

Allegato n. 9

ENVIRONMENTAL PHENOMENA AND RISKS	
Total positions	3 with funding from the Parthenope University + 1 without funding + 1 position reserved to employees of research institutes/centres
Reserved positions	1 position reserved to employees of research institutes/centres for ARPAC +1 position without funding
Funded positions	3 positions with full funding from the Parthenope University +
Duration of the PhD course	Three years
PhD Course in convention with foreign universities	PhD course in convention with the University of Cadiz – Spain. All PhD students must spend at least three months of study and/or research in a foreign country
Participating institutions	University of Cadiz – Spain
(Italian academic) Scientific Sectors	GEO/12, ICAR/01, ICAR/02, ICAR/06, ICAR/07, ICAR/08, ICAR/09, GEO/02, GEO/04, CHIM/12, ING-IND/01
Objectives of the PhD course	<p>The theme of this PhD course is the study of a wide range of environmental phenomena, the potential risks associated with them and the methods for their mitigation. The topic is highly interdisciplinary and requires the convergence of tools and expertise from different scientific fields and disciplines. Starting from the climate, understood as a complex of phenomena at multiple scales that develop within atmosphere, hydrosphere, cryosphere, biosphere, lithosphere, it will focus on the effects of the phenomena in terms of individual potential negative fallout on people and production capacity, as well as on the hazard assessment, on the vulnerability of the elements at risk, on possible integrated strategies for mitigation.</p> <p>Topics of basic and applied research in the fields of oceanography, meteorology, climatology, geology, will therefore be considered, as well as their interactions in cases of environmental pollution, hydro-geological risk and similar issues; they will be joined by disciplines more directly related to the assessment and mitigation of risk, such as maritime and hydraulic engineering, geotechnical and structural engineering and geomatics, together with issues related to the methods of experimental investigation, monitoring and control of the territory .</p> <p>All above disciplines will provide the scientific and technical knowledge necessary to design actions to mitigate the most serious</p>

	<p>natural hazards, both with structural protection and soil conservation, and using non-structural measures for improving the security of land and of land-based activities.</p> <p>The PhD program is intended to train professionals capable of being competitive in research (universities, research institutes, public and private) and employment market (Public Administration, Science and Technology Parks, Research Consortia, National Agencies and Regional Authorities for the Environment, River Basin Authorities, small and medium-sized enterprises, etc ...) at national and international level.</p> <p>To ensure maximum adaptability to the variety of profiles required in the labor market we will promote the ability to work in teams, the knowledge of foreign languages, the ability to manage interdisciplinary knowledge, including environmental law.</p>
Coordinator	Prof. Enrico Zambianchi
Participation requisites	<p>Possession of one of the following qualifications:</p> <ul style="list-style-type: none"> - “laurea specialistica” or “laurea magistrale” awarded in accordance with DM 509/1999 and subsequent amendments and additions; - “laurea” or “diploma di laurea” awarded in earlier courses of study (whose legal course has a duration of at least four years); - Master / Diploma of a Higher Education Institution in Spain; - An equivalent Bachelor’s + Master’s degree from a foreign university. <p>In the latter case, if the title has not already been officially declared equivalent to the required Italian degree, the decision on admission is solely demanded to the Commission.</p>
Admission test structure	<p>Admission will be structured in two phases:</p> <p>The first will consist of an evaluation of the candidate’s curriculum vitae et studiorum and of a research project, which will not represent an obligation in terms of the PhD project assigned to successful candidates, <u>that must be submitted by candidates together with the application form.</u> Candidates are also requested to provide a list of <u>courses taken and exams passed (with marks) in the course of the Bachelor’s and Master’s studies.</u></p> <p>A maximum score of 60 points may be awarded in this phase.</p> <p>The second phase is an oral test. A maximum score of 40 points may be awarded in this phase.</p> <p>Maximum attainable score is 100 points.</p> <p>Only candidates scoring more than 35 points in the first phase will be admitted to the oral test.</p> <p>Only candidates scoring more than 25 points will be admitted to the final ranking.</p>

<p>Curriculum and project evaluation</p>	<p>The candidate evaluation in the first phase is expressed in an analytical form by the selection committee; it will be based on the evaluation of the following elements submitted by the candidate:</p> <ul style="list-style-type: none"> - Curriculum vitae et studiorum (up to 30 points); - Research project, <u>that must be submitted by candidates together with the application form</u>, which will not represent an obligation in terms of the PhD project assigned to successful candidates (up to 30 points). <p>The project is expected not to exceed 8 pages. It will consist of:</p> <ul style="list-style-type: none"> • Introduction/motivation • Literature/knowledge review • Materials and methods • Activity time schedule • Expected results • Bibliography
<p>Written admission test</p>	<p>No written test is planned.</p>
<p>Oral admission test</p>	<p>The oral examination is scheduled for Sept 24th, 2019, and will consist in an interview that will focus on the curriculum presented by the candidates, their qualifications and any publications, as well as on the research project. In the interview a good knowledge of the English language will also be ascertained.</p>