



INDUSTRIAL ENGINEERING	
CYCLE	XLII
COORDINATOR	Prof. Alessandro TASORA email: <a href="mailto:alessandro.tasora@unipr.it">alessandro.tasora@unipr.it</a> Department of Engineering for Industrial systems and Technologies
DURATION	3 years
START DATE	November 1st 2026
POSITIONS AVAILABLE	5
ADMISSION PROCEDURES	Assessment of QUALIFICATIONS and Research Project Oral Exam in PRESENCE or REMOTELY
ADMISSION REQUIREMENTS	Regardless of age and citizenship, applicants may apply if they hold at least one of the following qualifications: <ul style="list-style-type: none"><li>• a Master's degree (Laurea Magistrale or equivalent);</li><li>• a degree awarded under the previous Italian system;</li><li>• an equivalent academic qualification obtained abroad, recognized as suitable for admission to the PhD programme.</li></ul> Applicants who have not yet graduated may also apply, provided that they obtain their degree by <b>31 October 2026</b> .
<b>TRAINING OBJECTIVES</b>	
<p>The PhD Program in Industrial Engineering aims to provide participants with an in-depth understanding of the covered topics, with the goal of achieving a cultural and professional preparation suitable both for integration into industrial production units and into public or private research and development organizations. The PhD program focuses on advanced numerical, analytical, and experimental techniques, enabling the PhD graduate to address technical and scientific challenges in Industrial Engineering. It also fosters managerial and organizational skills that ensure professional autonomy and the ability to quickly integrate into collaborative environments alongside other researchers and professionals within institutions or companies. The internationalization phase included in the three-year curriculum allows for the establishment of relationships with foreign institutions, offering PhD graduates the opportunity to engage in a scientific context that goes beyond national borders.</p>	
<b>RESEARCH AREAS</b>	
<ul style="list-style-type: none"><li>• Theoretical, applied and material mechanics; material technology; continuum and structural mechanics; machine design; measurements and diagnostics;</li><li>• Economic, organizational, managerial, logistical, plant-related and legal aspects in engineering;</li><li>• Energy systems, thermodynamics and fluid dynamics, machinery, technical physics;</li><li>• Industry 4.0 and future developments.</li></ul>	

Position with Scholarship		
N°	Funding entity	Research Topic, if any
2	University of Parma (Ministerial funds, University funds and Cariparma Foundation)	
1	Fully funded by Cariparma Foundation	



Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 6 of the Competition notice)		
N°	Funding entity	BOUND RESEARCH TOPIC
1	partially funded by University and Cariparma Foundation funds and co-funded by <b>TECNORD S.r.l.</b>	Theoretical and experimental investigation of innovative hydraulic systems and solutions.
1	funded by Barilla G. e R. Fratelli S.p.A.	Development of a Predictive Model for the Monitoring and Behavioral Analysis of a Pasta Production Line Using an Advanced Distributed Sensor Network

ADMISSION ASSESSMENT
<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)</p> <p><b>ORAL EXAM:</b> up to 50 points</p> <p><b>Minimum score for ELIGIBILITY:</b> 70/120</p>

ORAL EXAM PROGRAM			
<p><b>Applicants admitted to the ORAL EXAM can take it either in PRESENCE or REMOTELY in Audio and Video Teleconference</b> (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>			
<table border="1"> <tr> <td> <b>Foreign Language</b> the fluency of which shall be assessed during the Oral Exam </td> <td style="background-color: yellow;"> <b>ENGLISH</b> </td> <td> The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text </td> </tr> </table>	<b>Foreign Language</b> the fluency of which shall be assessed during the Oral Exam	<b>ENGLISH</b>	The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text
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SCHEDULE OF THE ADMISSION EXAMS	
<b>ASSESSMENT OF QUALIFICATIONS</b>	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 <a href="http://unipr.esse3.cineca.it/Home.do">http://unipr.esse3.cineca.it/Home.do</a> in the days preceding the date of the Oral Exam. <b>Publication on the website constitutes official notification. No individual communication will be sent to candidates by email.</b>
<b>ORAL EXAM</b>	<b>DATE</b> 9 <sup>th</sup> September 2026 (with possible extension in the following days)
	<b>TIME</b> 09:00 am (Italian Time)
	<b>PLACE</b> Professor Alessandro Tasora's Office – Building 8 SCIENTIFIC ENGINEERING HEADQUARTERS Department of Engineering for Industrial Systems and Technologies Parco Area delle Scienze, 181/A - Campus 43124 PARMA - ITALY
<b>FURTHER INFORMATION</b>	<b>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.</b>



	<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	For foreign candidates, the admission examinations may be held in English at the candidate's choice.
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## LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

### MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

<b>ANNEX A</b>	(art. 3.2 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 3.2 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Academic Qualifications</b>	<b>Certificates and academic transcripts of records for both Bachelor and Master degrees</b> 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).
<b>Research Project</b>	The research proposal must be written in Italian or English, in accordance with the format attached to the Call for Applications. It must focus on an <b>original research topic</b> In accordance with the <a href="#">Guidelines for the responsible use of Artificial Intelligence in education and research</a> , the candidates must explicitly state whether they have used Generative Artificial Intelligence systems in the production of the research proposal attached to their application form, specifying which tools were used and for which parts of the document. During the oral examination, the Admission Board will assess the candidate's full mastery of the content included in the document and their ability to justify the methodological and scientific choices made in the project.  <u>The research proposal <b>does not constitute a binding commitment</b> for the subsequent choice of the PhD research topic, which will be assigned by the Academic Board</u>  <b>Failure to submit the research proposal will result in exclusion from the selection procedure.</b>

### LIST OF EVALUABLE QUALIFICATIONS

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

<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. The marks of the exams and the graduation mark will be the most relevant element of the evaluation.	<b>Up to 25 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics	<b>Up to 10 points</b>
<b>Research Project</b>	Points relating to the research project shall be allocated on the basis of the following criteria: <ul style="list-style-type: none"> <li>○ Scientific value and or originality of the proposal</li> <li>○ description and structure of the proposal</li> <li>○ proposal feasibility</li> </ul>	<b>Up to 14 points</b>



<b>Statement of Research Interest</b>	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	<b>Up to 5 points</b>
<b>Scientific Publications</b>	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc. <i>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</i>	<b>Up to 6 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. They must be uploaded directly by the signatory to the <a href="#">REFERENCE LETTER</a> 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.	<b>Up to 5 points</b>
<b>Other Academic qualifications</b>	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	<b>Up to 2 points</b>
<b>Other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <li>– 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</li> <li>– Working activity</li> <li>– Professional and/or training internship</li> <li>– Language proficiency certificates</li> <li>– Periods of study abroad, outside the country of origin (e.g. Erasmus program or other similar mobility programs)</li> <li>– Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>	<b>Up to 3 points</b>
<b>EVALUATION ORAL EXAM</b>		
<b>Interview Program</b>	<b>Evaluation CRITERIA</b>	<b>POINTS</b>
<b>The ORAL EXAM</b> 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"> <li>○ research project presentation</li> <li>○ general knowledge of issues related to the PhD course</li> <li>○ knowledge of foreign languages</li> </ul>	<b>Up to 50 points</b>