



INDUSTRIAL ENGINEERING		
Cycle	XXXIII	
Duration	3 years	
Coordinator	Prof. Gianni ROYER CARFAGNI – Department of Engineering and Architecture E-mail: gianni.royer@unipr.it	
Research Topics (the applicant MUST indicate one research topic)	<p>Research topics are the following:</p> <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	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.	
Academic degree required	Laurea pursuant to the previous university system, laurea specialistica or laurea magistrale, or a foreign academic qualification that has been recognized as equivalent	
POSITIONS PUT OUT TO COMPETITION		
With Scholarship	6	
Without Scholarship	2	
Reserved to holders of Research Grant	1	
Reserved to employees of companies having a “Industrial Engineering Doctorate” arrangement	3	
TOTAL	12	
KIND OF SCHOLARSHIP		
N°	<i>Funding entity</i>	<i>Research Topic, if any</i>
3	Scholarship Ministerial funds	--
1	Scholarship University funds	--
1	Funded by Department of Engineering and Architecture (SMILE research project)	--



1	Co-funded by Fondazione Cariparma	• Operations management
Positions Reserved to holders of Research Grant		
N°	<i>Subject area of the research</i>	
1	Industrial logistics	
Positions reserved to employees of companies having a “Industrial Engineering Doctorate” arrangement		
N°	<i>Company/Institution</i>	
1	SIRAM S.p.A.	
1	ASK Industries S.p.A.	
1	SUPSI – University of Applied Sciences and Arts of Southern Switzerland	
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	<p>Language the fluency of which shall be assessed during the Oral Exam: ENGLISH.</p> <p>The evaluation of the knowledge of this language will be oral and will consist in translating and commenting a short scientific text.</p>	
<p>Possibility of videoconference for candidates residing or temporarily abroad (the relevant request shall be submitted using the form attached to the competitive examination announcement)</p>		YES
<p>Candidates shall use the Skype platform for the connection via web. In order to organize the connection, the candidate has to send a mail barbara.bigliardi@unipr.it at least one week before the competition.</p>		
THE INTERVIEW MAY BE HELD ALSO IN ENGLISH		
LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT		
Graduation thesis	<p>Abstract of the graduation thesis (mandatory qualification): 10,000 characters maximum (blank spaces included). Candidates may also attach the whole graduation thesis.</p>	Up to 10 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>Score will be rebalanced proportionally in case of equivalent evaluations.</p>	Up to 10 points



<p>Average of the exam marks (if the candidate will attain the degree no later than 31 October 2017) , as an alternative to the graduation mark</p>	<p>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 2 points; - From 18/30 to 25/30: 0 points; Score will be rebalanced proportionally in case of equivalent evaluations.</p>	<p>Up to 10 points</p>
<p>Curriculum Vitae et studiorum and other qualifications</p>	<p>Including academic career and postgraduate experience, accompanied with a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark (mandatory qualification)</p>	<p>Up to 15 points</p>
<p>Research Project</p>	<p>The research project shall be related to the Research Topic specified by the candidate in the application and shall consist of a maximum of 3 pages, be written in Italian or in English. It shall focus on an original topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. (mandatory qualification). <u>Such a Research Project is nota a constraint to the later choice or the Doctoral Thesis.</u></p> <p>To decide which Research Project to preent, the candidate can contact one of the Doctorate Members involved in the Research Topic specified in the application, available at the address: http://dia.unipr.it/it/ricerca/dottorato-di-ricerca/dottorato-ingegneria-industriale</p>	<p>Up to 20 points</p>
<p>Scientific pubblications</p>	<p>Articles on national and international journals, papers presented at conferences or symposia, book chapters: a copy of each article must be mandatorily attached to the on-line application.</p>	<p>Up to 5 points</p>
<p>Reference Letters</p>	<p>A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or by experts in the research areas working in public or private research facilities</p>	<p>Up to 5 points</p>
<p>Other qualifications</p>	<p>Awarding of Scholarships, prizes, trainings, etc.</p>	<p>Up to 5 points</p>
<p>SCHEDULE OF THE ADMISSION EXAMS</p>		



ORAL EXAM	ORAL EXAM DATE: 18 September 2017 TIME: 10:00am PLACE: Department of Engineering and Architecture Parco Area delle Scienze, 181/A – 43124 PARMA - ITALY
Oral Exam topics	The oral exam will focus on general concepts in the context of: <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.
OTHER INFORMATION	In the application to participate in the competitive examination, the candidate must choose and specify one research topic, and the oral exam will focus on this research topic. The oral exam may be held in Italian or English. For the candidates who will take the oral exam in Italian, the knowledge of English language will be evaluated orally, and the test will consist in reading and translating a scientific text.