



INDUSTRIAL ENGINEERING		
Cycle	XXXIV	
Coordinator	Prof. Gianni ROYER CARFAGNI Department of Engineering and Architecture email: <a href="mailto:gianni.royer@unipr.it">gianni.royer@unipr.it</a>	
Duration	3 years	
Starting date of the PdD programme	01/11/2018	
<b>Research Topics</b>		
<ul style="list-style-type: none"><li>• Theoretical and applied mechanics, mechanics of materials and structures, construction of machinery</li><li>• Economic, organizational, managerial, plants and legal aspects in the field of engineering</li><li>• Energetic systems, thermos-fluid dynamics, machinery and energy systems, technical physics</li></ul>		
<b>Training Objectives</b>		
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.		
<b>Admission requirements</b>		
Applicants who have one of the following degrees may participate in the selection: <ul style="list-style-type: none"><li>- Laurea specialistica or Laurea magistrale (second cycle degree)</li><li>- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);</li><li>- an academic Master's degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.</li></ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2018</b> .		
<b>POSITIONS PUT OUT TO COMPETITION</b>		
With Scholarship	7	
Without Scholarship	2	
Reserved to holders of scholarship within specific international mobility programs	1	
Reserved to employees of companies having a "Industrial Doctorate" arrangement	1	
<b>TOTAL</b>	<b>11</b>	
<b>Positions with University Scholarship</b>		
<b>N°</b>	<b>Funding entity</b>	<b>Research Topic</b>
3	Scholarship Ministerial funds	---
1	Scholarship co-funded by Fondazione Cariparma	---



<b>Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)</b>		
<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>		
<b>N°</b>	<b>Funding entity</b>	<b>BOUND RESEARCH TOPIC</b>
1	Funded by Casappa S.p.A.	Development of mathematical models and experimental methodologies to increase the performance of fluid power systems and machines.
1	Funded by EMILIA ROMAGNA REGION	<b>ATT-HiFood:</b> Advanced Thermal Treatments for High quality Food products
1	Funded by EMILIA ROMAGNA REGION	Microstructure and properties of metallic components produced by additive manufacturing
<b>Reserved to holders of scholarship within specific international mobility programs</b>		
<b>N°</b>	<b>Agreements/Cooperations/Mobility Programs</b>	
1	Reserved to holders under the mobility program UE H2020 "PBNv2"	
<b>Position reserved according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013 (Industrial Doctorate)</b>		
<b>N°</b>	<b>Company/Institution</b>	
1	Reserved to employees of SUPSI– University of Applied Sciences and Arts of Southern Switzerland	
<b>ADMISSION PROCEDURES</b>		
<p><b>Assessment of QUALIFICATIONS:</b> up to 70 points (a minimum score of 40 points shall be required to be admitted to the Oral Exam)  <b>ORAL EXAM:</b> up to 50 points  <b>Minimum score for ELIGIBILITY:</b> 70/120</p>		
<p><b>ADMISSION PROCEDURES for positions reserved to holders of scholarship funded by foreign States and/or scholarship holders within specific international mobility programs</b></p>		<p><b>Assessment of QUALIFICATIONS:</b> up to 120 points  <b>Minimum score for ELIGIBILITY:</b> 70/120</p>
<p><b>Foreign Language</b></p>		<p>Language the fluency of which shall be assessed during the Oral Exam:  <b>ENGLISH</b></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>
<p><b>Possibility of videoconference for candidates residing or temporarily abroad</b> (the relevant request shall be submitted using the form attached to the competitive examination announcement)</p>		<p><b>YES</b></p>
<p>il candidato potrà utilizzare la piattaforma <b>Skype</b> per il collegamento web. Per organizzare operativamente il collegamento si prega di inviare almeno una settimana prima della data del concorso una mail a <a href="mailto:barbara.bigliardi@unipr.it">barbara.bigliardi@unipr.it</a></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 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 (10.000 characters including spaces)
- **Certificates and academic transcript of records for both the Bachelor' and the 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 programme
  - 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:** Project related to the research topic specified by the Candidate in the application form: the research project shall consist of a maximum of 3 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; it does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board. 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/file/4216> ) for the research topic specified in the application form .

### 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)

- **Scientific Publications:** Articles on national and international journals, contributions presented at conferences or symposia, book chapters
- **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 (grants, awards, etc.)

### EVALUATION CRITERIA

QUALIFICATION	EVALUTATION CRITERIA	POINTS
<b>Curriculum Vitae et studiorum</b>	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	<b>Up to 15 points</b>  <b>For reserved position to Project UE</b> <b>Up to 25 points</b>
<b>Graduation mark</b>	Score related to the final mark: - 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 The scores will be proportionally renormalized in case of equivalent evaluations	<b>Up to 10 points</b>  <b>For reserved position to Project UE</b> <b>Up to 20 points</b>



<b>Average of the exam marks</b> (itthe candidate will attain the degree no later than 31 October 2018)	Score related to the average of the exam marks: - 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; The scores will be proportionally renormalized in case of equivalent evaluations	<b>Up to 10 points</b>  <b>For reserved position to Project UE</b> <b>Up to 20 points</b>
<b>Graduation thesis</b>	Abstract of the second cycle master's degree thesis (max 10.000 characters including spaces). The graduate candidates can also attach the complete thesis work	<b>Up to 10 points</b>  <b>For reserved position to Project UE</b> <b>Up to 20 points</b>
<b>Research Project</b>	SEE ABOVE	<b>Up to 10 points</b>  <b>For reserved position to Project UE</b> <b>Up to 40 points</b>
<b>Scientific Publications</b>	Articles on national and international journals, contributions presented at conferences or symposia, book chapters	<b>Up to 5 points</b>
<b>Reference Letters</b>	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	<b>Up to 5 points</b>
<b>Other qualifications</b>	grants, awards, training etc	<b>Up to 5 points</b>
<b>ORAL EXAMINATION</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM will focus on general concepts within the research topics indicated in this schedule	<ul style="list-style-type: none"> <li>○ research project presentation</li> <li>○ general knowledge of issues connected to the PhD course</li> <li>○ knowledge of foreign languages</li> </ul>	<b>Up to 50 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>ORAL EXAM DATE:</b> 14 September 2018 <b>TIME:</b> 10:00am <b>PLACE:</b> Department of Engineering and Architecture - Building 8 Parco Area delle Scienze, 181/A – 43124 PARMA - ITALY	
<b>OTHER INFORMATION</b>	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	