





CIVIL ENGINEERING AND ARCHITECTURE	
CYCLE	XXXIX
COORDINATOR	Prof. Andrea SPAGNOLI email: andrea.spagnoli@unipr.it Department of Engineering and Architecture
DURATION	3 years
STARTING DATE OF THE PHD PROGRAM	01/11/2023
TRAINING OBJECTIVES	
To develop specialized skills in the following fields:	
<ol style="list-style-type: none">(1) Infrastructure and Environmental Engineering: civil infrastructures for transport; survey, management, and analysis of land data, control and monitoring of displacements and deformations at all scales; issues related to surface waters and groundwater;(2) Structural and Geotechnical Engineering: mechanical behaviour of materials, structural components and structures; behaviour of soils and geotechnical structures;(3) Architecture and Urban Planning: theoretical, formal, distributional and functional aspects in architecture; the problems related to methods for survey and to computer-graphics in architecture; issues related to the implementation and the development of urban settlements; historical, artistic, technical and aesthetic themes in the architecture of the past.	
RESEARCH AREAS OF THE DOCTORAL COURSE (the candidate MUST mandatorily select one research area in the ANNEX A and present a research project in the selected area)	
<ul style="list-style-type: none">• Infrastructure and Environmental Engineering• Structural and Geotechnical Engineering• Architecture and Urban Planning	
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 31.10.2023

POSITIONS PUT OUT TO COMPETITION		9
With Scholarship		8
Reserved to holders of Research Grant		1
Position with Scholarship		
N°	Funding entity	Research Topic, if any
3	Scholarship funded by University of Parma (Ministerial funds)	---
1	Scholarship funded by University of Parma (University funds)	---
1	Scholarship co-funded by Fondazione Cariparma	---



Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)		
N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Department of Engineering and Architecture	FAME - Floods Active Management during Emergency
1	Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 7 “Digital and environmental transitions”) CUP D92J23000110006 	Urban Strategic Design as a tool for planning scenarios for urban green infrastructure in Italy
1	Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 118/2023 art. 8 “PNRR Research”) CUP D92J23000180006 	Reliability aspects on the residual service life estimation of as built and repaired RC and PC structures subjected to corrosion phenomena
Position reserved to HOLDERS OF RESEARCH GRANT		
N°	Subject area of the research	
1	Hydraulic structures, maritime engineering and hydrology (ICAR/02): Machine Learning Methods in Computational Fluid Dynamics for speedup of physically-based numerical solvers	

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	The language for which the fluency must be assessed during the Oral Examination. The assessment of knowledge of this language will be oral and will consist in reading and translating a scientific text.	ENGLISH
ORAL EXAMINATION INDICATION		
<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>		
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 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. 4 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 transcript of records for both Bachelor' and Master' degrees containing the following details for each degree held: (art. 4 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).	
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	
Research Project	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results. The project must focus on an original research topic (unpublished, personally developed by the candidate) related to the topics listed in https://dia.unipr.it/it/node/6470 . It should be noted that the Examination Board can 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</u> , 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		
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. The reference letters must sent directly by the signer to the address e-mail: roberto.brighenti@unipr.it . Reference letters sent directly by the candidate or received in any other way will not be evaluated.	
Scientific Publications	A maximum of 2 articles on national and international journals, papers presented at conferences or symposia, book chapters etc.	
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. Mandatory: Statement of Research Interest Not mandatory: Reference Letters	Up to 30 points
Graduation mark	---	Up to 5 points
Average of the exam marks (if the candidate will attain the degree no later than 31st October 2023)	---	Up to 5 points
Graduation thesis	Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae by attaching the abstract of the degree thesis or draft of the thesis approved by the supervisor)	Up to 6 points
Research Project		Up to 25 points
Scientific Publications		Up to 4 points
ORAL EXAM		
Interview Program	Evaluation CRITERIA	POINTS
The ORAL EXAM includes the presentation of the research project and is intended to assess the suitability of the applicant to pursue scientific research as well as the	<ul style="list-style-type: none"> ○ knowledge of the foreign language ○ research project presentation ○ general knowledge of research areas related to the PhD course 	Up to 50 points



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SCHEDULE OF THE ADMISSION EXAMS

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	11 September 2023
	TIME	9:00 AM (Italian Time) (with possible extension to the afternoon)
	PLACE	Department of Engineering and Architecture Meeting Room – Building 10 Parco Area delle Scienze, 181/A – Campus Universitario - 43124 PARMA
ALTRE INDICAZIONI	<p>In the application form (Annex A), the Candidate must specify a single research area (Infrastructures, Geostructures, Architecture), and on this area the Candidate must carry out the Oral Exam.</p> <p>The choice of the research area to be indicated in Annex A does not have a binding character on the subsequent choice of the PhD research topic, but has the purpose of assessing the candidates' skills during the admission exam. The PhD research topic will be agreed with the supervisor and approved by the Academic Board.</p> <p>The admission oral exam can also be carried out in English at the candidate's choice. If the Candidate wishes to carry out the Oral Exam in English, he/she must state a formal request in the application form (Annex A).</p> <p>For Candidates who will carry out the Oral Exam in Italian, the verification of the English language knowledge will take place in oral form and will consist in the reading and translation of a scientific text.</p>	