



CIVIL ENGINEERING AND ARCHITECTURE	
Cycle	XXXIV
Coordinator	Prof. Andrea CARPINERI Department of Engineering and Architecture email: andrea.carpinteri@unipr.it
Duration	3 years
Starting date of the PdD programme	01/11/2018
Research Topics	
<ul style="list-style-type: none">• Infrastructure and Environmental Engineering• Structural and Geotechnical Engineering• Architecture and Urban Planning	
Training Objectives	
<p>To develop specialized skills in the following fields:</p> <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 groundwaters;(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.	
Admission requirements	
<p>Applicants who have one of the following degrees may participate in the selection:</p> <ul style="list-style-type: none">- Laurea specialistica or Laurea magistrale (second cycle degree)- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);- an academic Master's degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes. <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.</p>	
POSITIONS PUT OUT TO COMPETITION	
With Scholarship	6
Without Scholarship	1
Reserved to holders of Research Grant	1
TOTAL	8



Positions with University Scholarship		
N°	Funding entity	Research Topic, if any
3	Scholarship University 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"> Analysis of seismic damage mechanisms and definition of vulnerability curves for specialized buildings of cultural heritage: new information tools for territorial planning of prevention measures
1	Funded by EMILIA ROMAGNA REGION	<ul style="list-style-type: none"> RobuStruPre: the strength of the prefabricated structures
Position reserved to holders of Research Grant		
N°	Subject area of the research	
1	"Development of a Smoothed Particle Hydrodynamics numerical model for hydraulic turbine"	
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>		
Foreign Language	<p>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 translating of a 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> <p>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</p>		YES
LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT		
Mandatory documents to be attached to the on-line application		
<ul style="list-style-type: none"> – 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)

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)

- **Research Project:** The research project shall consist of a maximum of 3 pages, be written in Italian or in English, on the subject of research specified by the candidate in the application form (ANNEX A), 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 is advised to contact one of the Academic Board Members for the research topic specified in the application form: <http://www.dotingcivarch.unipr.it>
The Research 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;
- **Scientific Publications:** Articles on national and international journals, papers presented at conferences or symposia, book chapters 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 30 points
Graduation thesis	Consistency of the Master's Degree thesis with the doctoral programme research topics (Abstract of the second cycle master's degree thesis or the draft of the thesis approved by supervisor)	Up to 10 points
Research Project	Points relating to the research project on the subject of research specified by the candidate in the online application form	Up to 20 points
Scientific Publications	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	Up to 10 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">○ knowledge of foreign languages○ research project presentation○ general knowledge of issues connected to the PhD course	Up to 50 points
SCHEDULE OF THE ADMISSION EXAMS		
ORAL EXAM	ORAL EXAM DATE: 19 September 2018 TIME: 09:30am PLACE: Department of Engineering and Architecture Parco Area delle Scienze, 181/A - 43124 PARMA - ITALY	
OTHER INFORMATION	<p>The Oral Exam must be taken in Italian or in English.</p> <p>For the Applicants who will take <u>the Oral Exam in Italian</u>, the knowledge of English language will be evaluated orally, and the test will consist in reading and traslating a scientific text.</p> <p>The Applicants who will take <u>the Oral Exam in English</u> (in presence or in videoconference using the platform of Skype for the connection via web), if they will be in the list of winners of the present competitive examination, will have to mandatorily learn Italian during the 1st year of the Doctorate Course, attending a Course by the University of Parma (http://www.lass.unipr.it/en/teaching/italian-courses-foreigners) and passing the final exam, in order to be able to attend (at the 2nd year) the 'Preparatory Course' (by the Doctorate School in Engineering and Architecture) which is held in Italian.</p>	