



UNIONE EUROPEA  
Fondo Sociale Europeo



Università degli Studi di Cagliari

<b>International PhD Programme in CIVIL ENGINEERING AND ARCHITECTURE in collaboration with - École Nationale Supérieure d'Architecture de Toulouse - Université Bordeaux Montaigne</b>	
DISCIPLINARY SCIENTIFIC AREAS	08b - CIVIL ENGINEERING; 08a - ARCHITECTURE; 04 - EARTH SCIENCES; 07 - AGRICULTURAL AND VETERINARY SCIENCES; 09 - INDUSTRIAL AND INFORMATION ENGINEERING; 11a - HISTORICAL, PHILOSOPHICAL AND PEDAGOGICAL SCIENCES
COORDINATOR	PROF. IVAN BLEČIĆ
HEAD DEPARTMENT	DEPARTMENT OF CIVIL, ENVIRONMENTAL ENGINEERING AND ARCHITECTURE
DURATION	3 YEARS
LEARNING OUTCOMES AND RESEARCH TOPICS	<p>The PhD in Civil Engineering and Architecture puts the built environment and the territory at the centre of the scientific interest, intended as a complex research field comprising the historical and contemporary built systems, road and hydraulic infrastructures, the environment and the natural and man-made landscapes, with particular attention to the relationships among environment, economy and society. The vast field of investigation promotes an interdisciplinary vision of the problems and topics addressed, and favours the integration between fundamental and applied research.</p> <p>Within this wide field of research, the primary objective of the PhD programme is to promote the training in research and the acquisition of methods and tools for conducting research projects, together with the ability to teach courses at the level of higher education. Particular attention is paid to the consolidation of the autonomous elaboration capacity of original research programs on the topics of the Doctorate.</p> <p>The PhD also pursues technical and operational objectives, consistently with possible professional connotation of the disciplines of civil engineering and architecture, in which basic research is combined with applied research, with significant social repercussions. These objectives aim to strengthen the capacity of the PhD students to identify the existing relationships and interconnections between the engineering, architectural, technological, environmental, economic and social aspects.</p> <p>For the development of doctoral research, the PhD promotes laboratory activities on engineering, architectural, technological, environmental, economic, and social aspects connected with the construction and integration of construction works, road and hydraulic infrastructures, natural water systems and soil defence systems.</p> <p>The PhD has a strong international characterisation, provides for extended periods of research and study abroad, maintains collaborations and establishes co-supervision and cotutelle agreements with scholars and institutions abroad. Following the signing of agreements with École Nationale Supérieure d'Architecture de Toulouse and Université Bordeaux</p>



	<p>Montaigne, the Doctorate offers the option for the respective PhD students to undertake joint educational paths, with the consequent release of the double degree.</p> <p>The advanced knowledge and skills acquired during the doctoral course, and the constant stimulus deriving from the interdisciplinary context that characterises the Academic Board, contribute to the formation of PhD graduates, capable of addressing complex problems concerning transformations of the territory in its broadest sense, compatibly with a sustainable development of the environment, the prevention and mitigation of natural risks and the prudent use of natural resources.</p>
<p>ELIGIBILITY AND OTHER REQUIREMENTS FOR CANDIDATES (ART. 2 - NOTICE OF COMPETITION)</p>	<p>EVERY ITALIAN 2ND CYCLE DEGREE (<i>LAUREA MAGISTRALE/SPECIALISTICA/VECCHIO ORDINAMENTO</i>) AND EQUIVALENT AND SUITABLE FOREIGN ACADEMIC DEGREES</p>
<p>ADMISSION TESTS</p>	<p>ASSESSMENT OF QUALIFICATIONS AND CURRICULUM VITAE, AND VIDEO CONFERENCE INTERVIEW.</p> <p>The interview is aimed at verifying the candidate’s ability to orientate within the main study areas of the doctorate, and his/her analysis, elaboration and communication skills, as well as his or her aptitude for research.</p> <p>The candidate will also be asked to discuss a three-year research project, which must be submitted in addition to the documents required in art. 3 of the notice of competition (<i>Annex A ‘Titoli valutabili e Curriculum Vitae’; Annex B ‘Dichiarazione sostitutiva di certificazioni del/i titolo/i di accesso con esami e voti’; two-sided coloured scanned copy of a valid ID, with a clear photo</i>), within the deadline (file name: <i>progetto_di_ricerca_surname_name</i>).</p> <p>The candidate must propose a research project (min. 8,000, max. 16,000 characters, title and references excluded) relevant to the themes and areas of study of the Doctorate in Civil Engineering and Architecture, specifying: (1) the motivations and the objectives; (2) the relationship between the state-of-the-art and the elements of innovation and advancement of knowledge achievable through the project, (3) the possible phases of the research project, and (4) the methodologies and tools that the candidate proposes to employ.</p>
<p>ADMISSION TESTS FOR FOREIGN CANDIDATES APPLYING FOR RESERVED POSITIONS SUPPORTED BY A SCHOLARSHIP</p>	<p>ASSESSMENT OF QUALIFICATIONS AND CV, VIDEO CONFERENCE INTERVIEW</p> <p>The interview is aimed at verifying the candidate’s ability to orientate within the main study areas of the doctorate, and his/her analysis, elaboration and communication skills, as well as his or her aptitude for research.</p> <p>The candidate will also be asked to discuss a three-year research project, which must be submitted in addition to the documents required in art. 3 of the notice of competition (<i>certificate attesting the award of a 2<sup>nd</sup> level foreign degree needed to access a PhD programme, including exams and marks, with a translation in Italian or English; certificate attesting the award of a 1<sup>st</sup> level foreign degree, including exams and marks, with a translation in Italian or English; signed Curriculum Vitae preferably in EU format, in English or Italian; up to 3 reference letter(s), in English or Italian, on institutional letterhead paper, dated and signed by a university professor or expert in the PhD scientific area(s), following the prescriptions of each annex; additional qualifications, certifications, publications (up to 5) and work experiences, detailed in English or in Italian; two-sided coloured scanned copy of a valid ID, with a clear</i></p>



	<p><i>photo</i>), within the deadline.</p> <p>In the submitted text (min. 8,000, max. 16,000 characters, title and references excluded) the candidate must propose a research project relevant to the themes and areas of study of the Doctorate in Civil Engineering and Architecture, specifying (1) the motivations and the objectives; (2) the relationship between the state-of-the-art and the elements of innovation and advancement of knowledge achievable through the project, (3) the possible phases of the research project, and (4) the methodologies and tools that the candidate proposes to employ.”</p> <p>Reference letters must be written, in Italian or English, by a university professor or an expert in the fields of research of the PhD programme, on letterhead of the institution to which they belong, dated and signed. Evaluators will send their letters directly to the email address <a href="mailto:phdcall_referenceletter@unica.it">phdcall_referenceletter@unica.it</a> (object: surname and name of the candidate being evaluated and name of the PhD programme for which he/she is applying).</p>
POSITIONS	8
SCHOLARSHIPS	<p>2 FUNDED BY MUR “2019-2020 PLANNING EX ART. 1 D.M. N. 435/2020 STATE UNIVERSITIES”</p> <p>2 FUNDED BY MUR PL, 1 OF WHICH RESERVED FOR FOREIGN CANDIDATES HOLDING A FOREIGN DEGREE</p> <p>1 FUNDED BY FLUORSID SPA. – research topic “<i>Sustainable reuse of fly ashes by-products for road construction</i>” - REFERENCE PERSON Prof. Mauro Coni</p> <p>1 FUNDED BY DEPT. OF CIVIL AND ENVIRONMENTAL ENGINEERING, AND ARCHITECTURE (FUNDS FROM RAS –PUBLIC WORKS DEPARTMENT, research topic “<i>Modelling, monitoring and innovative structural consolidation of bridges and containment structures</i>” - REFERENCE PERSON Prof. Mauro Sassu</p> <p>The recipients for those scholarships which are related to a specific topic will be selected among the candidates who will gain a suitable position in the ranking lists for the admission to the PhD programme, as well as a positive assessment as regards the adequacy of his/her CV to develop the specific topic.</p>
POSITIONS WITHOUT SCHOLARSHIP	2
REFERENCE PERSON	PROF. IVAN BLEČIĆ - EMAIL: <a href="mailto:dotticar@unica.it">dotticar@unica.it</a>
WEBSITE	<a href="http://dottorati.unica.it/dotticar/">http://dottorati.unica.it/dotticar/</a>