




INDUSTRIAL ENGINEERING	
CYCLE	XL
COORDINATOR	Prof. Gianni ROYER CARFAGNI email: gianni.royer@unipr.it Department of Engineering for Industrial systems and Technologies
DURATION	3 years
STARTING DATE OF THE PHD PROGRAM	November 1st 2024
POSITIONS PUT OUT TO COMPETITION	8
ADMISSION PROCEDURES	Assessment of QUALIFICATIONS and Research Project Oral Exam in PRESENCE or REMOTELY
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 31.10.2024
TRAINING OBJECTIVES	
<p>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.</p>	
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 physics; • Industry 4.0 and future evolution 	

Position with Scholarship		
N°	Funding entity	Research Topic, if any
3	Scholarship funded by University of Parma (Ministerial funds)	
1	Scholarship co-funded by Fondazione Cariparma	

Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 6 of the Competition notice)		
N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship co-financed with funds under the PNRR - Mission 4, Component 1, Inv. 4.1 (Ministerial Decree 629/2024 art. 8 "PNRR Research") CUP D92J24000150006 	Circular materials for green packaging
1	Scholarship co-financed with funds under the PNRR - Mission 4, Component 2, Inv. 3.3 (Ministerial Decree 630/2024) and co-financed by the Company GEA PROCOMAC S.r.l. CUP D92J24000240004 	Big data analysis e modelling
1	Scholarship co-financed with funds under the PNRR - Mission 4, Component 2, Inv. 3.3 (Ministerial Decree 630/2024) and co-financed by the Company SpaceGlass S.r.l. CUP D92J24000240004 	Innovative windows for special applications

POSITION RESERVED	
Reserved to Holders of RESEARCH GRANT for the scientific disciplinary sector BIO/09 in the research topic "Sustainability and resilience Assessment of agri food industry and Ho.Re.Ca sector in Italy")	1

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>

ORAL EXAM PROGRAM		
<p>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)</p>		
<p>The ORAL test involves the presentation and discussion of the research project by the candidate and is aimed at verifying the candidate's aptitude for scientific research and his general preparation on topics related to the research topics of the doctoral course</p>		
<p>Foreign Language the fluency of which shall be assessed during the Oral Exam</p>	<p>ENGLISH</p>	<p>The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text</p>

SCHEDULE OF THE ADMISSION EXAMS		
ASSESSMENT OF QUALIFICATIONS	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	2 nd September 2024 (with possible extension in the following days)
	TIME	09:00 am (Italian Time)
	PLACE	Master Room – Building 3 Department of Engineering for Industrial Systems and Technologies Parco Area delle Scienze, 181/A - Campus 43124 PARMA - ITALY
FURTHER INFORMATION	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>	
	THE INTERVIEW MAY BE HELD ALSO IN ENGLISH	For foreign candidates, the admission examinations may be held in English at the candidate's choice.

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT		
MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION		
ANNEX A	(art. 3.2 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. 3.2 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 transcripts of records for both Bachelor and Master degrees containing the following details for each degree held: (art. 3.2 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 make 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	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 25 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 or originality of the proposal ○ description and structure of the proposal ○ proposal feasibility 	Up to 15 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 on national and international journals, papers presented at conferences or symposia, book chapters etc.	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 uploaded directly by the signatory to the REFERENCE LETTER folder. The file must be named "Candidate's Surname and Name – Reference Letters - PhD in Industrial Engineering". The candidate, therefore, must not upload them through the procedure of online registration for the competition.	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 program or other similar mobility programs) – Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.) 	Up to 3 points
EVALUATION 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"> ○ research project presentation ○ general knowledge of issues related to the PhD course ○ knowledge of foreign languages 	Up to 50 points