CALL BY PUBLIC COMPETITION FOR 116 PHD SCHOLARSHIPS FOR RESEARCH ON “GREEN” AND “INNOVATION” TOPICS 2014-2020 PON RESEARCH AND INNOVATION (D.M. 1061/2021) XXXVII CYCLE

D.R. rep. n. 1429 ref. n. 265072 of 11/10/2021

APPLICATION DEADLINE: 25 October 2021
12:00 (midday) EST*

* The registration procedure will be automatically interrupted at 12 pm sharp, it is necessary to begin the trials in advance to conclude it by the deadline

ACADEMIC YEAR 2021/2022
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Art. 1

POSITIONS AVAILABLE

1. In implementation of Ministerial Decree No. 1061 of 10 August 2021, which provided for the allocation of additional FSE REACT-EU resources from the PON “Research and Innovation” 2014 to 2020, for active and accredited PhD programs under DM 45/2013 for the XXXVII cycle, the University of Florence assigns **116 doctoral grants** for the following programs:

<table>
<thead>
<tr>
<th>AREA</th>
<th>DOCTORAL PROGRAM</th>
<th>GREEN</th>
<th>INNOVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>biomedical</td>
<td>Drug area and Innovative treatments</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Biomedical Sciences</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>scientific</td>
<td>Evolutionary Biology and Ecology</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physics and Astronomy</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International Doctorate in Atomic and Molecular Photonics</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>International Doctorate in Structural Biology</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Mathematics, Computer Science, Statistics</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Chemical Sciences</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Earth Sciences</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>social</td>
<td>Development Economics and Local System</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>sciences</td>
<td>Legal Sciences</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>technology</td>
<td>Architecture, Design, Knowledge and Preservation of the Cultural Heritage</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sustainable Management of Agricultural, Forestry and Food Resources</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Information Engineering</td>
<td>6</td>
<td></td>
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<tr>
<td></td>
<td>Industrial Engineering</td>
<td>19</td>
<td></td>
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<tr>
<td></td>
<td>International Doctorate in Civil and Environmental Engineering</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agricultural and Environmental Sciences</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sustainability and Innovation for Built Environment Design and Product System</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>humanities</td>
<td>Philology, Italian Literature, Linguistics</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Languages, Comparative Literatures and Cultures</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education Sciences and Psychology</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td></td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td><strong>106</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

2. The grants are intended for PhD programs on innovation, digital and enabling technologies (Action IV.4 PON Research and Innovation) and on “green” issues relating to the conservation of the ecosystem, biodiversity, as well as the reduction of climate change impact and the promotion of sustainable development (Action IV.5 PON Research and Innovation). The PhD programs involve an interchange between research and industry with periods of study and research in enterprises from a minimum of six to a maximum of twelve months.

3. The details of each grant are contained in Annex 2, which is an integral part of this call.

4. There are no non-scholarship positions, so the PhD program is automatically concluded in the event of a waiver of the scholarship.

5. There are no supernumerary admissions.

6. The duration of the doctorate program is three years, with an expected beginning on 1 January 2022.

7. The definitive award of grants and enrolment shall be conditional on the successful outcome of the ministerial verification carried out at the end of the procedure.

8. The use of the male gender is of no discriminatory nature but is intended as a neutral gender, for the purposes of more immediate communication.
Art. 2
ADMISSION REQUIREMENTS

1. All individuals who, by the deadline of this call, are in possession of one of the following academic qualifications may apply for participation in the competition, without age or nationality limits:
   - Master’s degree (laurea magistrale) obtained pursuant to the D.M. 270/2004;
   - Master’s degree (laurea specialistica) obtained pursuant to the D.M. 509/1999;
   - degree obtained according to the didactic systems in force prior to the D.M. 509/1999, whose legal duration was at least four years;
   - Second-level academic qualification issued by the institutions belonging to the AFAM (High Artistic and Musical Training) sector;
   - Academic qualification obtained from foreign universities and declared equivalent to the above-mentioned qualifications by the Ministry of University and Research (MUR) according to the current law or suitable according to what is established by the following art. 3, para. 2.

2. Those who will obtain one of these qualifications by 31 October 2021 may also apply. In such a case, candidates are admitted to the competition with reservation, and it is their duty to promptly send to the PhD Office (dottorato@unifi.it) a self-declaration stating that they have obtained the academic qualification. Failure to do so will result in exclusion from the competition.

3. Those who have already received, even partially, a scholarship for another doctoral program are excluded from participation.

Art. 3
ACADEMIC QUALIFICATIONS OBTAINED OUTSIDE OF ITALY

1. Candidates with a foreign academic degree (equivalent to a master’s degree), may apply for admission attaching the qualifications obtained, accompanied by a translation into Italian or English, which can be done the candidates themselves. When candidates apply for admission to the competition we consider that the request for assessment of admissibility of their attached foreign academic qualification is also submitted at the same time. These candidates shall be admitted to the competition with reserve and shall be excluded from the competition, or, in case they pass the entry exam, from the doctoral program, if, following verification, the qualifications do not comply with the requirements of this call and therefore with the requirements for admission to PhD programs.

2. The foreign academic qualification must have been obtained from an officially recognized academic institution that enables access to PhD programs in the country in which the title was issued, and that it is comparable in duration, level and field of study to the Italian degree required for access to doctoral programs. The suitability of the foreign title is established by the Board of Admission to the Doctoral Program in compliance with the relevant legislation in force in Italy and in the country where the title was issued, as well as the international treaties or agreements on the recognition of qualifications for further studies.

3. All documents including the application form, all academic qualifications which, if foreign must be translated in Italian, legalized and accompanied by a “Declaration of Value” issued by the competent Italian Representations of the country in which the title was obtained, must be submitted to the PhD Office on or before the commencement of the courses. Alternatively to the “Declaration of Value”, candidates may present the certificate of comparability of the foreign university degree issued by the ENIC-NARIC Centre in Italy (CIMEA), which contains all the information necessary for the evaluation of said qualification. The Diploma Supplement, issued when the degree was obtained in a EU country, is considered sufficient.
Art. 4
APPLICATION FOR ADMISSION

1. The application for participation in the selection must be completed using the online procedure only at: sol.unifi.it/domdottpon/login.jsp from 11 October 2021 until 25 October 2021, 12 noon.

2. Below are the steps all applicants should follow:
   - go to sol.unifi.it/domdottpon/login.jsp;
   - register by entering the required data;
   - select the chosen doctorate and the grant(s) for which they wish to compete;
   - complete the online application as indicated on the various windows;
   - attach:
     a) a pdf of an identity document;
     b) for the Italian academic qualifications: self-certification dated and signed, (bachelor and master degree or single cycle), with list of exams taken and relative mark, thesis title and graduation mark;
     for qualifications obtained abroad: a copy of the title held (bachelor’s and master's) with the list of examinations taken and the relative mark, thesis title and final mark (if any);
     c) curriculum vitae, dated and signed;
     d) research project with an indication of the grant for which they intend to compete;
     e) list of any publications and other qualifications.

Failure to submit the documents referred to in points (a), (b), (c) and (d) shall result in exclusion from the competition.
   - pay the non-refundable contribution of €30.00 to cover the costs of admission to the competition. Payment must be made by the date of expiry of the call, as shown on page www.unifi.it/pagopa. Failure to do so will result in the exclusion from the competition.

3. No refund of the payment shall be allowed under any circumstances. The candidate will be considered to have completed the application procedure correctly and therefore entered into the competition only after the payment has been made.

4. Applications for admission may be submitted for each doctoral program listed in Annex 2. Candidates wishing to participate in more than one program, will have to submit separate applications and make the separate payments for each.

5. Within the same doctoral program, the candidate can select one or more scholarships for which to compete, attaching a separate research project for each.

6. The application for online admission, once “closed”, is not modifiable, nor can it be supplemented with further documentation. Candidates wanting to amend their application need to submit a new one upon request for cancellation of the previous one.

7. It is in the interest of candidates to complete their application for participation in the competition, including payment of the admission fee, well in advance of the due date. Applications closed by 12 noon on 25 October 2021 and payments made by 23:59 on the same day shall be considered valid. The above terms are final.

Art. 5
INDICATIONS RELATING TO THE RESEARCH PROJECT

1. The research project in Italian or English, must not exceed 10,000 characters in length (including spaces, abstract, bibliography and notes) and may contain up to three explanatory images. The project must focus on the subject chosen, as set out in Annex 2, and must include:
   - abstract (maximum 1,500 characters, including spaces),
   - state of the art and contextualization of the subject,
   - methodologies,
   - expected results,
1. In case candidates intend to compete for several scholarships, they need to attach separate research projects clearly indicating the reference scholarship for each and bring the projects together in a single .zip file.

Art. 6

EVALUATION PROCEDURE

1. The selection of candidates shall be made by assessing their academic qualifications and be means of an oral interview carried out online.
2. The interview may be carried out in one of the foreign languages indicated in the doctoral program and may include the verification of the knowledge of one or more foreign languages and of the Italian language for foreign nationals.
3. Evaluation procedure:

<table>
<thead>
<tr>
<th>QUALIFICATIONS ASSESSMENT</th>
<th>max 30/100</th>
</tr>
</thead>
<tbody>
<tr>
<td>university career (max 20 points)</td>
<td></td>
</tr>
<tr>
<td>any further education and professional and research experiences (max 7 points)</td>
<td></td>
</tr>
<tr>
<td>any scientific publications (max 3 points)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESEARCH PROJECT</th>
<th>max 30/100</th>
</tr>
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<tbody>
<tr>
<td>the following aspects will be evaluated: coherence with the theme of the grant, clarity of the presentation, feasibility, methodological rigor and how up-to-date is the bibliography on the state of the art.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>ORAL INTERVIEW</th>
<th>max 40/100</th>
</tr>
</thead>
<tbody>
<tr>
<td>project discussion (max 35 points – max 40 if the verification of the language is not foreseen)</td>
<td></td>
</tr>
<tr>
<td>language test, if applicable (max 5 points)</td>
<td></td>
</tr>
<tr>
<td>the interview will focus on the topics covered by the research project presented and will also be aimed at the verification of scientific knowledge, research aptitude and the candidate’s willingness to carry out an experience abroad</td>
<td></td>
</tr>
</tbody>
</table>

THE ELIGIBILITY IS ACHIEVED WITH A MINIMUM SCORE OF 65/100, OF WHICH AT LEAST 20/100 MUST BE OBTAINED AT THE ORAL INTERVIEW

Art. 7

ORAL INTERVIEW PROCEDURE

1. Candidates must have a webcam at their disposal to allow the Admissions Board to identify them and be in full view during the interview. The Board will send the link to participate in the interview to the email address indicated in the application.
2. On the day and time of the interview, the candidates must be available at the phone number provided and must identify themselves before the interview begins with a valid ID.
3. Failure to show up, failure to connect, unavailability of the candidate on the appropriate time and day, or failure to provide a valid identification document, are grounds for exclusion from the selection procedure.
4. In the event of technical problems of connection during the videoconference interview, if the problem concerns one or more Board members, the interview shall be postponed by default to another date, if the problem concerns the candidate, the Board may, on grounds of good reason, postpone to another date, respecting the principles of non-discrimination and equal treatment between candidates.

Art. 8

ADMISSIONS BOARDS

The Boards for admission to doctoral programs are appointed by the Rector, upon a proposal from the PhD Academic Board (“Collegio dei Docenti del Dottorato”), in accordance with the University Ph.D. Programs Regulations.
1. The composition of the Boards can be consulted on the University web site, at the following address: www.unifi.it/p12104.html.
2. The Boards shall hold a preliminary session to evaluate the qualifications submitted by the candidates and assign each of them a score.
3. At the end of the oral interview, the Boards shall draw up the ranking lists and forward the minutes of their meetings to the Rector, who shall issue a decree to approve the said documents.

Art. 9
CALENDAR OF INTERVIEWS AND OUTCOME OF THE COMPETITION

1. The dates of the oral interviews are given in Annex 2 of each scholarship.
2. The rankings, drawn up on the basis of the overall score reported by each candidate, will be published at: www.unifi.it/p12104.html.

Art. 10
ADMISSION TO THE PROGRAMS AND ASSIGNMENT OF POSITIONS TO CANDIDATES

1. Candidates are admitted to the programs according to the order of each ranking. In the event of a useful placement in more than one ranking, the candidate must choose the one they want to apply to.
2. The winners will receive indications on the terms and conditions, which are considered as final, for the acceptance or the renunciation of the place. The information will be sent to the e-mail address given in the competition application. Failure to respond within the time limits will result in forfeiture from the position, in which case the next candidate in line in the ranking will be offered the position.
3. The acceptance of the scholarship entails that the winner:
   a) formally undertakes to carry out the planned periods of research as an intern and abroad and declares that she/he is aware that failure to comply with the minimum period as an intern in a company will result in the withdrawal of the scholarship;
   b) is aware that the modification of project objectives and expected results (if not previously authorized by the MUR - Ministry of University and Research) will result in the withdrawal of the scholarship and a request for total refund of any amounts already paid;
   c) is aware that any negative evaluation by the Academic Board and the consequent failure to be admitted to the following year of the PhD program or the waiver of the scholarship will result in the withdrawal of the scholarships and the consequent failure to be admitted to the following year of the PhD program or the waiver of the scholarship will result in the withdrawal of the sums paid for the current year, and that failure to obtain the qualification will result in the withdrawal of the amounts paid for the last year of the course;
   d) certifies that he/she does not have any other grants for whatever reason, and undertakes, for the duration of the additional grant, not to receive any other grants for any reason, except those eligible under the national law in force.

Art. 11
ENROLMENT IN THE PROGRAMS

1. Following the ministerial verification referred to in art. 1 paragraph 7, those who have accepted the position will receive correspondence with the necessary information and forms for enrolment purposes. The enrolment procedure is considered complete only after the payment of the regional fee and the stamp duty, according to the instructions published on the University website (www.unifi.it/p11733.html).

Art. 12
REGIONAL FEE FOR THE ACCESS TO COURSES

1. According to art. 1, paragraphs 252 and 262 of Law 11/12/2016 n. 232, in order to access and take the courses, in addition to the stamp duty, doctoral students are required to pay the regional fee for the right to university education (ex art. 18, paragraph 8 of D. Lgs. No. 68 of 29 March 2012), the amount of
which is set at € 140,00 for the academic year 2021/2022.

2. The following individuals are not be required to pay the regional fee:
   - those who have applied for a scholarship from the Regional Board for the Right to University Studies (DSU Toscana) for the academic year 2021/2022. Students who subsequently fail to win/qualify on the DSU ranking must then pay the said fee after the publication of the final ranking by the DSU Toscana. The terms by which this fee must be paid will be communicated subsequently on the University web site, in the PhD programs section;
   - students with disabilities, with a disability recognition (art. 3, para. 1, of Law n. 104/1992) equal to or greater than 66%;
   - children of disability pension holders pursuant to art. 30 of the Law n. 118 of 30 March 1971.

3. Admission to the years following the first and final examination shall be subject to verification that the regional fee has been paid.

Art. 13

SCHOLARSHIPS

1. Scholarships (or grants) are awarded as specified in art. 9.

2. In the case of equal merit, the assessment of the most disadvantaged economic situation within the meaning of the D.P.C.M. 159/2013 prevails. To this end, doctoral students must go to any CAAF/I.N.P.S. office by 15 December 2021 and get assistance to fill in and sign the “Dichiarazione Sostitutiva Unica” (DSU) in order to obtain the statement of the Equivalent Financial Situation Index (ISEE) for university financial aid. It should be noted that, according to art. 8, para. 4 of D.P.C.M. 5 December 2013 n. 159, the family unit of the applicant requesting the financial aid for the PhD programs consists exclusively of the same applicant, their spouse, children under the age of 18, as well as children over the age of 18, according to the rules of paragraphs 2 to 5 of Article 3 of the same D.P.C.M. and without prejudice to the possibility for the applicant to constitute the household according to the ordinary rules. At the time of signing up for the DSU, doctoral students must specify to CAAF/I.N.P.S. that the declaration is intended to obtain the ISEE “for the right to university study” and whether they intend to benefit from the specific facilities provided for the students enrolled in research PhD programs. Different types of ISEE other than the one specified will not be considered.

3. The annual amount of the scholarship is € 15,343.28 (before tax). The amount of the scholarship is increased by 50% in case of periods of study/work abroad.

4. The scholarship is paid in deferred monthly instalments.

Art. 14

ATTENDANCE AND OBLIGATIONS OF DOCTORAL STUDENTS

1. The doctoral students who are the recipients of the scholarships referred to in this call are required to:
   - carry out a compulsory period of study and research in an enterprise of at least six (6) to a maximum of twelve (12) months;
   - carry out a period of study and research abroad from a minimum of six (6) to a maximum of twelve (12) months, where provided. These periods of study and research, as detailed in the scholarship fact sheets (Annex 2), must be carried out by 31 December 2023 at the latest;
   - report on the activities carried out according to the provisions of the D.M. 1061/2021 and its annexes.

2. Students enrolled in PhD programs are obliged to take their courses on a full-time basis and to carry out continuous study and research activities, according to the modalities established by the Academic Board and according to the rules laid down by art. 17 of the University PhD programs Regulations. In particular, each PhD student is obliged to acquire, during the three-year period, at least 6 CFUs attending dedicated advanced courses on the so-called “cross-skills” or “complementary skills”.

3. Doctoral students can be engaged in subsidiary or supplementary teaching activities, approved by the
Academic Board, provided they are not in contrast with the research activity connected with the doctorate and in accordance with paragraph 4 of the aforesaid art. 17.

5. In the case where the PhD student engaged in paid work, the assessment of the compatibility with the obligations laid down for the attainment of a Research Doctor is responsibility of the Academic Board.

Art. 15

OBTAINING THE QUALIFICATION OF PhD

1. The title of a Research Doctor is obtained by passing the final examination according to art. 21 of University PhD Programs Regulations.

2. PhD students are required to upload their PhD dissertation, as a pdf, in the dedicated online archive of the University, according to the University rules on the submission of the doctoral dissertation issued with D.R. n. 1238 of 20 December 2012.

Art. 16

INTELLECTUAL PROPERTY OF RESEARCH RESULTS AND PUBLICATIONS

1. The intellectual and industrial property rights on the results obtained by the PhD student are regulated in accordance with the current law (Copyright Law - D.lgs. 633/1941 - and Industrial Property Code - D.lgs. 30/2005), and the Regulation for the management of industrial and intellectual property rights with reference to research activities carried out by university staff and, where appropriate, according to the individual agreements with universities, enterprises or entities involved.

2. PhD students are required to enter into a special confidentiality commitment in relation to information, data and documents of a confidential nature which that were brought to their knowledge whilst carrying out their activity at and/or on behalf of the University.

3. PhD students are in any case guaranteed the possibility to carry out the publishing activities provided for in their academic path, which must be programmed in a manner compatible with the protection of possible results.

Art. 17

PERSONAL DATA HANDLING

1. The personal data relating to this procedure are collected and processed for the institutional purposes of the University in accordance with art. 13 and 14 of EU Regulation 2016/679 - General Data Protection Regulation (GDPR).

2. Candidates are entitled to the rights provided for in the same regulation. For further details, please see the link www.unifi.it/cmpro-v-p-11360.html.

Art. 18

PUBLICITY

1. This call for applications (bando) is published in the “Gazzetta Ufficiale”, the Official Journal of the State - Public Competitions and Exams Special Series - and, in its entirety, on the University Official Register and on the website at www.unifi.it/p12104.html.

2. It is also advertised on the Ministry's website and on the EURAXESS European website.

Art. 19

UNIT IN CHARGE OF THE PROCEDURE

1. For all the effects of this call, the “Area Servizi alla Didattica” – Process Unit “Courses and Quality of Study Programs” – Doctorate, Piazza San Marco 4, 50121 Florence is identified as the organizational unit in charge.
2. Enquiries on the application can be sent to the e-mail address dottorato@unifi.it or by telephone to the following numbers: 055 2757 668 - 681 - 309 from Monday to Friday, 10 am - 1 pm and Thursdays 2.30 - 5 pm.
3. The person in charge of the procedure is Sabrina Pazzagli.

Art. 20
FINAL PROVISIONS

1. The acts of public competitions are public, and access to them is allowed in the manner set out in Law 7 August 1990, n. 241.
2. For all that is not expressly provided for in this call, reference is made to the University PhD Regulations and to the normative, regulatory and ministerial provisions mentioned in the introductory part of the Decree announcing this call.
3. The University reserves the right to exclude at any time the candidates taking part in the exam announced in this call for non-compliance with the provisions given therein or with the terms indicated, or for failure to meet the access requirements.