
|--|--|--|
| | | <ul style="list-style-type: none"> • 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 • Study of the Cenozoic paleoclimatic transition from greenhouse to icehouse through calcareous nannofossils from the Southern Ocean. • 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. | 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

| | |
|--------------------------------------|--|
| 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 | 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) <u>It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board</u> |



| LIST OF EVALUABLE QUALIFICATIONS (only qualifications attested by a document drawn up in Italian or in English) | | |
|---|--|------------------------|
| Curriculum Vitae et studiorum | <p>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.</p> <p>The marks of the exams and the graduation mark will be the most relevant element of the evaluation.</p> | Up to 6 points |
| Graduation thesis | Congruence with the research topics of the PhD course and quality of the research methodology | Up to 8 points |
| Research Project | <p>Points relating to the research project shall be allocated on the basis of the following criteria:</p> <ul style="list-style-type: none"> ○ Scientific value and or originality of the proposal: max 8 points ○ description and structure of the proposal: max 3 points ○ proposal feasibility: max 3 points ○ consistency with the research themes of the PhD course: max 8 points | Up to 22 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 1 points |
| Graduation mark | <p>Score related to the final mark:</p> <ul style="list-style-type: none"> - 110 and 110 with honours (magna cum laude): 5 points - from 107 to 109: 4.5 points - from 105 to 106: 3.5 points - from 100 to 104: 2.5 points - from 95 to 99: 1 point - under 95: 0.5 points | Up to 5 points |
| Average of the exam marks (if the candidate will attain the degree no later than 31 October 2023) | <p>Score related to the average of the exam marks:</p> <ul style="list-style-type: none"> - from 28 to 30: 5 points - from 27 to 27.99: 4.5 points - from 26.5 to 26.99: 3.5 points - from 26 to 26.49: 2.5 points - from 25 to 25.99: 1 point - under 25: 0.5 points | Up to 5 points |
| Scientific Publications | <ul style="list-style-type: none"> ○ Abstract presented at a national or international congress: 0,5 point ○ Articles on scientific journals (ISI/SCOPUS): 2 points ○ Other publication (related to the topics of PhD program): 1 point | Up to 5 points |
| 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 | Up to 1 points |
| Other experiences (training, work, research, teaching, etc.) | <ul style="list-style-type: none"> ○ Periods of study abroad: 1 point ○ Scholarships, scientific associations awards: 1 point | Up to 2 points |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | POINTS |



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| <p>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</p> | <ul style="list-style-type: none">○ 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 |
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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.

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|--------------------------|--------------|--|
| ORAL EXAM | DATE | 18 September 2023 |
| | TIME | 09:00 AM (Italian Time) |
| | PLACE | Department of Chemistry, Life Sciences and Environmental Sustainability EARTH SCIENCES BUILDING Parco Area delle Scienze, 157/A – Campus 43124 PARMA - ITALY |
| ALTRE INDICAZIONI | | <p>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. <u>The PhD research topic will be assigned by the Academic Board.</u></p> <p>For foreign candidates, the admission examinations may be held in English at the candidate's choice.</p> |



PHILOLOGICAL-LITERARY, HISTORICAL-PHILOSOPHICAL AND ARTISTIC STUDIES

| | |
|---|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof. Italo TESTA email: italo.testa@unipr.it Department of Humanities, Social Sciences and Cultural Industries |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |

TRAINING OBJECTIVES

In **Greek and Latin Philology** the knowledge and skills of doctoral candidates will be deepened in the sciences of antiquity, with particular reference to linguistics, philological-literary studies, archaeology, papyrology, and the development of the Greek-Latin tradition in the Middle Ages and the Humanities. The doctoral candidates will be led to realize a critical edition, a commentary or an essay, concerning texts in Greek or Latin, or the edition of sources or archaeological contexts, according to the complete time span of their tradition and their continuity of life.

In **Philosophy**, PhD students' critical ability and logical-argumentative skills will be developed, as will their knowledge in the history of philosophy. PhD students will acquire the ability to conduct an original piece of research – which requires being able to put into practice conceptual analysis, reasoning, historic and philological documentation – in the fields of theoretical philosophy, the philosophy of language and aesthetics, and the history of medieval, modern and contemporary philosophy.

In **Italian and Romance Studies** the aim is to train researchers able both in the linguistic and philological fields as well as literary theory. They will be able to produce critical texts and commentaries of texts from the Romance field or that of Italian literature, and to conduct innovative, historical-literary or thematic analysis of various time periods.

In **Foreign Languages and Literature**, the focus is on the learning of languages and foreign literature within the European area (English, French, German, Spanish and Russian) as well as, where applicable, their expression in the field of post colonialism. Within the course, original and innovative research activities, based on the latest theoretical and methodological approaches and relevant to the discipline of linguistics (translation, discourse analysis, corpus linguistics, lexicography) and the historical-critical analysis of literature and of the culture between the early modern age and contemporaneity, are promoted.

In **History**, the goal is to train young academics in the field of historical sciences through the acquisition of skills, methodologies and critical abilities that are necessary for historical, classical and contemporary-age research. PhD students will be supervised during their realisation of original and innovative research projects, focused on various types of sources and dealing with the main issues relating to different perspectives in political and religious history, the history of ideas, and social and economic analysis.

In **History of Art and the Performing Arts**, the aim is to provide the methodological and critical tools necessary for conducting research in the history of medieval art, or modern or contemporary art, in the history of criticism and museology, but also in the fields of the history of theatre and cinema. PhD students will acquire the ability to consciously recall critical debate, to be able to read the various sources available, and above all the ability to employ philological tools when reading an image

RESEARCH AREAS



- Greek and Latin Philology
- Philosophy
- Italianistics and Romance Philology
- Foreign Languages and Literatures
- History
- History of Art and Entertainment

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 **31.10.2023**

| POSITIONS PUT OUT TO COMPETITION | | 19 |
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| With Scholarship | | 19 |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 5 | Scholarship funded by University of Parma (Ministerial funds) | --- |
| 1 | Scholarship co-funded by Fondazione Cariparma | --- |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | |
| N° | Funding entity | BOUND RESEARCH TOPIC |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Humanities, Social Sciences and Cultural Industries | History of education. Health education: historical analysis (18th-19th century) and present-day perspectives. Analysis of various historical sources (with special attention to primary sources and archival research) <i>from</i> the timespan mentioned above; assessment of the <i>longue durée</i> of themes and concepts through empirical research, including constructing appropriate and validated instruments |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Humanities, Social Sciences and Cultural Industries | Educational sciences. Models and cultures of training for education and social work professionals. Theoretical research on the cultural foundations of training models shaping the professional identity of educators and social workers; research-training activities in order to design interventions to support inclusive processes and promote professional development. |
| 1 | Scholarship financed with funds under the PNRR–Mission 4 component 1 (Ministerial Decree 118/2023 art. 7 “Digital and environmental transitions”) CUP D92J23000120006 | The poems of Ugo Foscolo: comments on the web: Development of a portal dedicated to Foscolo's commentaries on the poems. This will be a valuable tool for the knowledge of the author and for the development of new research projects. The reference model will be the Dartmouth Dante Project (https://dante.dartmouth.edu/). Once the portal has been set up, the work will be devoted to the development of query |





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| | | masks, to the preparation of guide-paths for the right use of the corpus, and to exploration models on individual aspects of Foscolo's language and culture. The project will be able to draw on the support of scholars belonging to CRIF (Centro di Ricerca Interuniversitario Foscolo). |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000260006</p>  | <p>Music, theater and art in Bourbon Parma: The project studies the documents in the Parma State Archive relating to entertainment and the arts under the dukedom of Philip I and his minister Du Tillot, and aims to integrate them into a system of relationships that increases knowledge and connections, to make them usable through different consultation channels according to the needs of different users.</p> |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000260006</p>  | <p>The storytelling of the Po river in contemporary cinema. The research project consists in the mapping and enhancement of the contemporary national audiovisual heritage, starting from 2000 to the present, which sees the Po River as a central element of cinematographic narration. In collaboration with the Interregional Agency for the Po River (AIPO), the project aims to: survey and promote the audiovisual production related by theme; map projects that have not yet been implemented, identifying potential and creating a network in the national production sector</p> |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000260006</p>  | <p>Policies for the management of the acquisition, description and digitization cycle of personal archives, improper public archives, and community archives. The project is aimed at defining policies for the management of the acquisition, description, and digitization cycle of specific types of funds (personal archives, improper public archives, community archives) characterized by extreme documentary heterogeneity that must be safeguarded and enhanced in the management process, starting from the heritage preserved by Istoreco, Reggio Emilia Archive Center. Tools will be defined for public institutions that guarantee their protection for the management of rights, metadatization and digitization that guarantee usability by different users, management tools that allow interoperability between different public digital libraries and archival description platforms.</p> |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000260006</p>  | <p>Study and digitization of the manuscripts of the Latin elegiacs preserved in the Palatine Library of Parma / Latin Philology and Literature. Study and detailed analysis of the manuscripts relating to the works of the Latin elegiacs preserved in the Palatine Library of Parma to reconstruct their history, identify their characters and contribution to the reconstruction of the text. Digitization of the investigated material.</p> |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000260006</p>  | <p>Ludovico Beccadelli's archive in Parma (Palatina Library): toward a new digital catalogue / Romance and Italian Philology. The aim of the <i>project</i> is to explore the manuscripts and the printed books of Ludovico Beccadelli (1501-1521) now preserved in the Palatina Library of Parma and to create a complete, machine-readable <i>catalogue</i> of the collection. The philological analysis will be supported by the development and implementation of a digital platform that will host a short</p> |



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| | | version of the descriptive records encoded in TEI-XML language, according to ICCU standard parameters (see: Manus Online). Particular attention will be paid to the autograph letters of the collection, in order to present the first annotated edition of Beccadelli's letters. |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000260006</p>  | <p>Archival Science, Bibliography and Librarianship: The research project focuses on digital history, a field that includes the analysis and implementation of digital media and tools for the research, communication and teaching of history. The objective of the case study will be the design of a platform for the Settore Servizi Educativi, Sistema Bibliotecario e Pari Opportunità (Educational Services, Library System and Equal Opportunities Sector) of the Municipality of Parma dedicated to the communication and didactics of the city's history.</p> |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000260006</p>  | <p>Ephemeral Renaissance: Festivals and Theater in Venice (1450-1550). Archival Reconnaissance, Historical Reconstruction and Virtual Dissemination of a Multimedia Cultural Heritage, in collaboration with the State Archives of Venice and other Venetian archives, for the development and implementation of the FRIDA project (Festival in Renaissance Italy: A Digital Atlas) and the related Digital Atlas, functional to the conservation and enhancement of the performing, visual and literary arts, as tangible and intangible cultural heritage</p> |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000260006</p>  | <p>Habits and social transformation / Philosophy and Social Criticism. The project aims to investigate elements of resistance to change and tipping points in the inclusive and innovative transformation of individual and collective habits in response to new social needs and sustainability requirements. The project aims at the elaboration of a philosophical model of habit processes that, drawing on traditions such as pragmatism, critical theory, embodied cognition, phenomenology, and sociology of critique, develops a transdisciplinary approach to habit transformation and a pragmatic direction of research and action in organizational contexts. The project involves collaboration with the Foundation for Social Critique and the Parma Territorial Agency for Energy and Sustainability</p> |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 10 “Cultural Heritage”) CUP D92J23000290006</p>  | <p>Contemporary art: research that explores the field of applications of new technologies (AR and VR, but not exclusively) in particular in relation to contemporary visual communication, also on the basis of documents conserved at the CSAC.</p> |
| 1 | <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 10 “Cultural Heritage”) CUP D92J23000290006</p>  | <p>Digitalising The Liberal: Anglo-Italian cultural relations, 1821-1823. By combining the tools of Digital Humanities with traditional scholarship, the project aims at providing both the (inter)national scholarly community and the wider public with a scholarly online edition of <i>The Liberal: Verse and Prose from the South</i>, the groundbreaking periodical published in 4 issues London in 1822-23 but edited in Pisa and Genoa by a coterie of intellectuals (including Percy Bysshe Shelley, Lord Byron, and Mary Shelley) led by Leigh Hunt. The selected doctoral student's investigation will concern first editions of the periodical, extant manuscripts of single texts, significant variants and other</p> |



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| | related or contextual materials preserved archives in Italy (e.g. Archivio Storico del Conservatorio Sant'Anna, Pisa) and abroad (e.g. British Library, Bodleian Library, New York Public Library, National Library of Scotland). |
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ADMISSION PROCEDURES

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

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| 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 short passage | FRENCH, ENGLISH, GERMAN, SPANISH (at the candidate's choice). |
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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 or in isolation / quarantine for COVID-19 virus infection. 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) |
| Degree thesis | PDF of the second cycle master's degree thesis Undergraduate applicants shall submit the abstract and the draft of the thesis approved by their supervisor through a short statement attached to the draft |
| 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, 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) <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , 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. | Up to 7 points |
| Graduation mark (or alternatively average of the exam marks) | Score related to the final mark: - 110 with honours (magna cum laude). Alternatively, where this is not yet present: score relating to the average of the exam marks | Up to 1 points |
| Graduation thesis | Consistency of the Master's Degree thesis with the doctoral programme research topics, methodological rigor, knowledge of critical literature | Up to 25 points |
| Research Project | Points relating to the research project : ○ (originality, articulation, feasibility of the proposal) | Up to 28 points |
| Scientific Publications | Monographs, articles in national and international scientific journals, book chapters, conference proceedings, reviews. | Up to 11 points |
| Other qualifications | Post lauream scholarship, experience abroad, award, | Up to 8 points |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | POINTS |
| 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 | <ul style="list-style-type: none">○ knowledge and methodology necessary for the realization of the project: max 35 points○ knowledge of chosen foreign language: max 5 points | Up to 40 points |

| SCHEDULE OF THE ADMISSION EXAMS | | |
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| 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 | DATE | 18 September 2023 |
| | TIME | 10:00 AM (Italian Time) |
| | PLACE | Department of Humanities, Social Sciences and Cultural Industries Via D'Azeglio, 85 43125 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. <u>The PhD research topic will be assigned by the Academic Board.</u> For foreign candidates, the admission examinations may be held in English at the candidate's choice. | |







| JURIDICAL SCIENCES | |
|--|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof. Fabio Salvatore CASSIBBA email: fabiosalvatore.cassibba@unipr.it Department of Law, Politics and International Studies |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| PARTNER INSTITUTION | <ul style="list-style-type: none">University of Modena e Reggio Emilia |
| TRAINING OBJECTIVES | |
| <p>The training project of the PhD course in Legal Sciences envisages a plurality of higher-education activities, throughout the three-year period and divided into various types.</p> <p>First of all, the PhD course intends to emphasise interdisciplinary/multidisciplinary/transdisciplinary activities right from the first year, through the provision of various courses on topics of general legal interest or, in any case, of transversal interest for the training of doctoral students. The related courses (some delivered exclusively in English) will be taught by professors of the I and II fascia and by RTD-B researchers, as well as by experts in the various scientific disciplinary sectors involved, so as to foster the acquisition of skills and professionalism really suited to the training objectives of the course, on the methodological level, on the level of reasoning and analysis in the legal field, of the in-depth knowledge required at the level of professional outlets. In addition to these courses, there is also teaching aimed at perfecting the doctoral students' language skills in the legal field. These teaching activities will take place - in particular, though not exclusively - in the first year of the doctoral programme, so as to enable the doctoral students, on the one hand, to acquire a solid and interdisciplinary "initial" training, also with regard to methodological profiles and the tools required for research; on the other hand, to give them the opportunity in the following years to perfect their skills in specific subject areas, also through periods of residence abroad, with a view to then writing their doctoral thesis. The doctoral course also envisages strengthening the theoretical skills of the doctoral students by means of lectures (also in foreign languages) on legal issues related to the individual scientific disciplines of Area 12, held by professors of the first or second rank or by RTD-B researchers, also from outside the teaching staff, whether Italian or foreign, as well as by experts in the field, including foreigners.</p> <p>Lastly, the doctoral course intends to enrich the training of doctoral students by encouraging their participation in conferences, study meetings, seminars (typically, though not exclusively, organised or sponsored by universities, including foreign ones, and by national or international research bodies), also abroad, which from time to time will be accredited as moments of common, interdisciplinary or sector-specific teaching.</p> | |
| RESEARCH AREAS | |
| <ul style="list-style-type: none">Ius/01 – Private lawIus/07 - Labour LawIus/08 - Constitutional LawIus/10 - Administrative LawIus/17 – Criminal LawIus/18 – Roman LawIus/19 – History of Medieval and Modern LawIus/21 – Comparative Public LawSps/12 –Sociology of Law, deviance and social change | |
| ADMISSION REQUIREMENTS | <p>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:</p> <ul style="list-style-type: none">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 <p>Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.10.2023</p> |



| | | POSITIONS PUT OUT TO COMPETITION | 13 |
|--|--|---|-----------|
| With Scholarship | | | 13 |
| Position with Scholarship | | | |
| N° | <i>Funding entity</i> | <i>Research Topic, if any</i> | |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | <ul style="list-style-type: none"> • Ius/01 – Private law • Ius/19 – History of Medieval and Modern Law • Sps/12 – Sociology of Law, deviance and social change | |
| 3 | Scholarship funded by University of Modena e Reggio Emilia | <ul style="list-style-type: none"> • Ius/01 – Private law • Ius/07 – Labour Law • Ius/17 – Criminal Law | |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | | |
| N° | <i>Funding entity</i> | <i>BOUND RESEARCH TOPIC</i> | |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 7 “Digital and environmental transitions”) CUP D92J23000130006 | IUS/08 - Constitutional Law - If Artificial Intelligence is the latest frontier in the manipulation of natural and human facts, talking about emotional AI or creative AI transports us into a field particularly dense with ethical and legal implications for which an adequate legal basis is still lacking. | |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000270006 | IUS/07 - Labour law - Aspects relating to tenders and outsourcing in public administration, with particular reference to the protection of workers in the processes of integration of services, between the responsibility of the principal, social clauses and safety of the service | |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000270006 | IUS/10 - Administrative law - Regulatory and administrative simplification in the authorisation procedures for the initiatives envisaged by the NRP and for the awarding of public contracts as a means of achieving the Plan's objectives. | |
| 2 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000270006 | IUS/10 - Administrative law - Digitisation is a mission of the NRP for the transformation (also) of the public administration. The related benefits and/or criticalities are explored according to two project lines, relating to the computerisation of (1) procurement and (2) justice. | |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000270006 | IUS/18 – Roman Law – Search for synergetic strategies between public and private actors to promote and facilitate dialogue between public administration and enterprises in the field of cultural tourism | |



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| <p>Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D92J23000270006</p> <p>   </p> | <p>IUS/21 Comparative Public Law - The guarantee of food safety and food security is increasingly linked to the issue of sustainability, which, in addition to the environmental, economic and social dimensions, must also be interpreted in terms of food. In this perspective, an analysis of the legal issues involved seems, therefore, necessary</p> |
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ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 70 points
(a minimum score of 35 points shall be required to be admitted to the Oral Exam)
ORAL EXAM: up to 50 points
Minimum score for ELIGIBILITY: 70/120

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|-------------------------|---|----------------|
| 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 etc. | ENGLISH |
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ORAL EXAMINATION INDICATION

THE ORAL EXAM TAKES PLACE IN THE PRESENCE. (*The REMOTE ORAL EXAM is allowed for candidates only in isolation / quarantine for COVID-19 virus infection or due to illness / hospitalisation certified by a medical report. To this end, candidates must submit a **motivated REQUEST** as per the model attached to the competition announcement)

*** Modified with the Rector Decree n. 1397 of 28.07.2023**

THE INTERVIEW MAY BE HELD ALSO IN ENGLISH FOR FOREIGN CANDIDATES

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

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| 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 | 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) <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , 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 | <p>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.</p> <p>Score related to the final mark: - 110 with honours (magna cum laude): 5 points; - 110: 3 points</p> <p>Score related to the average of the exam marks (if the candidate will attain the degree no later than 31 October 2023): - 30/30: 5 points - From 27/30 to 29/30: 3 points</p> | Up to 40 points |
| Graduation thesis | Congruence with the research topics of the PhD course for the scientific disciplinary sectors available for competition | Up to 2 points |
| Research Project | <p>Points relating to the research project:</p> <ul style="list-style-type: none"> ○ methodological rigor: max 10 points ○ originality: max 8 points ○ consistency with the topics of the scientific disciplinary sector of reference: max 2 points | Up to 18 points |
| Scientific Publications | Monographs, articles in scientific journals, chapters in collective volumes (uniquely referable to the candidate). | Up to 5 points |
| 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 | Up to 3 points |
| Other experiences (training, work, research, teaching, etc.) | <ul style="list-style-type: none"> – 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 – 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 2 points |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | 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 | <ul style="list-style-type: none"> ○ presentation of the project: max 30 points ○ preparation on the topics of the scientific disciplinary sector of reference for the project: 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> in the days preceding the date of the Oral Exam.



UNIVERSITÀ DI PARMA

| | | |
|-------------------|---|---|
| ORAL EXAM | DATE | 12 September 2023 |
| | TIME | 11:00 AM (Italian Time) |
| | PLACE | "BANDIERA" CLASSROOM University of Parma - CENTRAL PALACE Via Università, 12 43121 PARMA - ITALY |
| ALTRE INDICAZIONI | <p>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. <u>The PhD research topic will be assigned by the Academic Board.</u></p> <p>For foreign candidates, the admission examinations may be held in English at the candidate's choice.</p> | |



TRASLATIONAL MEDICAL AND SURGICAL SCIENCES

| | |
|--|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof. Nicola SVERZELLATI email: nicola.sverzellati@unipr.it Department of Medicine and Surgery |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| TRAINING OBJECTIVES | |
| <p>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.</p> <p>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.</p> <p>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.</p> | |
| RESEARCH TOPICS (The applicant MUST indicate one research topic in the ANNEX A) | |
| <ol style="list-style-type: none">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. | |



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| ADMISSION REQUIREMENTS | <p>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:</p> <ul style="list-style-type: none"> – 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 <p>Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree by 31.10.2023</p> |
|-------------------------------|---|

| POSITIONS PUT OUT TO COMPETITION | | 10 |
|---|--|--|
| (Modified by Rector Decrees n. 1410 of 29.07.2023 and by Rector Decrees n. 1413 of 02.08.2023) | | |
| With Scholarship | | 9 |
| Reserved to holders of scholarship within specific international mobility programs | | 1 |
| Position with Scholarship | | |
| N° | <i>Funding entity</i> | <i>Research Topic, if any</i> |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | --- |
| 1 | Scholarship co-funded by Fondazione Cariparma | --- |
| Position with Scholarship | | |
| LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | |
| N° | <i>Funding entity</i> | <i>BOUND RESEARCH TOPIC</i> |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Medicine and Surgery (Prof. Lauretani funds PRIN2020 CUP D95F2200042001) | Sarcopenia and motoric frailty in older persons |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Medicine and Surgery (Prof.ssa Barili PRIN2022) | Genomic and transcriptional analyses for the study of possible new molecular targets in the presence of neoplasms, infections, Mendelian and complex genetic diseases |
| 1 | Scholarship financed by the Department of Medicine and Surgery | Dissecting the link between cholesterol homeostasis and immune-inflammatory profiles in patients with advanced non-small cell lung cancer and renal cell carcinoma treated with immune checkpoint inhibitors |
| 1 | Scholarship partly financed with UNIVERSITY funds and co-financed by Novartis Farma S.p.A. | Early lipid lowering therapy after an acute coronary syndrome |
| 1 | Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 7 “Digital and environmental transitions”) CUP D92J23000140006 | Italian network of excellence for advanced diagnosis (INNOVA) |
| | | |
| Reserved to HOLDERS OF SCHOLARSHIP WITHIN SPECIFIC INTERNATIONAL MOBILITY PROGRAMS | | |
| N° | <i>Agreements/Cooperations/Mobility Programs</i> | |
| 1 | Reserved to holders of scholarship 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 THE ORAL EXAM TAKES PLACE IN THE PRESENCE. (*The REMOTE ORAL EXAM is allowed for candidates only in isolation / quarantine for COVID-19 virus infection or due to illness / hospitalisation certified by a medical report. To this end, candidates must submit a motivated REQUEST as per the model attached to the competition announcement) * Modified with the Rector Decree n. 1397 of 28.07.2023 | | |
| 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 | 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. <u>The research project does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined with the supervisor and approved 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 | Up to 9 points |
| 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 | Up to 5 points |



| | | |
|---|---|------------------------|
| Average of the exam marks (if the applicant will attain the degree no later than 31 st October 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 | Up to 5 points |
| Graduation thesis | Congruence with the research topics of the PhD course and quality of the research methodology | Up to 2 points |
| 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 | Up to 10 points |
| 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. | Up to 1 point |
| 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 | | |
| Interview Program | Evaluation CRITERIA | 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 | <ul style="list-style-type: none"> • Ability to argument the project proposal: up to 30 points • Discussion of the critical points of the project: up to 18 points • Ability to provide an adequate scientific context to the project proposal: up to 15 points • Ability to mitigate risks deriving from unexpected results: up to 10 points • Knowledge of the English language: up to 7 points | Up to 75 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.

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| ORAL EXAM | DATE | 12 September 2023 (with possible extension in the following days) |
| | TIME | 09:00 AM (Italian Time) |
| | PLACE | Aula 1 c/o Aule Nuove – Polo Gramsci Via A. Gramsci 14 43126 PARMA - ITALY |
| ALTRE INDICAZIONI | <p>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. <u>The PhD research topic</u> will be defined with the supervisor and approved by the Academic Board.</p> <p>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.</p> | |





| VETERINARY SCIENCES | |
|---|---|
| CYCLE | XXXIX |
| COORDINATOR | Prof. Gaetano DONOFRIO email: gaetano.donofrio@unipr.it Department of Veterinary Science |
| DURATION | 3 years |
| STARTING DATE OF THE PHD PROGRAM | 01/11/2023 |
| TRAINING OBJECTIVES | |
| Veterinary Science Doctoral course aims at training PhD-students about research topics on basic, pre-clinical, clinical and nonclinical areas (animal production and food inspection) by novel methodology and technology. PhD student chooses to develop his/her own research project under the supervision of a Tutor and to produce scientific outcomes in the following area: VET, AGR and BIO. | |
| RESEARCH AREAS | |
| <ul style="list-style-type: none"> • Biopathology • Clinical Sciences • Basic Sciences • Animal Production Sciences and Technologies • Food Inspection and Public Health | |
| ADMISSION REQUIREMENTS | <p>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:</p> <ul style="list-style-type: none"> – "Laurea Magistrale" LM-42 Veterinary Medicine – "Laurea Magistrale" LM-6 Biology – "Laurea Magistrale" LM-9 Medical Biotechnology, Veterinary and Pharmaceutica – "Laurea Magistrale" LM-86 Zootechnical Sciences and Animal Technologies <p>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</p> <ul style="list-style-type: none"> – Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programs <p>Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree within the deadline set for enrollment, that is by 31.10.2023</p> |

| POSITIONS PUT OUT TO COMPETITION* | | 7 |
|--|--|------------------------|
| (Modified by Rector Decrees n. 1320 of 19.07.2023 and n. del) | | 7 |
| With Scholarship | | 7 |
| Position with Scholarship | | |
| N° | Funding entity | Research Topic, if any |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | --- |
| 1 | Scholarship funded by University of Parma (University funds) | --- |
| 1 | Scholarship co-funded by Fondazione Cariparma "CARLO GABBI" | --- |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | |



(Modified by Rector Decree n. 1320 of 19.07.2023)

| N° | Funding entity | BOUND RESEARCH TOPIC |
|----|--|---|
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company Deakos S.r.l. CUP D92J23000370004  | Innovation and sustainability in the therapeutic protocols of bacterial diseases in the veterinary field |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company VETS ON ROAD S.r.l. CUP D92J23000370004  | Correlation between parameters of intraoperative monitoring with evoked potentials (MEP and SEP) and long-term outcome in dogs undergoing neurosurgery for intervertebral disk extrusion. |

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 40 points

ORAL EXAM: up to 80 points

Minimum score for ELIGIBILITY: 70/120

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| 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 translation and comprehension of a scientific text. | ENGLISH |
|------------------|---|----------------|

ORAL EXAMINATION INDICATION

THE ORAL EXAM TAKES PLACE IN THE PRESENCE. (*The REMOTE ORAL EXAM is allowed for candidates only in isolation / quarantine for COVID-19 virus infection or due to illness / hospitalisation certified by a medical report. To this end, candidates must submit a **motivated REQUEST** as per the model attached to the competition announcement)

*** Modified with the Rector Decree n. 1397 of 28.07.2023**

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 |
| 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). <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved 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. The marks of the exams and the graduation mark will be the most relevant element of the evaluation. | Up to 2 points |
| Graduation mark | Score related to the final mark: - 110 with honours (magna cum laude): 3 points; - 110: 2 points; - From 100 to 109: 0.1 points for each mark unit | Up to 3 points |
| Average of the exam marks (if the candidate will attain the degree no later than 31 October 2023) | Score related to the average of the exam marks: - 30/30: 3 points; - From 26/30 to 29/30: 2 points; - From 22/30 to 25/30: 1 point; - From 18/30 to 21/30: 0.5 points | Up to 3 points |
| Graduation thesis | Congruence with the research topics of the PhD course and quality of the research methodology | Up to 5 points |
| Research Project | It will be evaluated: <ul style="list-style-type: none"> ○ Scientific value and originality of the proposal ○ description and structure of the proposal ○ proposal feasibility ○ consistency with the research themes of the PhD course | Up to 10 points |
| Statement of Research Interest | 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 |
| Scientific Publications | Articles published in journals indexed in databases Wos and Scopus | Up to 5 points |
| 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 signer to the address e-mail: gaetano.donofrio@unipr.it (The candidate, therefore, must not uploading them through the procedure of the competition online registration). | Up to 5 points |
| Other qualifications | Other qualifications certifying the candidate's training and skills (scholarships, prizes, etc.) relevant to the PhD topics: <ul style="list-style-type: none"> – Scientific research, of any type (basic, oriented, finalized, translational, applied, etc.) and carried out with different level of qualification, including the ownership of research grants and participation in research projects – Working activity – Professional and/or training internship – Language proficiency certificates – Periods of study abroad, outside the country of origin (e.g. Erasmus program or other similar mobility programs) | Up to 5 points |




| | – Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.) | |
|---|---|------------------------|
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | 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 | | Up to 80 points |



| SCHEDULE OF THE ADMISSION EXAMS | | |
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| 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 | DATE | 13 September 2023 (with possible extension in the following days) |
| | TIME | 09:00 AM (Italian Time) |
| | PLACE | ROOM "D" Department of Veterinary Science Via del Taglio, 10 43126 PARMA - ITALY |
| ALTRE INDICAZIONI | For foreign candidates, the admission examinations may be held in English at the candidate's choice. | |



| 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 | 01/11/2023 |
| 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 | |
| <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> – 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 31.10.2023 |

| POSITIONS PUT OUT TO COMPETITION | | 9 |
|--|--|---|
| With Scholarship | | 8 |
| Reserved to holders of Research Grant | | 1 |
| Position with Scholarship | | |
| N° | <i>Funding entity</i> | <i>Research Topic, if any</i> |
| 3 | Scholarship funded by University of Parma (Ministerial funds) | --- |
| 1 | Scholarship funded by University of Parma (University funds) | --- |
| 1 | Scholarship co-funded by Fondazione Cariparma | --- |
| Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) | | |
| N° | <i>Funding entity</i> | <i>BOUND RESEARCH TOPIC</i> |
| 1 | Scholarship funded by EMILIA ROMAGNA REGION  | Multisensory Analysis based on Deep Learning for an Innovative, Sustainable and Safe Mobility |



| | | |
|---|---|--|
| | The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna | |
| 1 | Scholarship financed with funds under the PNRR – Mission 4 component 1 (Ministerial Decree 118/2023 art. 9 “Public Administration”) CUP D91I23000080006  | Analysis and development of Artificial Intelligence-based techniques and tools for automatic discovery and improvement of PA business processes from events and data generated by the information systems in use |
| 1 | Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 117/2023) and co-financed by the Company thing2i S.r.l. CUP D92J23000380004  | Design and implementation of a scalable IoT architecture with distributed intelligence and integration of heterogeneous communication protocols for innovative smart city applications |
| Position reserved to HOLDERS OF RESEARCH GRANT | | |
| N° | Subject area of the research | |
| 1 | ING-INF/05 “Information processing systems” | |

| 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 REMOTELY for candidates residing abroad or temporarily abroad for study / work reasons or in isolation / quarantine for COVID-19 virus infection. 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 | <p>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.</p> <p><u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u>, 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).</p> <p>Failure to submit the project will result in exclusion from procedure for admission to the course.</p> | |
| LIST OF EVALUABLE QUALIFICATIONS (only qualifications attested by a document drawn up in Italian or in English) | | |
| Curriculum Vitae et studiorum | <p>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</p> <p>It will also be evaluated the congruence of the degree obtained with the PhD themes.</p> | 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 | <p>Points relating to the research project shall be allocated on the basis of the following criteria:</p> <ul style="list-style-type: none"> ○ 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 | <p>Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.</p> <p>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.</p> | Up to 5 points |
| Reference Letters | <p>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).</p> <p>Evaluation of the judgments reported in the reference letters.</p> | Up to 2 points |
| Other experiences and qualifications | <ul style="list-style-type: none"> – 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.) <p>Duration evaluation (for scholarships and internships), score (for the GRE test), prestige (for awards)</p> | Up to 3 points |
| ORAL EXAM | | |
| Interview Program | Evaluation CRITERIA | POINTS |



| | | |
|--|---|------------------------|
| <p>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</p> | <ul style="list-style-type: none">○ knowledge of the foreign language: max 5 points○ research project presentation: max 25 points○ general knowledge of issues connected to the PhD course: max 20 points | Up to 50 points |
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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.

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|--------------------------|--|--|
| ORAL EXAM | DATE | 14 September 2023 (with possible extension in the following days) |
| | TIME | 02:30 PM (Italian Time) |
| | PLACE | Department of Engineering and Architecture 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. <u>The PhD research topic will be assigned by the Academic Board.</u> | |
| | 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 | |