



INDUSTRIAL ENGINEERING	
Cycle	XXXV
Coordinator	Prof. Gianni ROYER CARFAGNI Department of Engineering and Architecture email: gianni.royer@unipr.it
Duration	3 years
Starting date of the PhD program	01/11/2019
Partner Institution for University Cooperation Agreements	<ul style="list-style-type: none">• Universidade Federal de Santa Caterina (Brazil)
Research Topics	
<ul style="list-style-type: none">• Theoretical and applied mechanics, mechanics of materials and structures, construction of machinery• Economic, organizational, managerial, plants and legal aspects in the field of engineering• Energetic systems, thermos-fluid dynamics, machinery and energy systems, technical physics	
Training Objectives	
<p>The Industrial Engineering PhD program aims to give 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 reality by providing the PhD an additional tool to get into a scientific context not just limited to national borders.</p>	
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 programs <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2019.</p>	
POSITIONS PUT OUT TO COMPETITION	
With Scholarship	6
Without Scholarship	2
Reserved to holders of scholarship funded by foreign States	1
TOTAL	9



Positions with University Scholarship		
N°	Funding entity	Research Topic, if any
2	Scholarship Ministerial funds	---
1	Scholarship co-funded by Fondazione Cariparma	---
Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)		
<p>During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.</p>		
N°	Funding entity	BOUND RESEARCH TOPIC
1	Funded by EMILIA ROMAGNA REGION 	<ul style="list-style-type: none"> Microstrucutre and properties of metallic components produced by additie manufacturing
1	Funded by EMILIA ROMAGNA REGION 	<ul style="list-style-type: none"> ATT-Hifood: Advanced Thermal Treatment for High Quality Food Products
1	Funded by EMILIA ROMAGNA REGION 	<ul style="list-style-type: none"> Sustainable Food Packaging: Life-Cycle Assessment of advanced packaging machines and plants in an Industry 4.0 perspective
<p><i>The assignment of the aforementioned scholarship funded by Emila Romagna Region is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</i></p>		
Position reserved to holders of scholarship fundend by foreign States		
N°	University or Foreign State	
1	Reserved to holders of Hochschule für Technik Stuttgart (Germany)	
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) ORAL EXAM: up to 50 points Minimum score for ELIGIBILITY: 70/120</p>		
ADMISSION PROCEDURES for positions reserved to holders of scholarship funded by foreign States		Assessment of QUALIFICATIONS: up to 120 points Minimum score for ELIGIBILITY: 70/120
Foreign Language	Language the fluency of which shall be assessed during the Oral Exam: ENGLISH . The evaluation of the knowledge of this language will be oral and will consist in reading and traslating of a scientific text.	
Possibility of videoconference for candidates residing or temporarily abroad (the relevant request shall be submitted using the form attached to the competitive examination announcement) The candidate can use the Skype platform for the web connection		YES
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 Call for Applications)
- Scanned Copy of a **valid identification document** with photo
- **Curriculum Vitae et studiorum** (art. 4 of the Call for Applications)
- **Abstract of the second cycle master's degree thesis.** Undergraduate applicants may submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)
- **Certificates and academic transcript of records for both Bachelor' and Master' degrees** containing the following details for each degree held: (art. 4 of the Call for Applications):
 - 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 Italian or in English, focus 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, argumentation. 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>). The project does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board.

Further qualifications that may be attached to the application, if in possession of the applicant

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

- **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 the specific her/his research interests;
- **Scientific Publications:** Articles on national and international journals, contributions presented at conferences or symposia, book chapters. It is necessary to attach a copy to online application;
- **Reference Letters:** a maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities;
- **Any other document** certifying the applicant's training and abilities (other Master's and/or specialization degree in subjects consistent with the research topics of this PhD program, mobility experience abroad, grants, awards, internships etc.).

EVALUATION CRITERIA

QUALIFICATION	EVALUTATION CRITERIA	POINTS
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 15 points



Graduation mark	<p>Score related to the final mark:</p> <ul style="list-style-type: none"> - 110 with honours (magna cum laude): 10 points; - 110: 8 points; - From 105 to 109: up to 6 points; - From 100 to 104: up to 3 points; - From 66 to 99: 0 points <p>The scores will be proportionally renormalized in case of equivalent evaluations</p>	Up to 10 points
Average of the exam marks (if the candidate will attain the degree no later than 31 October 2019)	<p>Score related to the average of the exam marks:</p> <ul style="list-style-type: none"> - 30/30: 10 points; - From 28/30 to 29/30: up to 5 points; - From 26/30 to 27/30: up to 3 points; - From 18/30 to 25/30: 0 points; <p>The scores will be proportionally renormalized in case of equivalent evaluations</p>	Up to 10 points
Graduation thesis	Consistency of the Master's Degree thesis with the doctoral program research topics	Up to 10 points
Research Project	Consistency of the Research Project with the doctoral program research topics	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	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	Up to 5 points
Other qualifications	other Master's and/or specialization degree in subjects consistent with the research topics of this PhD program, mobility experience abroad, grants, awards, internships etc	Up to 5 points
ORAL EXAMINATION	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 connected to the PhD course ○ knowledge of foreign languages 	Up to 50 points



LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT Positions reserved to holders of scholarship funded by Foreign States

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
Graduation thesis	Consistency of the Master's Degree thesis with the doctoral program research topics	Up to 20 points
Research Project	Consistency of the Research Project with the doctoral program research topics	Up to 40 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	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	Up to 5 points
Other qualifications	other Master's and/or specialization degree in subjects consistent with the research topics of this PhD program, mobility experience abroad, grants, awards, internships etc	Up to 5 points

SCHEDULE OF THE ADMISSION EXAMS

ORAL EXAM	DATE	12 September 2019
	TIME	10:00 am
	PLACE	Meeting Room – Building 10 Department of Engineering and Architecture Parco Area delle Scienze, 181/A – 43124 PARMA - ITALY
OTHER INFORMATION	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	