ANNEX 1 to the Ph.D. Call for admission to the Doctoral Programmes

Cycle 31st – Academic Year 2015/2016

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BIOMEDICAL AREA

DOCTORAL PROGRAMME IN DRUG RESEARCH AND INNOVATIVE TREATMENTS
Coordinator Prof. Elisabetta Teodori

Administrative office: Department of Neuroscience, Psychology, Drug Research and Child Health (NEUROFARBA)

Curricula:

1) Pharmaceutical Sciences
2) Pharmacology, Toxicology and Innovative Treatments

No. of Positions: 8

Scholarships: 6
   5 University of Florence
   1 University Hospital Meyer

Positions with no scholarship: 2

Evaluation of applicants:
applicants will be selected by written and oral examination (cfr. Article 12, paragraph 1, sub-paragraph a) of Doctoral Regulation n. 670 of July 4th 2013).
With regards to the written examination the applicants will be asked to discuss a particular theme choosing one of the texts proposed.

Themes for the examinations relating to the curriculum of the Pharmaceutical Sciences:
The written examination will be characterised by the completion of an essay on design and synthesis, or molecular modelling or analysis or pharmaceutical technology, of pharmacologically active molecules of natural or synthetic origin.
The oral examination will be centred on the discussion of the theme chosen by the applicant as well as the discussion of any research project that the applicant may present at the moment of the oral examination.

Themes for the examinations relating to the curriculum in Pharmacology, Toxicology and Innovative Treatments:
The written examination will be characterised by the completion of an essay on general pharmacology.
The oral examination will focus on the discussion of the theme chosen by the applicant, as well as the discussion of any research project that the applicant may present at the moment of the oral examination.

Foreign language in which the examinations can be done: English.

Documents to be attached to the application form:
- research project (optional).
**TUSCAN PH.D. IN NEUROSCIENCES**  
Coordinator Prof. Renato Corradetti

**Regione Toscana Pegaso Project** – Partner Universities: University of Florence, University of Pisa, University of Siena.

**Administrative office:** Department of Neuroscience, Psychology, Medicine and Child Health (NEUROFARBA)

**No. of Positions:** 13

**Scholarships:** 10  
3 University of Florence  
1 Department of Translational Medicine  
6 Regione Toscana Pegaso Scholarships 2015

**Positions with no scholarship:** 3

**Evaluation of applicants:**  
Applicants will be selected by oral examination (cfr. Article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation n. 670 of July 4th 2013). Selection of applicants will follow a two-step evaluation (see scheme below).

**Step 1) Preselection for admission to the oral examination:**

The Committee will evaluate:
1) CV (European format) with indication of qualifications (e.g. awards, certificates of research experience and/or attendance of courses relevant to Neuroscience) and all publications of the applicant.
2) Publications by the applicant attached to the application. Publications will contribute for a maximum of 3 (three) points. Technical reports and Specialization thesis are not evaluated and should not be uploaded.
3) Research project in English. In this phase the project will be evaluated for its coherence with the Doctorate in Neurosciences and for its feasibility, in general and within the Tuscan PhD in Neurosciences Program. (Note: the project presented will not necessarily be accepted as the thesis project for the applicant, should he/she be accepted in the PhD Program).

Applicants receiving a score of at least 30/40 will be admitted to the oral examination.

**Step 2) Oral examination:**

The oral examination will focus on a discussion of the research project presented.  
**Good knowledge of spoken and written English is required.**  
The examination can be taken in **English** or **Italian**.

For applicants who are not resident in Italy, it will be possible to take the oral examination by Skype, if required in the online application.

Applicants receiving a score of at least 50/80 in the oral examination will enter the final ranking list.
**Evaluation steps:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Maximal score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preselection:</td>
<td></td>
</tr>
<tr>
<td>Curriculum vitae, qualifications, publications, Research Project redaction</td>
<td>40/120</td>
</tr>
<tr>
<td><em>Applicants obtaining a score of at least 30/40 in the evaluation of CV, publications and redaction of the research project will be admitted to the oral examination</em></td>
<td></td>
</tr>
<tr>
<td>Oral examination: discussion of the research project to assess applicant's aptitude for research</td>
<td>80/120</td>
</tr>
</tbody>
</table>

*The oral examination is passed with a score of at least 50/80*

**Documents to be attached to the application:**
- CV (European format) with indication of qualifications and all publications of the applicant.
- Publications by the applicant submitted for evaluation in step 1.
- Research project in English (six pages maximum including references).

*Filename of files to be uploaded should include the applicant's surname*
DOCTORAL PROGRAMME IN BIOMEDICAL SCIENCES
Coordinator: Prof. Massimo Stefani

Administrative office: Department of Experimental and Clinical Biomedical Sciences

Curricula:
1. Human Morphology and Morphogenesis
2. Functional Biology of Biomolecules and Biosystems
3. Physiological and Nutritional Sciences
4. Experimental Pathology
5. Endocrinological, Molecular and Regenerative Biotechnologies
6. Biomedical Sciences of Developmental Age

Number of positions: 7

Scholarships: 5 University of Florence

Positions with no scholarship: 2

Evaluation of applicants:
applicants will be selected following oral examination and evaluation of curriculum vitae, publications and other qualification documents, as well as the research project, according to the following scheme (article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation n. 670 of July 4th, 2013).

Scoring criteria:

<table>
<thead>
<tr>
<th>parameter</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>curriculum vitae, publications and other qualification documents (if any)</td>
<td>20/120</td>
</tr>
<tr>
<td>research project</td>
<td>40/120</td>
</tr>
<tr>
<td>oral examination: discussion of the project and publications (if any)</td>
<td>60/120</td>
</tr>
</tbody>
</table>

Eligibility is achieved with a minimum score of 80/120

Documents to be attached to the application form:
- curriculum vitae et studiorum;
- publications and other qualification documents (if any);
- research project, written in English and of maximum 12,000 characters including spaces, which must include summary, introduction, methodology, expected results and references. The project must refer specifically to one or more of the working themes listed below.

Themes to which the research projects of the applicants must be linked:

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Morphology and Morphogenesis</td>
<td>1) Systematic and topographic anatomy</td>
</tr>
<tr>
<td></td>
<td>2) Applied anatomy: diagnostic imaging and semeiotics</td>
</tr>
<tr>
<td></td>
<td>3) Morpho-functional histology and cytology</td>
</tr>
<tr>
<td></td>
<td>4) Embryology and organogenesis</td>
</tr>
<tr>
<td></td>
<td>5) Histo-chemistry</td>
</tr>
<tr>
<td>Functional Biology of Biomolecules and Biosystems</td>
<td>1) Protein biophysics</td>
</tr>
<tr>
<td></td>
<td>2) Cell biology of amyloids</td>
</tr>
<tr>
<td></td>
<td>3) Biophysics of lipid bilayers and biembranes</td>
</tr>
</tbody>
</table>
| Physiological and Nutritional Sciences | 1) Muscle biophysics  
2) Neurophysiology  
3) Pathophysiology of nutrition  
4) Adaptation to muscle activity and sport |
|----------------------------------------|---------------------------------------------------------------|
| Experimental Pathology                 | 1) Mechanisms of cancer onset and progression  
2) Cancer invasion and metastasis  
3) Cancer stem cells: characterization and targeting  
4) Novel strategies for cancer treatment  
5) Improvement of clinical handling of oncologic patients  
6) Innovative approaches to cancer diagnosis and prognosis |
| Endocrinological, Molecular and Regenerative Biotechnologies | 1) Genetic aspects of male infertility  
2) Control mechanisms of human spermatogenesis  
3) Role of oxidative stress in male infertility  
4) DNA fragmentation in human spermatozoa: biochemical mechanisms and clinical meaning and significance  
5) Pathophysiology of fat tissue |
| Biomedical Sciences of Developmental Age | 1) Clinical biochemistry  
2) Pediatrics  
3) Hygiene and Public Health  
4) Orthodontics  
5) Preventive medicine |
DOCTORAL PROGRAMME IN CLINICAL SCIENCES
Coordinator Prof. Francesco Annunziato

Administrative office: Department of Experimental and Clinical Medicine

Curricula:

1) Clinical Pathophysiology and of Aging and Nursing Sciences
2) Clinical and Experimental Medicine
3) Pathology and Clinic of the Locomotor Apparatus and the Calcified Tissues
4) Anaesthetic and Surgical Sciences
5) Psychology and Pain Management

No. of Positions: 11

Scholarships: 8
   6 University of Florence
   2 Department of Experimental and Clinical Medicine

Positions with no scholarship: 3

Evaluation of applicants:
applicants will be selected by written and oral examination (article 12, paragraph 1, sub-paragraph a) of Doctoral Regulation n. 670 of July 4th 2013).

Foreign language in which the written examination can be done: English.
SCIENTIFIC AREA

DOCTORAL PROGRAMME IN PHYSICS AND ASTRONOMY
Coordinator Prof. Roberto Livi

Administrative office: Department of Physics and Astronomy

Curricula:
1) Physics
2) Astronomy

No. of Positions: 12

Scholarships: 9
4 University of Florence
1 University of Florence and Department of Physics and Astronomy
2 National Institute for Nuclear Physics (INFN)
1 National Institute for Astrophysics (INAF)
The scholarships will be aimed at studies of Gaia-ESO survey.
1 National Institute of Optics (INO-CNR)

Positions with no scholarship: 3

Evaluation of applicants:
Applicants will be selected by written and oral examination with evaluation of their curriculum and any additional qualification documents (article 12, paragraph 1, sub-paragraph b) of Doctoral Regulation n. 670 of July 4th 2013).

The examinations may be taken in the following foreign language: English.

For applicants who are not resident in Italy, it will be possible to take the oral examination by Skype, if required in the online application.

Documents to be attached to the application form:
- curriculum vitae et studiorum;
- declaration in lieu of certification of the list of exams taken with grades and title of the Master thesis (or equivalent degree);
- list of publications;
- qualification documents.
INTERNATIONAL DOCTORATE IN ATOMIC AND MOLECULAR PHOTONICS
Coordinator Prof. Roberto Righini

Administrative office: Department of Physics and Astronomy

Partner Institutions: Universidad Complutense de Madrid, Imperial College of London

No. of Positions: 8

Scholarships: 6
1. University of Florence
4. European Laboratory for Non-linear Spectroscopy (LENS)
1. EU Project Photbots ERC Advanced Grant GA n. 291349 - European Laboratory for Non-linear Spectroscopy (LENS) - Subject: Photonics and micro robotics using patterned polymeric structures. The project will be concerned with the understanding and implementation of patterned polymers for the realization of photonic structures as resonators and complex photonic materials, and their use for creating microscopic artificial creatures that can perform simple tasks and either walk on a dry surface or swim, using the environmental light as energy source.

Positions with no scholarship: 2

Evaluation of applicants:
applicants will be selected by: a) oral examination, which will also include the discussion and evaluation of their research project; b) evaluation of their curriculum and of any other qualification document. The score system is specified below (article 12, paragraph 1, sub-paragraph c) of the Doctoral Regulation of July 4th 2013.
The oral examination will be carried out in English.

For applicants who are not resident in Italy, it will be possible to take the oral examination by Skype, if required in the online application.

Scoring of applicants:

<table>
<thead>
<tr>
<th>parameter</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral examination</td>
<td>60/120</td>
</tr>
<tr>
<td>Research project</td>
<td>40/120</td>
</tr>
<tr>
<td>Curriculum vitae, qualification documents and publications (if any)</td>
<td>20/120</td>
</tr>
</tbody>
</table>

Eligibility is achieved with a minimum score of 80/120

Documents to be attached to the application form:
- research project, concerning a possible topic of research to be carried on in the doctorate period (two A4 pages);
- curriculum vitae;
- list of publications;
- any additional qualification document.

The research project, the curriculum vitae and the qualification documents must be written in English.
INTERNATIONAL DOCTORATE IN STRUCTURAL BIOLOGY
Coordinator Prof. Claudio Luchinat

Administrative office: Magnetic Resonance Center (CERM)

No. of Positions: 5

Scholarships: 4
   1 University of Florence
   3 Interuniversity Consortium for Magnetic Resonance of MetalloProteins (CIRMMP)

Positions with no scholarship: 1

To the successful applicants without a scholarship, contracts of apprenticeship (“Apprendistato di Alta Formazione e Ricerca”) may be offered, whenever available, according to article 2, paragraph 10 of the PhD Call.

Evaluation of applicants:
applicants will be selected by oral examination, evaluation of their curriculum, of any other qualification document, and of their research project, through a score system as specified below (article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation n. 670 of July 4th 2013).

The evaluation will be held in English.

Scoring of applicants:

<table>
<thead>
<tr>
<th>parameter</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum vitae, any other qualification document, research project</td>
<td>60/120</td>
</tr>
<tr>
<td>Oral examination</td>
<td>60/120</td>
</tr>
</tbody>
</table>

Eligibility is achieved with a minimum score of 80/120

Documents to be attached to the application form:
- curriculum vitae;
- any additional qualification document and publications;
- research project.

All the documentation requested must be written in English (on pain of exclusion).

The research project will be discussed and evaluated during the oral examination. The project must describe a possible research activity to develop in the three years of the doctorate.
DOCTORAL PROGRAMME IN MATHEMATICS, COMPUTER SCIENCE, STATISTICS
Coordinator Prof. Graziano Gentili

Administrative office: Department of Mathematics and Computer Science “U. Dini” (DIMAI)

Partner Institutions of the Consortium: University of Perugia, Istituto Nazionale di Alta Matematica“F. Severi” (INDAM)

Curricula:
1) Mathematics
2) Computer Science
3) Statistics

No. of Positions: 13

Scholarships: 11
6 University of Florence
3 University of Perugia
2 Istituto Nazionale di Alta Matematica“F. Severi” (INDAM)

Positions with no scholarship: 2

Admission examination:
A written and oral examination, including the evaluation of the curriculum, of possible qualification documents and of the research project (article 12, paragraph 1, sub-paragraph b) of Doctoral Regulation of July 4th 2013).

Documents to be attached to the application form:
- curriculum vitae;
- any additional qualification document;
- research project.

The research project, of maximum 5,000 characters, will be discussed and evaluated during the oral examination, and will contribute to the evaluation of the attitude of the applicant towards research.

Foreign language for the written examination: English.
DOCTORAL PROGRAMME IN CHEMICAL SCIENCES
Coordinator Prof. Andrea Goti

Administrative office: Department of Chemistry “Ugo Schiff”

Curricula:
1) Chemistry
2) Science for the Conservation of Cultural Heritage

No. of Positions: 8

Scholarships: 6
5 University of Florence
1 University of Florence and Department of Chemistry “Ugo Schiff”

Positions with no scholarship: 2

Contracts of apprenticeship ("Apprendistato di Alta Formazione e Ricerca"), whenever available, may be offered to the successful applicants with no scholarship, according to Article 2, paragraph 10 of the PhD Call.

Evaluation of applicants:
applicants will be selected by evaluation of their curriculum, of qualification documents and of their research project and successive oral examination, through a score system as specified below (article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation of July 4th 2013).

Scoring of applicants:

<table>
<thead>
<tr>
<th>parameter</th>
<th>minimum score</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae, student career, qualification documents and publications, research project</td>
<td>40/120</td>
<td>60/120</td>
</tr>
<tr>
<td>Applicants who obtain at least 40/120 marks in the evaluation of the above parameters will be admitted to the oral examination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral examination: discussion of the research project, the qualification documents presented and publications</td>
<td>40/120</td>
<td>60/120</td>
</tr>
<tr>
<td>The oral examination will be successful for applicants who obtain at least 40/120 marks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Applicants who obtain at least 40/120 marks in the evaluation of their CV, qualification, and publications will be admitted to the oral examination

Applicants who obtain at least 80/120 overall marks and 40/120 marks in each evaluation will be eligible to enter the Doctorate course according to the final ranking

Documents to be attached to the application form (candidate's surname must be cited in the files name):
- curriculum vitae;
- list of exams taken with the relative grades;
- list of any additional qualification document and scientific publications;
- a suitable research project written in English in no more than 12,000 characters including spaces, comprising abstract, introduction and references, in order to assess the applicant’s aptitude to research;
- title and short summary (maximum five A4 sheets) of the Master thesis.

The possession of these documents must be declared with a self-certification (D.P.R. n. 445/2000).
The oral examination may be given in **English**. If given in Italian, the oral examination will include an assessment of **English** language proficiency.

For applicants who are not resident in Italy, it will be possible to take the oral examination by Skype, if required in the online application.
DOCTORAL PROGRAMME IN EARTH SCIENCES
Coordinator Prof. Lorella Franchalanci

Regione Toscana Pegaso Project – Partner Universities: University of Florence, University of Pisa, University of Siena.

Administrative office: Department of Earth Sciences

No. of Positions: 12

Scholarships: 9
- 3 University of Florence
- 6 Regione Toscana Pegaso Scholarships 2015

Positions with no scholarship: 3

Evaluation of applicants:
Applicants will be selected by oral examination (cfr. Article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation n. 670 of July 4th 2013). Selection of applicants will follow a two-step evaluation (see scheme below).
The oral examination consists in the evaluation of titles presented.

<table>
<thead>
<tr>
<th>Evaluation of the entrance examination:</th>
<th>Max score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum vitae, titles and possible scientific publications</td>
<td>20/120</td>
</tr>
<tr>
<td>Research project</td>
<td>40/120</td>
</tr>
<tr>
<td>Oral examination: discussion of the research project and of the possible scientific publications</td>
<td>60/120</td>
</tr>
</tbody>
</table>

Eligibility is achieved with a minimum score of 80/120

During the oral examination a check of the knowledge of the English language, spoken and written, will be done.
Foreign language in which the examinations can be done: English.

Documents to be attached to the application form:
- List of all the university exams with the relative score;
- Curriculum vitae et studiorum with list of possible other titles and of scientific publications;
- Research project has to be presented in the field of the doctorate themes, maximum length of 12,000 characters (with spaces included), with an abstract, introduction and bibliography (the research project is request with the aim to evaluate the general attitude of the candidate to work on research). The research project can be presented in English language.
SOCIAL SCIENCES AREA

DOCTORAL PROGRAMME IN LEGAL SCIENCES

Coordinator Prof. Vittoria Barsotti

Administrative office: Department of Legal Sciences (DSG)

Curricula:

1) Comparative Law
2) Public Law – Town Planning Law and Environmental Law
3) Criminal Law and Criminal Procedure
4) Private Law
5) International and European Union law
6) Theory and History of Law – Theory and History of Human Rights (International) – Authorities in agreement: University of Paraná (Curitiba, Brazil); University Federal of Paraiba (Joao Pessoa, Brazil).

No. of Positions: 9

Scholarships: 7 University of Florence
with one position with scholarship reserved, in the frame of the International Cooperation Agreement with the University of Paraná and with the University of Paraiba (Brasil), to applicants who have obtained the qualifications for admission to the Phd courses in foreign Universities according to article 1, paragraph 2, of the Phd Call.

Positions with no scholarship: 2

Evaluation of candidates:
Candidates will be selected by a written test (in the form of an essay), by oral examination, by evaluation of their curriculum, their other qualification documents and their research project. The essay will cover the topics of each curriculum belonging to the PhD program. Only candidates with a score of 40/60 and above will be admitted to the oral part. At the end of each oral session the examining commission will publicize the results. [See Article 12, paragraph 1, sub-paragraph b) of Doctoral Regulation of 04 July 2013].

Concerning the position with scholarship reserved, after an equipollence evaluation of the degree, candidates will be selected by oral examination (via Skype) and discussion of the research project.

Scoring of candidates:

<table>
<thead>
<tr>
<th>parameter</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral examination, including the assessment of the knowledge of the foreign language, chosen from English, French, German and Spanish</td>
<td>30/60</td>
</tr>
<tr>
<td>Research project and any additional qualification documents</td>
<td>20/60</td>
</tr>
<tr>
<td>Curriculum vitae</td>
<td>10/60</td>
</tr>
</tbody>
</table>

Eligibility is achieved with a minimum total score of 80/120

Documents to be attached to the application form:

- curriculum vitae;
- any additional qualification document and scientific publication;
- abstract of the JD dissertation;
- research project, of at most 5 pages, indicating with sufficient precision the subject, the objectives and the methodology, which will be discussed during the oral examination.
TECHNOLOGICAL AREA

DOCTORAL PROGRAMME IN SUSTAINABLE MANAGEMENT OF AGRICULTURAL RESOURCES, FORESTRY AND FOOD
Coordinator Prof. Leonardo Casini

Administrative office: Department of Agricultural, Food and Forestry Systems (GESAAF)

Curricula:
1) Wine Economics and Rural Development (EVSR)
2) Economics, Forestry Planning and Wood Sciences (EPFSL)
3) Agro-Forest Engineering (IAF)
4) Science and Food Technology (STA)

No. of Positions: 6

Scholarships: 4
3 University of Florence
1 UNICESV (Centro Universitario di ricerca e formazione per lo sviluppo competitivo delle imprese del settore vitivinicolo italiano).

Positions with no scholarship: 2

Evaluation of applicants:
applicants will be selected by written examination and oral examination (article 12, paragraph 1, sub-paragraph a) of Doctoral Regulation n. 670 of July 4th 2013).

English language examination intended to assess the knowledge of a foreign language.
**Doctoral Programme in Agricultural and Environmental Sciences**
Coordinator Prof. Simone Orlandini

**Administrative office:** Department of Agrifood Production and Environmental Sciences (DISPAA)

**No. of Positions:** 9

**Scholarships:** 7
- 5 University of Florence
- 1 University of Florence and Department of Agrifood Production and Environmental Sciences (DISPAA)
- 1 Department of Agrifood Production and Environmental Sciences (DISPAA) project H2020 Nomorfilm (“Novel marine biomolecules against biofilm. Application to medical devices”) – **Subject:** “Production of bioactive molecules from microalgal and cyanobacterial cultures for application in agriculture and environment protection, and as pharmaceuticals and food ingredients”.

**Positions with no scholarship:** 2

**Evaluation of applicants:**
applicants will be selected by oral examination including the evaluation of CV and presented research project (article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation n. 670 of July 4th 2013).

**Scoring of applicants:**

<table>
<thead>
<tr>
<th>parameter</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum vitae, any additional qualification documents</td>
<td>15/120</td>
</tr>
<tr>
<td>Research project</td>
<td>40/120</td>
</tr>
<tr>
<td>Oral Examination: argumentation of the research project and any additional qualification documents</td>
<td>65/120</td>
</tr>
</tbody>
</table>

Eligibility is achieved with a minimum total score of 80/120

CV has to be presented in European format (Europass).

The research project should be attached to the application form and it should be made as the CV pattern uploaded into the following departmental webpage (section “dottorato di ricerca”): [http://www.dispaa.unifi.it/yp-26-dottorati.html](http://www.dispaa.unifi.it/yp-26-dottorati.html). The research project should be focused on a possible research activity, which the applicant will be going to execute during the three-year doctoral program.

**English** language examination intended to assess the knowledge of a foreign language.

For applicants who are not resident in Italy, it will be possible to take the oral examination by Skype, if required in the online application.

The admission examination can be taken in the following foreign language: **English.**

**Documents to be attached to the application form:**
- curriculum vitae;
- any additional qualification document and scientific publications;
- research project.
Themes:

Research project has to be prepared in Italian or English in no more than 12,000 characters including spacing, and structured in introduction, state of the art, objectives, materials and methods, expected results. For XXXI cycle, several priorities of interest have been selected. The project must relate, and should make specific reference, to one of them listed below:

- Designing wheat ideotypes for a changing climate;
- Nutritional requirements and products quality of autochthonous pig breeds;
- Bacterial symbiosis in the olive fly: from basic knowledge to practical applications;
- Study on the effect of diets enriched in polyphenols on rumen lipid metabolism and on nutraceutical quality of milk from ruminants;
- Remediated sediments for the propagation and cultivation of woody fruit species in container: physiological, productive and qualitative aspects;
- Microbial interactions in phycosphere;
- Production of bioactive molecules from microalgal and cyanobacterial cultures for application in agriculture and environment protection, and as pharmaceuticals and food ingredients;
- Improvement of grapevine production as affected by biostimulants;
DOCTORAL PROGRAMME IN ARCHITECTURE
Coordinator Prof.ssa Maria Teresa Bartoli

Administrative Office: Department of Architecture (DiDA)

Curricula:
1) Architectural and Urban Design
2) Architectural Technologies
3) History of Architecture and Cities
4) Design
5) Survey and Representation of Architecture and Environment
6) Structures and Conservation of Architecture and Cultural Heritage
7) Landscape Architecture
8) Urban and Regional Planning

No. of Positions: 12

Scholarships: 9
8 University of Florence
1 University of Florence and Department of Architecture (DiDA)

Positions with no scholarship: 3

Evaluation of candidates:
Candidates will be selected by written examination and oral examination [cf. Article 12, paragraph 1, sub-paragraph a) of Doctoral Regulation of 04 July 2013]. The written examination will focus on a topic related to the content of different scientific-disciplinary Ph.D. curricula.

The oral examination will focus on the discussion of the written examination, the curriculum vitae of the candidate and on an examination of a European Union language (preferably English). The curriculum vitae will be used in an informative manner and will not contribute to the formation of the score.

Documents to be attached to the application form:
- curriculum vitae, relating to the training and research activities carried out by the candidate, of maximum two pages, as well as the indication of the pre-chosen foreign language for the examination.
- curriculum vitae, related to training activities and research carried out by the candidate, of maximum two folders, as well as an indication of the foreign language chosen for verification.

Examinations for foreign candidates will be held in English, it is also required to acquire a basic level of Italian within the first year of the Ph.D. studies.

For information on the PhD Programme see the link http://www.dida.unifi.it/vp-321-dottorato-di-ricerca.html
DOCTORAL PROGRAMME IN INFORMATION ENGINEERING
Coordinator Prof. Luigi Chisci

Administrative office: Department of Information Engineering (DINFO)

Curricula:
1) Control, Optimization and Complex Systems
2) Electronics, Electromagnetism and Electrical Systems
3) Computer Engineering
4) Telecommunications and Telematics

No. of Positions: 9

Scholarships: 7
- 5 University of Florence
- 1 University of Florence and Department of Information Engineering (DINFO)
- 1 Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT)

Positions with no scholarship: 2

To the successful applicants without a scholarship, contracts of apprenticeship ("Apprendistato di Alta Formazione e Ricerca") may be offered, whenever available, according to Article 2, paragraph 10 of the Call.

Evaluation of applicants:
applicants will be selected following oral examination and evaluation of curriculum vitae, publications and other qualification documents, as well as the research proposal, according to the following scheme (article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation n. 670 of July 4th 2013).

Scoring of applicants:

<table>
<thead>
<tr>
<th>parameter</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum vitae, qualification documents and publications (if any)</td>
<td>40/120</td>
</tr>
<tr>
<td>Research proposal</td>
<td>40/120</td>
</tr>
</tbody>
</table>

Applicants who obtain at least 27/120 marks in the evaluation of the two above parameters will be admitted to the oral examination

Interview (including a discussion of the research proposal) | 40/120

Eligibility is achieved with a minimum score of 80/120

For applicants who are not resident in Italy, it will be possible to take the oral examination by Skype, if required in the online application.

Documents to be enclosed with the application form:
- Curriculum vitae including a list of publications and of the other qualification documents (if any);
- Title and grades of Bachelor and Master Thesis,
- List of exams of Bachelor and Master Degrees with grades (documents should be either in Italian or in English);
- Publications and qualification documents (if any);
- Research proposal.

Optional Documents to be attach
The proposal must be in .pdf format, written either in Italian or in English.
The proposal should describe a three years project having a high potential for novel scientific contributions in the broad field of Information Engineering, but also in other fields provided that methodologies and/or technologies of Information Engineering are exploited.

This proposal must include the specific reference to the curriculum and the chosen area of study, as specified in the table reported below:

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Areas</th>
</tr>
</thead>
</table>
| Control, Optimization and Complex | AREA 1 – CONTROL SYSTEMS: concerns the analysis, modelling and synthesis of high-performance automatic control, supervision and monitoring systems for processes that are only partially known and possibly subject to constraints such as those encountered in industrial applications, robotics, bio-engineering, aerospace, electrical systems, etc.  
AREA 2 – OPTIMIZATION: concerns the study of Operations Research models and their applications, as well as the development and the analysis of efficient optimization algorithms for the solution of complex problems. The optimization applications are found both in the field of automation systems as well as in the productive world, from logistics to transportation, to the supply-chain, in the networks of electrical energy management (“smart grids”) even in stochastic contexts and multiple decision-makers (game theory).  
AREA 3 – COMPLEX SYSTEMS: this research area is suitable for applicants with a strong background in Physics, Chemistry, Mathematics or Engineering who are willing to carry out research work of cross-disciplinary type. Training aims to deepen the more formal aspects of the analysis of complex systems. The research topic can concern methodological aspects, from dynamical systems to stochastic processes, including complex networks and their applications, from computer engineering to life science. |
| Systems                           |                                                                                                                                                                                                      |
| Electronics, Electromagnetism and | AREA 1 – HIGH-FREQUENCY ELECTRONICS: concerns the analysis and design of electronic devices and systems at high frequency (from radio frequency to millimetre waves).  
AREA 2 – DIGITAL ELECTRONIC SYSTEMS: concerns the analysis and design of electronic systems based on advanced digital components, with applications from biomedical to radar fields.  
AREA 3 – ELECTROMAGNETISM: concerns the use and development of numerical techniques for the analysis and design of radiant systems and passive devices at high frequency, from some GHz up to optical frequencies.  
AREA 4 – ELECTRICAL SYSTEMS: concerns the critical and comparative analysis of control techniques for electrical drives with the development of innovative algorithms, the automation of power systems, with particular reference to the “power quality” in distribution networks, to the “smart-metering” and fault diagnosis in electrical systems. |
| Electrical Systems                |                                                                                                                                                                                                      |
| Computer Engineering              | AREA 1 – METHODS AND TECHNOLOGIES OF SOFTWARE: concerns methods of design, examination and evaluation of complex software systems, with further details on formal methods and advanced SW architectures.  
AREA 2 – PATTERN RECOGNITION AND COMPUTER VISION: concerns multimedia processing, classification and media search from databases and Internet, solutions for human-machine interaction, smart environments.  
AREA 3 – ARTIFICIAL INTELLIGENCE AND BIOINFORMATICS: is mainly focused on machine learning and its applications to bioinformatics.  
AREA 4 – DISTRIBUTED SYSTEMS AND DATA ENGINEERING: it concerns the study of distributed, parallel and complex processing systems wherein distributed architecture, performance and data complexity issues are integral part of the problem, such as for instance in applications for big data, smart cities, smart clouds, internet-of-things, smart manufacturing, etc.. |
| Telecommunications and Telematics  | AREA 1 – ALGORITHMS AND TECHNOLOGIES FOR SIGNAL PROCESSING: concerns processing methods and techniques of mono/multidimensional signals for the extraction of information and the efficiency of their representation in transmission and storage. |

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AREA 2 – TRANSMISSION SYSTEMS: concerns methods and techniques for efficient generation, transmission and disclosure of information through future terrestrial and satellite transmission channels.

AREA 3 – TELECOMMUNICATION NETWORKS: concerns methods and techniques for efficient transfer of information from source to destination through complex and advanced communication networks and related communication network applications.

AREA 4 – TELEMATICS AND INFORMATION SOCIETY: this cross-disciplinary area involves the applications of ICT technologies considered as key-enabling in different scientific and application domains. It requires a multi-disciplinary background in order to cope with the large variety of services and applications of telematics. The domains of interest include: telecommunications, communication, political and socio-economic sciences including all areas of the “Societal Challenges” of the European programme H2020.
DOCTORAL PROGRAMME IN INDUSTRIAL ENGINEERING

Coordinator Prof. Maurizio De Lucia

Administrative office: Department of Industrial Engineering Florence (DIEF)

Curricula:
1) Energy and Innovative Industrial&Environmental Technologies
2) Design and development of Industrial Products and Processes
3) Industrial Engineering and Reliability
4) Science and Engineering of Materials

No. of Positions: 18

Scholarships: 14
5 University of Florence
7 Department of Industrial Engineering Florence (DIEF)
1 Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali (INSTM) and Department of Industrial Engineering Florence (DIEF)
1 PIN S.c.r.l. Prato

Positions with no scholarship: 4

Evaluation of applicants:
applicants will be selected by oral examination, evaluation of their curriculum, of their other academic or professional qualifications and of their research project through a score system as specified below (article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation n. 670 of July 4th 2013).

Scoring of applicants:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>minimum score</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of the curriculum vitae, evaluation of other academic or professional qualifications and publications (if any)</td>
<td>12/120</td>
<td>18/120</td>
</tr>
<tr>
<td>Evaluation of the research project</td>
<td>28/120</td>
<td>42/120</td>
</tr>
<tr>
<td>Oral examination: discussion of the project and publications (if any)</td>
<td>40/120</td>
<td>60/120</td>
</tr>
</tbody>
</table>

Eligibility is achieved with a minimum score of 80/120

The applicant will be excluded from the evaluation, if one of three minimum scores will not be obtained.

For applicants who are not resident in Italy, it will be possible to take the oral examination by Skype, if required in the online application.

Documents to be attached to the application form:
- curriculum vitae;
- any additional qualification documents and scientific publications;
- research project.

The research project must be written in Italian or English in NO MORE than 12,000 characters including spacing, abstract, introduction and references (otherwise the applicant will be excluded from the evaluation). The project must relate, and should make specific reference, to one of the working themes listed below.
The violation of the above prescription causes the exclusion from the competition.

**Themes of Doctoral Program:**

- Refrigeration ejection: Ejection development of refrigeration systems operating with natural fluids. Application of ejectors for the recovery of the loss of lamination in compression refrigeration systems. Thermodynamic analysis, fluodynamic and experimental activity.
- Energy consumption, air quality and reducing risk of contamination, as a function of the effectiveness of the flushing air and the efficiency of the HVAC systems in special environments
- Experimental analysis of the secondary air circuits and auxiliary components in gas turbines aeronautical or industrial, with particular attention to cooling systems of blade sets and / or gearing systems.
- Numerical modeling of combustion processes, heat exchange and lubrication in machines even in the presence of two-phase flow, with approaches nonstationary
- New solutions for energy conversion and utilization in dwellings and distributed applications, with accent on renewables.
- Aeroacoustic noise in aircraft engines and the use and/or implementation of control systems passive or active
- Development of components and system systems based on thermal solar (concentration technology)
- Study of multistage turbomachinery using CFD calculation methodologies.
- Innovative technologies for the enrichment of oxygen in the combustion air for power plant
- Theoretical and experimental study of systems of innovative thermal reforming for the production of hydrogen from syngas via catalytic processes for different plant sizes
- Functionalised magnetic nanomaterials for smart drug delivery
- Development of a new sustainable supply chain and a roadmap for a sustainable business model for the fashion industry
- Development of a new sustainable supply chain and a roadmap for a sustainable business model for the Made in Italy
- Design of innovative robotic wearable systems
- Development of innovative models for auxiliary bearing systems in turbomachinery
- Development of innovative navigation systems for autonomous underwater vehicles
- Development and experimental validation of innovative rotor dynamical models
- Development and experimental validation of innovative vehicle-track interaction models
- Development of innovative propulsion systems for autonomous underwater vehicles
- Human neck modeling for tracheostomy improvement and development of new tools and methods
- Development of a hip protective device for falls of elderly people
- Studies on the car power train to optimize the vehicle dynamics
- Study of aircraft noise and prediction of the noise impact by using specific models for the verification of the environmental compatibility of new airport settlements.
- Analysis and optimization of Metal Additive Processes and integration with CAM systems
- Modeling and optimization of machining processes
INTERNATIONAL DOCTORATE IN CIVIL AND ENVIRONMENTAL ENGINEERING
Coordinator Prof. Fabio Castelli

Pegaso Project Regione Toscana – Partner Institutions: University of Florence, University of Pisa

University in agreement: University of Perugia, Technical University of Braunschweig (Germany)

Administrative office: Department of Civil and Environmental Engineering (DICEA)

Curricula:
1) Solid, Fluid and Materials Mechanics
2) Construction Design, Verification and Control
3) Environment, Resources and Security

For further details on the international joint degrees and the description of the curricula and the co-financing grants view the Ph.D. programme website: http://www.ddicea.unifi.it/mdswitch.html

No. of Positions: 15

Scholarships: 11
4 University of Florence
3 University of Perugia
4 Regione Toscana Pegaso Scholarships 2015

Positions with no scholarship: 4

Evaluation of applicants:
oral examination, evaluation of the curriculum, of any other qualification document and of the research project (article 12, paragraph 1, sub-paragraph c) of Regulation, Doctoral Regulation n. 670 of July 4th 2013).

Scoring of applicants:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral examination</td>
<td>70/120</td>
</tr>
<tr>
<td>Curriculum vitae, qualification documents and publications</td>
<td>20/120</td>
</tr>
<tr>
<td>Research project</td>
<td>30/120</td>
</tr>
</tbody>
</table>

Eligibility is achieved with a minimum score of 80/120

For applicants who are not resident in Italy, it will be possible to take the oral examination by Skype, if required in the online application.

Documents to be attached to the application form:
- curriculum vitae;
- any additional qualification documents and scientific publications;
- research project, within the theme of the Ph.D., which must be written in English up to a maximum of three pages and will refer to at least one of curricula.

A good knowledge of spoken and written English is required.
DOCTORAL PROGRAMME IN SMART COMPUTING
Coordinator: Prof. Paolo Frasconi

Regione Toscana Pegaso Project – Partner Universities: University of Florence, University of Pisa, University of Siena.

Administrative office: Department of Information Engineering (DINFO)

No. of positions: 12

Scholarships: 9
3 University of Florence
6 Regione Toscana Pegaso Scholarship 2015

Positions with no scholarship: 3

Evaluation of applicants:
Applicants will be scored according to several parameters (evaluation of curriculum vitae, publications and other qualification documents, research project, interview), as detailed in the scheme below (article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation n. 670 of July 4th 2013).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum vitae; qualification documents</td>
<td>40/120</td>
</tr>
<tr>
<td>Research proposal</td>
<td>40/120</td>
</tr>
<tr>
<td>Applicants scoring at least 54/120 on the above parameters will be shortlisted for interview</td>
<td></td>
</tr>
<tr>
<td>Interview (including a discussion of the research proposal)</td>
<td>40/120</td>
</tr>
</tbody>
</table>

Candidates with an overall score below 80/120 cannot be admitted to the program

Documents to be enclosed with your application:
- Curriculum vitae (including a list of publications);
- Transcript of records of your MSc degree;
- Research proposal.

Optional documents:
- PDF copy of your MSc thesis (if available);
- List of names and email addresses of up to three scholars familiar with your academic work who have agreed to provide a reference to support your application;
- Any other qualification documents useful to support your application.

All documents (except the research proposal, see below) should be in Italian or in English.

The research proposal should describe a three years project having a high potential for a novel scientific contribution in the broad field of Smart Computing. In particular, we encourage proposals in one or more of the following research areas:
- Computer Networking
- Computer Vision
- Computer Architectures
- Data Analysis
- Embedded and Cyber-physical Systems
- Machine learning
- Neuroinformatics
- Pervasive Sensing & Computing
- Quantitative evaluation and verification of concurrent systems
- Security and Privacy in Smart Systems
- Software architectures and engineering methods

The research proposal should be written in English and should be submitted as a PDF file. The length may not exceed 12,000 characters.

Foreign residents are allowed to use Skype for the interview. If you wish to take advantage of this opportunity, please check this option when completing the online application.
HUMANITIES AREA

DOCTORAL PROGRAMME IN PHILOLOGY, ITALIAN LITERATURE, LINGUISTICS
Coordinator Prof. Adele Dei

Administrative office: Department of Humanities (DILEF)

Curricula:
1) Italian Studies (International) – Partner Institutions: Rheinische Friedrich-Wilhelms University, Bonn, Germany; University of Paris IV Sorbonne, France
2) Linguistics
3) History and Critical Tradition of Medieval and Renaissance Texts

No. of Positions: 6

Scholarships: 4 University of Florence

Positions with no scholarship: 2

Evaluation of applicants:
applicants will be selected by written examination, oral examination, evaluation of their curriculum, of their other qualification documents and of their research project (article 12, paragraph 1, sub-paragraph b) of Doctoral Regulation n. 670 of July 4th 2013).

Documents to be attached to the application form:
- abstract of Master thesis (or equivalent degree) including professor name and evaluation;
- curriculum vitae;
- list of exams taken with the relative grades;
- any scientific qualification document which the applicant considers useful to discuss during the oral examination;
- research project which the applicant intends to carry out during the Ph.D.

The written examination consists of a detailed study on a topic chosen from among those proposed by the Commission, which will focus:
- on the interpretation and the commentary to a text or illustration of a fundamental theme of Italian Literature from its origins to the contemporary (Italian Studies);
- on a theme featuring one of the following areas: historical linguistics, theoretical linguistics, corpus linguistics, Italian linguistics and communication theory (Linguistics);
- on the illustration of themes, texts or palaeographic Medieval or Renaissance documents (History, and Critical Tradition of Medieval and Renaissance Texts).

The oral examination consists of a discussion of the research project proposed by the applicant, the scientific qualification documents presented and the assessment of the knowledge of a foreign language (Latin is obligatory for the curriculum in History and Critical Tradition of Medieval and Renaissance Texts).

For applicants who are not resident in Italy, it will be possible to take the oral examination by Skype, if required in the online application.

Foreign applicants (non EU citizen) with no scholarship will be selected by written and oral examinations like Italian and EU applicants. Foreign applicants (non EU citizen) with no scholarship must apply by the deadline and keep the procedures required in the Call for admissions. After their degree is recognized as equivalent to European degrees they will be called for an evaluation interview. During the interview they have to demonstrate an excellent knowledge of Italian language, and will be asked about their studies in the areas connected with the Doctoral Program and requested to introduce the research project they proposed.
DOCTORAL PROGRAMME IN COMPARATIVE LANGUAGES, LITERATURE AND CULTURE
Coordinator Prof. Maria Rita Manzini

Administrative Office: Department of Languages, Literature and Intercultural Studies

Curricula:

1) German Studies Florence-Bonn (International) – Partner Institutions: Rheinische Friedrich-Wilhelms University, Bonn, Germany
2) Founding Myths of Europe in the Arts and Literature (International) – Partner Institutions: Rheinische Friedrich-Wilhelms University, Bonn, Germany; University of Paris IV, Sorbonne, France
3) Language, Literature and Philology: Intercultural perspectives
4) Linguistics and Oriental Studies

No. of Positions: 6

Scholarships: 4 University of Florence

Positions with no scholarship: 2

Evaluation of applicants:
applicants will be selected by written examination, oral examination, evaluation of their curriculum vitae, and of their research project (article 12, paragraph 1, sub-paragraph b) of Doctoral Regulation n. 670 of July 4th 2013).

The written examination will consist in the analysis of a literary text or the discussion of a subject related to the themes of the four curricula. There will be three texts or subjects proposed, from which the applicant must choose.

The admission examination may be taken in one of the following foreign languages: German, French, English, Spanish.

Each applicant shall demonstrate competence, besides from the language in the area of their specialisation, in one or two foreign languages to be chosen between German, French, English, Spanish.

Documents to be attached to the application form:
- curriculum vitae. The CV must include abstracts of the Degree theses defended (Bachelor degree, Master degree, or other of maximum one page per abstract), as well as an abstract of eventual publications (maximum 250 words per article), stressing the original aspects of the various works.
- research project, of maximum five pages, defining the discipline in which they intend to specialise and written in Italian or in one of the foreign languages: German, French, English and Spanish. The project and the curriculum will be discussed during the oral examination.

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>German Studies Florence-Bonn (International) Partner Institution: Rheinische Friedrich-Wilhelms University, (Bonn)</td>
<td>1) Classical-romantic culture and its reception 2) 19th century German literature between Realism and Nihilism 3) Themes and currents of 20th century German Literature 4) Italo-German studies 5) Theory and history of translation and publishing techniques 6) Gender studies 7) Historico-literary anthropology</td>
</tr>
<tr>
<td>Founding Myths of Europe in the Arts and Literature (International)</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Partner Institution:</strong> University of Sorbonne Paris IV, Rheinische Friedrich-Wilhelms University, (Bonn)</td>
<td></td>
</tr>
</tbody>
</table>

| 1) Modernity and new myths |
| 2) Classical antiquity, Italian Renaissance and European culture |
| 3) Mythical figures of European culture |
| 4) Studies on 18th century Europe |
| 5) Literature and arts |
| 6) Aesthetics and poetics of modernity |
| 7) Classical-romantic culture and its reception |

<table>
<thead>
<tr>
<th>Language, Literature and Philology: Intercultural Perspectives</th>
</tr>
</thead>
</table>

Areas of research: Estonian, Germanic Philology, Romance Philology, Finnish, English, Comparative Literature, Portuguese, Romanian, Scandinavian, Spanish, Turkish, Hungarian. The Topic for the XXXI cycle, on which the written exam will focus, will be: “Forms and Modalities of biographical and autobiographical writing”.

<table>
<thead>
<tr>
<th>Linguistics and Oriental Studies</th>
</tr>
</thead>
</table>

3. Philological and linguistic analysis of texts, with particular attention to oriental languages. Analysis and interpretation of documents and texts in modern and ancient languages. Textual genres.
DOCTORAL PROGRAMME IN EDUCATION SCIENCES AND PSYCHOLOGY
Coordinator Prof. Simonetta Ulivieri

Administrative Office: Department of Education and Psychology

Curricula:  
- Theory and History of Educational Processes  
- Quality of Knowledge and Knowledge of the Differences  
- Research Methodologies for Educational Services  
- Sciences of Psychological Development and Social Education, of Organisation and Labour

No. of Positions: 6

Scholarships: 4 University of Florence

Positions with no scholarship: 2

Evaluation of applicants:
written examination, oral examination with evaluation of the curriculum, of any other qualification document and of the research project (article 12, paragraph 1, sub-paragraph b) of Doctoral Regulation n. 670 of July 4th 2013).

The oral examination will also affect the language assessment in one of the following foreign languages chosen by the applicant: English, French, Spanish.

Documents to be attached to the application form:
- CV with scientific qualifications;  
- any additional educational and professional qualification document;  
- publications (if any);  
- research project with bibliographic equipment (max 5 pages in A4 format and fonts 12 or 14 pt).

The research project will be discussed and valued during the oral examination; it will be necessary to the evaluation of applicant's disposition to the research in pedagogical and/or psychological fields.
DOCTORAL PROGRAMME IN HISTORY OF ART AND PERFORMING ARTS
Coordinator Prof. Maria Grazia Messina

Regione Toscana Pegaso Project – Partner Universities: University of Florence, University of Pisa, University of Siena.


Curricula:
1) History of Arts
2) History of Performing Arts

Description:
This Ph.D. programme is aimed at those who propose to carry out research in the field of History of Art and Performing Arts, with particular reference to the Tuscan region, its historical patrimony, as well as its development prospects and its relation to the wider international context. The History of Art curriculum is rooted in the established critical traditions and skills necessary for the identification of the contexts of production and reception essential for the understanding of artworks, studied as intellectual and material products and in the variety of their meanings, from the Middle Ages to the contemporary period. It avails itself of philological and historiographical research, and fosters a range of methodological approaches, from archival work up to the most recent methodological trends of the discipline. Privileged areas of study are: cultural transfers, extended to an international perspective; aspects of commissioning and collecting; organisation of museums and exhibitions; modes of reception in relation to art literature as well as to the history of criticism; modes of production and irradiation as part of the minor arts. The History of Performing Arts curriculum is based on a solid historical tradition which analyses the language of the arts (theatre, music, cinema and video, history of the actor) in accordance with the most innovative methodological trends in historical research and theoretical (even under the profile of reception). Privileged fields of research are the origins of the show (the birth of the opera, the creation of theatrical scenery, the notion of theatre the ‘Italian way’, the spreading of professional acting, the productive system, the socio-political fall-out); the study of archival (including multimedia) and book sources both of theatrical as well as of musical and audiovisual nature; the widespread dissemination of historical theatres; cinema in Tuscany; the network of theatrical, musical and cinematographic institutions; the study of actors and singers; video art, new media, the relation between cinema and art; the analysis of drama (even contemporary); the critical and historiographical tradition.

No. of Positions: 12

Scholarships: 9
3 University of Florence
6 Regione Toscana Pegaso Scholarships 2015

Positions with no scholarship: 3

Evaluation of applicants:
applicants will be selected by written examination, oral examination, evaluation of their curriculum vitae and of their other qualification documents and of their research project (article 12, paragraph 1, sub-paragraph b) of Doctoral Regulation n. 670 of July 4th 2013).

Themes of the examination:
Written examination:
subjects, topics and methodologies typical of the areas of research pertaining to the Ph.D programme. The outlines proposed by the Committee will allow a development in line with the specific curriculum, history of art or performing arts, chosen by each applicant.

Oral examination:
- Evaluation of the curriculum vitae;
- Interview aimed at verifying the applicant’s competence in the field, the contents, suitability, and modalities of the proposed research project;
- Verification of the applicant’s knowledge of English and of a second language.

Documents to be attached to the application form:
- Copy of thesis (Master or equivalent degree) in .pdf format;
- Curriculum vitae (education and training, professional experience, qualification documents and publications relating to the fields of the Ph.D. programme, skills and competences relevant to the evaluation);
- Research proposal consistent with the themes of the Ph.D. programme. This research proposal, presented in a text of 10,000 characters (including spacing), must specify the topic of research, outline its place with respect to the state of art, clarify its originality and indicate how the research will unfold throughout the three years of the Ph.D.

A good knowledge of spoken and written English is requested.
DOCTORAL PROGRAMME IN HISTORICAL STUDIES
Coordinator Prof. Andrea Zorzi

Administrative office: Department of History, Archeology, Geography, Fine & Performing Arts (SAGAS)

Branch office: University of Siena

Curricula:
1) History and Civilisation of the Ancient World and the Near East
2) Medieval History
3) Modern History
4) Contemporary History
5) Book Sciences, Institutions and Archives

No. of Positions: 11

Scholarships: 9
6 University of Florence
3 University of Siena

Positions with no scholarship: 2
of which 2 are reserved to citizens of foreign countries supported by a scholarship by a foreign State or by specific international mobility programmes qualified for admission Ph.D. course in foreign universities according to Article 1, paragraph 2, of the Phd Call.

Evaluation of applicants:
oral examination, evaluation of the curriculum, of any other qualification document and of the research project through a score system as specified below (article 12, paragraph 1, sub-paragraph c) of Doctoral Regulation n. 670 of July 4th 2013).

Scoring of applicants:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum vitae, qualification documents and publications (if any)</td>
<td>20/120</td>
</tr>
<tr>
<td>Research project</td>
<td>40/120</td>
</tr>
<tr>
<td>Oral examination: discussion of the project in order to evaluate the applicant’s attitude towards the research</td>
<td>60/120</td>
</tr>
</tbody>
</table>

Eligibility is achieved with a minimum score of 80/120

All applicants, who obtain at least 40 points in the evaluation of the curriculum vitae, qualification documents and the preparation of the project, are admitted to the oral examination. The oral examination is passed with a minimum score of 40 points.
The research project will be discussed and evaluated during the oral examination.

During the oral examination the general and specific competence on the historical and historiographical period and on the themes of the research will also be examined.
During the oral examination an evaluation on the knowledge of English will be held for the applicants who have graduated in Italian Universities, and of the Italian language (Standard Level B2) for applicants graduated in non-Italian Universities.
Documents to be attached to the application form:
- degree certificate (Master or equivalent);
- list of exams taken with the relative grades;
- curriculum vitae (education and training, professional experience, qualification documents and publications relating to the areas of the Ph.D., skills and competences relevant to the evaluation) with a list of all the additional qualification documents and any other scientific publications;
- copy of the degree thesis;
- research project, consistent with the curriculum of the Ph.D., to which explicit reference to one (or more) must be made. This project must be at least 8 000 and not more than 10 000 characters (excluding spacing). The project must specify the topic of the research, clarify the characteristics of originality and systematically indicate the state of the art on the argument (with adequate bibliographical references) and the areas for investigation which are considered to be usefully developed throughout the three years of the Ph.D.

The presentation of the following documents is requested for applicants graduated in non-Italian Universities:
- university certificates in original language and translated into Italian or English;
- curriculum vitae in Italian or English;
- one recommendation letter in English by a qualified scholar;
- a copy of the thesis (or equivalent) with abstract in Italian or English;
- research project in Italian or English;
- certification of good knowledge of Italian (Level Standard B2);
- any certification of the award of a scholarship by a foreign State or within specific international mobility programmes.