UNIVERSITÀ DI PARMA

CIVIL ENGINEERING AND ARCHITECTURE

CYCLE	XXXVII
COORDINATOR	Prof. Sandro LONGO email: sandro.longo@unipr.it Department of Engineering and Architecture
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	• New Jersey Institute of Technology (USA)

RESEARCH TOPICS (The candidate **MUST mandatorily** indicate one research topic in the ANNEX A or indicate if he / she participates for a scholarship with a specific topic)

- Infrastructure and Environmental Engineering
- Structural and Geotechnical Engineering
- Architecture and Urban Planning

TRAINING OBJECTIVES

To develop specialized skills in the following fields:

(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.

ADMISSION REQUIREMENTS	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: − 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 Undergraduate applicants may also submit applications with the obligation of getting their degree by **October 31st 2021.**

POSITION PUT OUT TO COMPETITION	**7**	With Scholarship	**7**
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)		
During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic 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.		
N°	*Funding entity*	*BOUND RESEARCH TOPIC*
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Engineering and Architecture	• Laboratory characterization and performance-based mechanical modeling of cold recycled asphalt mixtures
1	Scholaship funded by EMILIA ROMAGNA REGION *The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna*	• "**ARES** - **A**rtificial intelligence for flood **RES**ilience"

ADMISSION PROCEDURES	**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
Foreign Language	The language for which the fluency must be assessed during the Oral Examination: **ENGLISH**. The assessment of knowledge of this language will be oral and will consist in reading and translating a scientific text.

CANDIDATES ADMITTED TO THE ORAL TEST CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)
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)

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

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)

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: andrea.maranzoni@unipr.it Reference letters sent directly by the candidate or received in any other way will not be evaluated.
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). **It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project.** 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.
Scientific Publications	Max 2 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. 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 31 October 2021)	---	**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	Maximum 2	**Up to 4 points**

ORAL EXAM	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 general knowledge of issues connected to the PhD course	o knowledge of the foreign language o research project presentation o general knowledge of issues connected to the PhD course	**Up to 50 points**

SCHEDULE OF THE ADMISSION EXAMS		
ORAL EXAM	**DATE**	15 September 2021 (with possible extension in the following days)
	TIME	09:30 AM (Italian time)
	PLACE	Department of Engineering and Architecture MEETING ROMM – Building 10 Parco Area delle Scienze, 181/A – Campus 43124 PARMA - ITALY
OTHER INFORMATION		The Oral Exam must be taken in Italian or in English. **If the candidate wishes to take the oral exam in English he/she must attach a formal request to the application form (Form ANNEX A).** In the application for participation in the competitive examination, the Applicant **must choose and specify only ONE Thematics** (between the 3 possible Thematics), and the Applicant must take the oral exam on the chosen Thematics. During the Oral Exam the candidate must indicate the theme of research of his/her interest among those listed in https://dia.unipr.it/en/themes_37_Cycle In the case of admission to the PhD programme, the above choice will be binding for the research activity of the winner. For Applicants who will take the Oral Exam in Italian, knowledge of English will be assessed orally and the test will consist of reading and translating a scientific text. Foreign Applicants, if they are among the winners of the PhD admission competition, are strongly encouraged to attend an Italian language course (http://www.lass.unipr.it/en/teaching/italian-courses-foreigners). The Faculty Board will recognize the credits based on the level of knowledge acquired.