

PHD PROGRAMME TABLE 38TH CYCLE

Section “Available Positions and Scholarships” integrated on 12/05/2022

Section “Available Positions and Scholarships” integrated on 26/05/2022

Sections “Available Positions and Scholarships” and “Admission Exams” integrated on 08/06/2022

Section “Available Positions and Scholarships” integrated on 23/06/2022

PROGRAMME’S NAME	AGRICULTURAL, ENVIRONMENTAL AND FOOD SCIENCE AND TECHNOLOGY
DURATION	3 years
PROGRAMME START DATE	01/11/2022 (DD/MM/YYYY)
LANGUAGES	English
MANDATORY STAY ABROAD	3 months
COORDINATOR	Prof. Massimiliano Petracci (m.petracci@unibo.it)
CURRICULA	N/A
RESEARCH TOPICS	Detailed list at the bottom of the present document
PHD POSITIONS	24
ADMISSION PROCEDURE	Qualifications and research proposal evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Positions linked to research topics
1	PhD Scholarship	Totally funded by the University of Bologna general budget	
2	PhD Scholarship	Totally funded by the University of Bologna general budget	
3	PhD Scholarship	Totally funded by the University of Bologna general budget	
4	PhD Scholarship	Totally funded by the University of Bologna general budget under the “Departments of Excellence” initiative	
5	PhD Scholarship	Totally funded by the University of Bologna general budget under the “Departments of Excellence” initiative	
6	PhD Scholarship	Totally funded by the University of Bologna general budget under the “Departments of Excellence” initiative	
7	PhD Scholarship	Totally funded by MUR under the “Departments of Excellence” initiative	Water-Food-Energy-Sustainable Agriculture Nexus
8	PhD Scholarship	Totally funded by MUR under the “Departments of Excellence” initiative	Water-Food-Energy-Sustainable Agriculture Nexus
9	PhD Scholarship	Totally funded by MUR under the “Departments of Excellence” initiative	Water-Food-Energy-Sustainable Agriculture Nexus
10	PhD Scholarship	Totally funded by MUR under the “Departments of Excellence” initiative	Water-Food-Energy-Sustainable Agriculture Nexus

11	PhD Scholarship	Co-funded by MUR under the “Departments of Excellence” initiative and the Department of Agricultural and Food Sciences with funds made available by the project H2020 WATERAGRI (G.A. No. 858375, Ref. Attilio Toscano)	Sustainable agricultural water management in the context of Water-Food-Energy-Sustainable Agriculture Nexus
12	PhD Scholarship	Co-funded by MUR under the “Departments of Excellence” initiative and the Department of Agricultural and Food Sciences	Water-Food-Energy-Sustainable Agriculture Nexus: a system approach to the sustainability of fruit, forest and ornamental tree productions
13	PhD Scholarship	Totally funded by the University of Bologna general budget	
14	PhD Scholarship	Totally funded by the University of Bologna general budget	
15	PhD Scholarship	Totally funded by the University of Bologna general budget	
16	PhD Scholarship	Totally funded by the University of Bologna general budget	
17	PhD Scholarship	Co-funded by the University of Bologna general budget and the Department of Agricultural and Food Sciences	
18	PhD Scholarship	Totally funded by the University of Bologna general budget under the Progetti di Sviluppo Strategico dei Dipartimenti (PSSD) initiative	Water-Food-Energy-Sustainable Agriculture Nexus
19	PhD Scholarship	Totally funded by the University of Bologna general budget under the Progetti di Sviluppo Strategico dei Dipartimenti (PSSD) initiative	Water-Food-Energy-Sustainable Agriculture Nexus
20	PhD Scholarship	Funded by the Department of Agricultural and Food Sciences with funds made available by the project H2020 UNTWIST (G.A. 862524; Ref. Andrea Monti)	Uncover and promote tolerance to temperature and water stress in <i>Camelina sativa</i>
21	Research Grant	Provided by the Department of Agricultural and Food Sciences. The research grant will have a duration of 12 months, renewable up to 36 months, and gross percipient amount of €20,988.36	Pre-harvest strategies to increase productivity, fruit size and quality in yellow-fleshed kiwifruit (<i>Actinidia chinensis</i> var. <i>chinensis</i>)
22	Research Grant	Provided by the Department of Agricultural and Food Sciences. The research grant will have a duration of 12 months, renewable up to 36 months, and gross percipient amount of €20,988.36	Pre-harvest strategies to increase productivity, fruit size and quality in yellow-fleshed kiwifruit (<i>Actinidia chinensis</i> var. <i>chinensis</i>)
23	Executive PhD	Position reserved for employees of Reggio di Caserta	Historic garden: sustainable management
24	Research Grant	Provided by the Department of Agricultural and Food Sciences with funds made available by the project ALMA IDEA 2022 “Indagini analitiche rapide dell’aroma e di immagine su prodotti alimentari di origine animale (INARIM)” funded by the European Union – Next Generation EU. The research grant will have a duration of 12 months, renewable up to 36 months, and gross percipient amount of €20,988.36	Rapid analytical assessments of aroma and image on food products of animal origin

Admission Exams

	DATE AND TIME	RESULTS
Qualifications evaluation	Applicants' participation is not required	Available from 05/07/2022**
Oral examination	Date: starting from 11/07/2022 – 9.00 a.m. CEST* Place: In presence, Department of Agricultural and Food Sciences, Viale Fanin 44 50 (East Wing, 5th floor – Aula E-Learning), Bologna. Remotely, using Microsoft Teams	Available from 22/07/2022**

* In case that the oral examination cannot be completed in one day due to the large number of applicants, the oral examination detailed schedule shall be made available on the webpage [Studenti Online](#) together with the results of the qualifications and research proposal evaluation. **During the oral examination, applicants may express their interest in one or more positions linked to specific research topics.**

** The **results of the admission exams** will be available on the webpage [Studenti Online](#) (select “summary of the requests in progress” > “see detail” and open the .pdf file at the bottom of the page). **No personal written communication will be sent to applicants concerning the examinations results.**

Required and Supporting Documents to be attached to the application

All the documents listed below **shall be drawn up in English or in Italian**. In case of documents originally issued in any other language (e.g. identity document, qualifications), an official translation is required.

Only qualifications obtained **during the last 5 calendar years** shall be taken into consideration, except for the University Degree. The Admission Board will assess the relevance of the supporting documents to the PhD Programme.

REQUIRED DOCUMENTS	
Identity document	Valid identity document with photo (i.e. identity card, passport)
Curriculum Vitae	The Curriculum Vitae shall contain on the first page a Summary , duly filled, in Attachment 1 to the present PhD programme table and downloadable in .docx from the University Website (select the PhD Programme → “More information”, then check “Notices” at the bottom of the page). A 5 points penalty on the total qualification evaluation score shall be applied to applicants not attaching the summary.
Degrees	Documents attesting the awarding of the first and second cycle degrees, the exams taken and the marks obtained (see Art. 3 of the Call for Applications)
Research proposal	Multi-annual research proposal, with special emphasis on the activities to be completed during the first-year course. The proposal must meet the following requirements: <ul style="list-style-type: none"> - It must be written following the Research proposal Template, in Attachment 2 to the present PhD programme table and downloadable in .docx from the University Website (select the PhD Programme → “More information”, then check “Notices” at the bottom of the page) - It must mention on the cover page the research topic (1, 2, 3, 4, 5, 6, 7, 8, 9 o 10) of the PhD Programme the applicant is interested in and that covers the research project proposal. The proposals written without following the template and/or without mentioning the research topic will receive 0 points; - it cannot exceed 20,000 characters, including spaces and formulas, if present. This figure does not include: the title, the outline, references and images (such as graphs, diagrams, tables etc - where present); - It must include: the state of the art and consistency with the applicant study and research path; description of the project; expected results articulation of the proposal and implementation times; outlining of the criteria meant to be used to assess the research results; references. <p>The research proposal will not necessarily be the topic of the candidate’s doctoral research, if admitted; the research project to be carried out during the PhD Programme will be agreed upon with the Supervisor and approved by the Academic Board.</p>
SUPPORTING DOCUMENTS	
Thesis abstract	Abstract of the second cycle degree thesis . Graduated applicants may submit the draft of the thesis. Abstracts cannot exceed 5,000 characters, including spaces and formula possibly used.

	The above figure does not include: the title of the thesis, the outline, references, and images such as graphs, diagrams, tables etc.
Reference letter/s	No more than 2 reference letters signed by Italian and international academics and professionals in the research field, which do not form part of the Admission Board, attesting the suitability of the applicant and his/her interest in the scientific research. Letters shall be uploaded following the procedure detailed in the Call for Applications (Art. 3.2).
Publications	Lists of publications (i.e. monographs, articles on scientific journals), minor publications (conference papers, etc.), abstracts and posters presented during national and international conferences, etc.
Other documents	<ul style="list-style-type: none"> - Postgraduate vocational programmes and/or specialisation programmes relevant to the PhD Programme - Research activity of any kind - whether basic, applied, translational, etc. - carried out in any capacity, including when covered by research grants, and as a staff member of research projects - Study periods completed by applicants outside their countries of origin (e.g. Erasmus programme or other similar mobility programmes)

Evaluation criteria*

Scores will be expressed in points out of 100, as follows.

1. Qualifications and research proposal evaluation

Minimum score for admission to the oral examination: 30 points, Maximum score: 50 points

Qualifications evaluation	Second cycle degree (Master's) final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM)	14 points max
	Publications	3 points max
	Research activity, study periods abroad, reference letter/s, other evaluable documents	5 points max
Research proposal evaluation	Scientific value and ground-breaking nature of the proposal	14 points max
	Consistency with the applicant's study path	4 points max
	Structure of the proposal	6 points max
	Proposal feasibility	4 points max

2. Oral examination

Minimum score for eligibility: 30 points, Maximum score 50 points

English language proficiency	10 points max
Research proposal presentation	10 points max
General knowledge of issues encompassed by the PhD Programme	20 points max

Oral examination aims to assess the suitability of the applicant for scientific research as well as the general knowledge of issues encompassed by the PhD Programme (see the list of [research topics](#) at the bottom of the present document).

During the oral examination, the applicant's English proficiency shall be assessed.

The oral examination is carried out in Italian or English.

* Possible further evaluation criteria will be available on the [University website](#), selecting the relevant PhD Programme > "More information", at the bottom of the page in the section "Notices".

Research Topics

1. Agronomy, Herbaceous Crops, Flowers and Vegetables Systems, Agricultural Genetics and Agricultural Chemistry
2. International Cooperation and Sustainable Development Policies
3. Microbial Ecology and Plant Pathology
4. Agricultural and Food Economics and Policy
5. Agricultural Entomology
6. Agricultural Engineering
7. Food Science and Biotechnology
8. Animal Science
9. Tree Production Systems, Fruit, Forest and Ornamental Trees and Grape
10. Water-Food-Energy-Sustainable Agriculture Nexus

Curriculum Vitae Summary

PhD Programme in Agricultural, Environmental and Food Science and Technology

Personal Information

First name(s) / Surname(s)	
Nationality	
Date of birth (day, month, year)	
Gender	
Email address	

University Education

Master

Official duration in years				
Dates (start – end or planned end)				
Awarding institution	<i>(e.g. University of Bologna - Italy)</i>			
Title of qualification awarded	<i>(e.g. MSc in Biology)</i>			
Marks	YOUR mark	Minimum PASS mark	Maximum mark	ECTS conversion (if available)
Final grade (if available)				
Weighted average of exam marks				
Title and topic of Master Thesis				

Research and Study Abroad Experiences

List periods of study abroad (Erasmus and/or others), and research periods at universities or public/private institutions (only the last 5 years will be considered)

Scientific research of any kind (basic, oriented, translational, applied etc.)
Periods of study abroad (e.g. Erasmus)

Other qualifications

List other experiences relevant to the PhD Programme (only the last 5 years will be considered)

University Master Courses (Master universitari di I e II livello) relevant to the PhD Programme
Postgraduate training programmes/specialization programmes relevant to the PhD Programme
Internships
University teaching at any level
Other qualifications attesting the applicant's skills and education (prizes, grants etc.)

COVER PAGE

Name:

Surname:

Title of the project:

Indicate only one Research Topic you would like to be involved in (the full description of Research Topics is also available on the PhD Programme website, <https://phd.unibo.it/agricultural-environmental-food-sci-technology/en/phd-programme/reseach-topics/>):

- (1) Agronomy, Herbaceous Crops, Flowers and Vegetables Systems, Agricultural Genetics and Agricultural Chemistry
- (2) International Cooperation and Sustainable Development Policies
- (3) Microbial Ecology and Plant Pathology
- (4) Agricultural and Food Economics and Policy
- (5) Agricultural Entomology
- (6) Agricultural Engineering
- (7) Food Science and Biotechnology
- (8) Animal Science
- (9) Tree Production Systems, Fruit, Forest and Ornamental Trees and Grape
- (10) Water-Food-Energy-Sustainable Agriculture Nexus

NB: it must be not indicated the name of possible professors who will be responsible for the PhD candidate research activity and the thesis; a supervisor is appointed by the Academic Board only after enrollment.

PROPOSAL DESCRIPTION

The project description, with special emphasis on the activities to be completed during the first-year course, cannot exceed 20.000 characters, including spaces and formula possibly used. This figure does not include references and images (such as graphs, diagrams, tables etc - where present). It must contain the following elements:

- 1. State of the art.** Provide a brief survey of existing research efforts and scientific basis, preferably with references to scientific literature. If your project is a part of a larger research effort requiring coordination, explain specifically your planned contributions within the larger framework. Outline the essential elements showing consistency between the submitted research proposal and the applicant's training path and previous experiences
- 2. Description of the project.** Present the main objective and a brief summary, explaining how you intend to attain your goal. Describe how you are planning to use empirical, analytical or other methods for your research.
- 3. Expected results.** The description of expected results should address impact on science, technology and society, if appropriate.
- 4. Lead-time for implementation.** Outline a research plan for each year.
- 5. Proposed criteria to be used to assess the findings obtained.** The project timeline should contain measures of achievement.
- 6. References.** Please list applicable references.