# Doctoral Programme

## In Agricultural and Environmental Sciences

Coordinator prof. Giacomo Pietramellara

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<tr>
<th>Technological Area</th>
<th>Administrative Office</th>
<th>Curricula</th>
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<tbody>
<tr>
<td></td>
<td>Department of Agri-food, Environment and Forestry Sciences and Technologies</td>
<td>NO</td>
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</tbody>
</table>

### Positions Available: 8

- Positions with Scholarship: 7
- Position without Scholarship: 1

### Scholarships: 7

- 6 – University of Florence
- 1 – co-funded by C.N.R.- Istituto IBIMET e FOS s.r.l.

Thematic: “Development of techniques and technologies for the recognition of the phytosanitary condition of herbaceous and arboreal crops”

### Study/Research Periods Abroad

- YES – only positions with scholarship

### Mandatory Period Required

- 3 months

### Documents Required for the Admission (under penalty of exclusion)

- Copy of the Identification Document
- Replacement Declaration Form self-declaration for:
  - Italian Degree required for the access
  - transcript of records with marks (for those candidates whose degrees will be awarded within the 31st October 2019)
  - acknowledgment of compliance for any other qualification documents enclosed with the application
- Foreign Degree required for the access (those candidates whose degrees will be awarded within the 31st October 2019 shall enclose the list of the examinations completed with marks)

### Documents Required for the Evaluation

- **Mandatory**
  - Curriculum vitae (European format)
  - Research Project
- **Optional**
  - Publications
  - Any other scientific qualification document

### Reference Letters

A section is provided in the online application to specify the e-mail addresses of two professors/researchers willing to provide information about candidates training path and activities performed within a scientific field related to the Ph.D course.
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 with temporal distribution of the phases, expected results. For XXXIV cycle, several priorities of interest have been selected. The project must relate, and should make specific reference, to one of them listed in the section below: “Thematics”.

The research project should be attached to the application form and it should be made as the project pattern uploaded into the following departmental webpage (section “dottorato di ricerca”): www.dottoratoscienzeagrarieambientali.unifi.it. 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.

MODALITY OF EVALUATION

- Evaluation of curriculum vitae, research project, publications and other qualification documents
- Interview

As detailed in the section below “Evaluation Marks”

OTHER LANGUAGE FOR THE EXAMINATIONS

English

SKYPE INTERVIEW -

YES – possible for foreign resident only

FURTHER INFORMATION

The interview can be equally taken in Italian or in English language; if it is taken in Italian, English skills will be tested during the oral examination.

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<tr>
<th>EVALUATION MARKS</th>
<th>minimum score</th>
<th>maximum score</th>
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<tbody>
<tr>
<td>Curriculum vitae, scientific qualification documents,</td>
<td>10/120</td>
<td>15/120</td>
</tr>
<tr>
<td>Research Project redaction</td>
<td>30/120</td>
<td>40/120</td>
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Applicants who obtain a mark of at least 40/120 in the evaluation of the above parameters will be admitted to the oral examination.

| Interview: discussion of the research project and any other qualification document | 40/120 | 65/120 |

Eligibility is achieved with a minimum score of 80/120

THEMATICS

- Molecular mechanisms involved in exopolymers secretion in biocrust forming cyanobacteria and their response to desiccation stress;
- Lipid carry-over in an experimental insect-based aquaculture supply chain;
- Responses of Mediterranean understory vegetation to climate warming: assessing the role of microclimate on forest seed-bank and plant traits across Europe;
- Aromatic plants of the Tuscan archipelago: chemical characterization and agronomic performance for the conservation strategies and adaptation to climate change;
- Innovative management techniques in the pig breeding;
- Study of the impacts of climate change on Alpine pastoral resources in order to identify possible adaptation strategies;
- Bioecology and ethology of Auchenorryncha potential vectors of Xylella fastidiosa;
- New phytosanitary Emergencies: diagnosis, ecological impact, control of invasive pathogens hazardous to biodiversity, the stability of agro-ecosystems, the economy of Tuscan Nursery.
- Development of techniques and technologies for the recognition of the phytosanitary condition of herbaceous and arboreal crops

Further information available at the following web page:
www.dottoratoscienzeagrarieambientali.unifi.it

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<th>EXAMINATION SCHEDULE</th>
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<td><strong>DATE</strong></td>
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<tr>
<td>INTERVIEW</td>
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The list of the candidates admitted to the interview and the final ranking will be published online at the following website page: https://www.unifi.it/p11549.html