



IN

## **CIVIL AND ENVIRONMENTAL ENGINEERING**

Director prof. Luca Solari

## XXXVII cycle – academic year 2021/2022





università degli studi FIRENZE





The Pegaso Scholarships are financed with the resources of the Region of Tuscany that can represent an advance of POR FSE TOSCANA 2021/27 funds. The Pegaso Scholarships are the Region of Tuscany's project to promote the autonomy of the youth falls within the sphere of "GiovaniSì" (www.giovanisi.it).

| TECHNOLOGICAL AREA  |   |  |  |
|---|---|--|--|
| ADMINISTRATIVE OFFICE   | Department of Civil and Environmental Engineering (DICEA)   |  |  |
| REGIONE TOSCANA<br>PEGASO PROJECT 2021  | University of Florence<br>University of Pisa  |  |  |
| PARTNER INSTITUTIONS  | Bauingenieurwesen und Umweltwissenschaften – Technische Universitat<br>Braunschweig, Germany – Fakultat 3 Architektur   |  |  |
| CURRICULA   | <ol> <li>Solid, Fluid and Materials Mechanics</li> <li>Construction Design, Verification and Control</li> <li>Environment, Resources and Security</li> </ol>  |  |  |
|   | POSITIONS AVAILABLE: 12<br>Positions with scholarship: 10<br>Positions without Scholarship: 2*<br>* standard ranking only   |  |  |
| RANKING LIST FOR<br>STANDARD POSITIONS<br>SCHOLARSHIPS<br>AVAILABLE: 6                          | <ul> <li>5 - University of Florence</li> <li>1 – Novamont s.p.a.</li> <li>Thematic: "Organic Waste and Bioplastics composing".</li> </ul>   |  |  |
| RANKING LISTS FOR<br>POSITIONS WITH SPECIFIC<br>RESEARCH TOPICS<br>SCHOLARSHIPS<br>AVAILABLE: 4 | <ul> <li>Regione Toscana Pegaso Scholarships 2021**</li> <li>1. Thematic: "Development of methodologies for the evaluation of corrosion phenomena effects in prestressed reinforced concrete bridge decks with post-tensioned cables".</li> <li>2. Thematic: "A Plastic Budget Methodology to Model plastic pathways, degradation and storage in rivers, coastal areas and open seas".</li> <li>3. Thematic: "Development of transport infrastructure technologies to improving traffic fluidity, efficiency and road safety".</li> </ul> |  |  |

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|--|---|--|--|
|  | <ul> <li>4. Thematic: "Study and development of Machine Learning-based approaches for Structural Health Monitoring of historical constructions".</li> <li>** A period of training/research in an enterprise, a public research institution or other public institution (not a university) of at least 3 months is mandatorily required.</li> </ul>  |  |  |
| STUDY/RESEARCH<br>PERIODS ABROAD   | Mandatory for all positions   |  |  |
| MANDATORY PERIOD<br>REQUIRED   | <ul> <li>9 months either at TU- Braunschweig or other foreign university with a co- tutorship agreement to be signed within the first year of the course</li> <li>12 months for Pegaso Scholarships 2021 holders are due to perform a mandatory study/research period abroad</li> </ul>   |  |  |
| <b>DOCUMENTS REQUIRED</b><br><b>FOR THE ADMISSION</b><br>(under penalty of<br>exclusion) | <ul> <li>Copy of the Identification Document</li> <li>Self-declaration for qualifications (bachelor's/Master's/combined cycle degree) obtained in Italy with a list of all exams taken and their mark, title of the thesis and graduation mark (download the form <u>here</u> make sure you fill in in all the fields)</li> <li>Foreign qualification required to access with a list of all exams taken and their mark, title of the thesis and graduation mark.</li> </ul> |  |  |
|  | The same documentation except for the final mark must be submitted by those who will graduate by 31/10/2021   |  |  |
| DOCUMENTS REQUIRED<br>FOR THE EVALUATION   | <ul> <li>MANDATORY         <ul> <li>Curriculum vitae</li> <li>Research project</li> </ul> </li> <li>OPTIONAL         <ul> <li>List of publications</li> <li>Any other qualification document</li> </ul> </li> </ul>   |  |  |
| REFERENCE LETTERS  | A section is provided in the online application to specify the e-mail addresses<br>of one professor/researcher willing to provide information about candidates<br>training path and activities performed within a scientific field related to the<br>Ph.D. course.  |  |  |
| RESEARCH PROJECT   | Research project carried out in the context of the PhD program and should refer to at least one of the research topics/fields listed in correspondence to each curriculum. Here the complete list: <u>https://www.indicee.unifi.it/vp-170-topics-xxxvii-cycle.html</u> .  |  |  |
|  | The project should be written in English and should not exceed 3 pages including the references.<br>For candidates applying for specific research topics scholarships Pegaso 2021, the submitted research project should be related to that specific topics. In case the candidate also applies for standard positions (double application), the research project submitted will be valid for the application for standard scholarship as well.                             |  |  |

| EVALUATION PROCEDURE                       | <ul> <li>Evaluation of curriculum vitae, resolute other qualification documents</li> <li>Interview</li> <li>As detailed in the section below "Evaluation I</li> </ul>  |  | publications and  |  |
|--|--|--|---|--|
| OTHER LANGUAGE FOR<br>THE INTERVIEW        | English  |  |   |  |
| INTERVIEW MODE                             | In-person<br>N.B. In the application form the candidate can ask to take the interview remotely.  |  |   |  |
| FURTHER INFORMATION<br>ABOUT EXAMINATIONS  | The candidate's engineering background, necessary for the proposed research project, will be also verified during the interview. The Interview will be as well intended to verify candidates knowledge of the English language (level B2 or higher). |  |   |  |
| FURTHER INFORMATION<br>ABOUT THE PROGRAMME | The International PhD Programme leads mar<br>joined/double degree in co-tutorship with a<br>the rules and modalities provided by the Call<br>Further information available at the following<br><u>https://www.indicee.unifi.it/index.php</u>         | a foreign Univer<br>and by the inter         | sity, according to  |  |
|  |  |  |   |  |
|  | Parameter  | Minimum<br>score                             | Maximum<br>score  |  |
|  | Parameter<br>Curriculum vitae, publications,<br>qualification documents  |  |   |  |
| EVALUATION MARKS                           | Curriculum vitae, publications,  | score  | score   |  |
| EVALUATION MARKS                           | Curriculum vitae, publications,<br>qualification documents   | score<br>10/120<br>20/120<br>east 30/120 acc | score           20/120           30/120           ording to the |  |
| EVALUATION MARKS                           | Curriculum vitae, publications,<br>qualification documents<br>Research Project<br>Applicants who obtain a mark of at le  | score<br>10/120<br>20/120<br>east 30/120 acc | score           20/120           30/120           ording to the |  |

| EXAMINATION SCHEDULE  |  |               |  |  |  |
|---|--|---------------|--|--|--|
|   | DATE   | TIME          | PLACE  |  |  |
| INTERVIEW   | September 15 <sup>th</sup> – 16 <sup>th</sup> 2021 | 9:30 a.m.     | University of Pisa<br>Polo Didattico di Porta Nuova<br>Room PN8<br>Via Padre B. Fedi, 56122 Pisa |  |  |
| The list of candidates adr<br>web page: <u>https://www.</u> |  | final ranking | will be published at the following   |  |  |