



(ANNEX 1)

Document updated on 11/06/2021.

Addenda and corrections are written in red.

CALL FOR PHD POSITIONS – 37th CYCLE

PHD PROGRAMME IN AGRICULTURAL, FOREST AND FOOD SCIENCES

Coordinator	Prof. Eleonora BONIFACIO
Department	Agricultural, Forest and Food Sciences
Programme length	3 years
Programme website	http://dott-safa.campusnet.unito.it
Programme start date	1 st November, 2021
Departments involved in the PhD programme	Agricultural, Forest and Food Sciences

Positions offered by the PhD Programme¹	
n. 13 positions with scholarship, of which n. 2 reserved to candidates with international qualifications	<ul style="list-style-type: none">- of which:- n. 8 scholarships funded by the University of Torino;- n. 3 scholarships funded by the Department of Agricultural, Forest and Food Sciences- 1 scholarship funded by FERRERO TRADING LUX SA- 1 scholarship funded by the Department of Agricultural, Forest and Food Sciences (Departments of Excellence project)
n. 1 apprenticeship position with ARALDICA CASTELVERO S.C.A (upon Piedmont Region approval. This position is related to a specific research project)	
n. 1 apprenticeship position with SAGEA Centro di Saggio s.r.l.(upon Piedmont Region approval. This position is related to a specific research project)	
n.1 position reserved to employees of Centro di Sperimentazione Laimburg	
n. 2 positions reserved to students selected within the international mobility programme CSC (China Scholarship Council)	

¹ Any additional scholarships and apprenticeship contracts (Legislative Decree no. 81/2015 art.45), which may become available after the publication of this Call, will be announced on the Doctoral School website [Partecipare al Bando/Submitting your application](#) until the Call's deadline.



UNIVERSITÀ DEGLI STUDI DI TORINO

CALL FOR NON-RESERVED (ORDINARY) POSITIONS

ADMISSION PROCEDURE

(qualifications, including research project + interview)

	Max	Score	Information/ documents	Application
QUALIFICATIONS		max. 40		
Final grade Graduates in Italy		max. 14	Final grade of the degree giving access to PhD <i>110-110L >> 14</i> <i>107-109 >> 12</i> <i>104-106 >> 10</i> <i>100-103 >> 8</i> <i>=< 99 >> 7</i>	
Weighted average Graduands in Italy		max. 14	Self-certification of exams taken – Laurea Magistrale/Master's Degree and weighted average <i>28.1-30 >> 14</i> <i>27.1-28 >> 12</i> <i>26.1-27 >> 10</i> <i>25.1-26 >> 8</i> <i><25 >> 7</i>	



UNIVERSITÀ DEGLI STUDI DI TORINO

CV Graduates in Italy Graduands in taly		max. 2	(as per the CV template)
CV Graduates abroad Graduands abroad		max. 16	(as per the CV template)
Publications	2	max. 2	A max of 1 pt/published research paper
Reference letters (optional)	2	0	
Research Project		max. 22	<i>(Max 1000 words, excluding the reference list, in English). The research project must include: state of the art, objectives of the research, expected development and outcomes, bibliography)</i>
<i>Threshold to be admitted to the next examination</i>		30	
INTERVIEW		max. 60	<i>The interview will deal mainly on the research project and on the topic of the MSc thesis. The candidate can choose whether to perform the interview in English or Italian. In case Italian is selected, the knowledge of English will be assessed through reading and translation of a scientific text.</i> <i>Knowledge of English is mandatory</i>



Threshold to pass the interview (qualified for PhD)		40	
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CALL FOR POSITIONS RESERVED TO CANDIDATES HOLDING FOREIGN QUALIFICATIONS

ADMISSION PROCEDURE

(qualifications, including research project + interview)

	Max	Score	Information/ documents	Application
QUALIFICATIONS		max. 40		
CV Graduates abroad Graduands abroad		max. 16	(as per the CV template)	
Publications	2	max. 2	A max of 1 pt/published research paper	
Reference letters (optional)	2	0		
Research Project		max. 22	<i>(Max 1000 words, excluding the reference list, in English). The research project must include: state of the art, objectives of the research, expected development and outcomes, bibliography)</i>	



<i>Threshold to be admitted to the next examination</i>		30	
INTERVIEW		max. 60	<i>The interview will deal mainly on the research project and on the topic of the MSc thesis. The candidate can choose whether to perform the interview in English or Italian. In case Italian is selected, the knowledge of English will be assessed through reading and translation of a scientific text.</i> <i>Knowledge of English is mandatory</i>
<i>Threshold to pass the interview (qualified for PhD)</i>		40	

Research topics
PhD Programme in Agricultural, Forest and Food Sciences

1. Governance territoriale sostenibile e valutazione dei servizi ecosistemici - Sustainable territorial governance and assessment of ecosystem services (Referente scientifico: F. Brun)
2. Sostenibilità e tracciabilità delle colture erbacee per le filiere cerealicole e zootecniche - Sustainability and tracked production of crops for cereal and livestock supply chains (Referente Scientifico G. Borreani)
3. Tecniche e strategie per l'adattamento e la resilienza al cambiamento climatico di colture frutticole/viticole - Strategy and cultivation practices for adaptations and resilience to climate change in grapevine/fruit trees. (Referente scientifico: S. Guidoni)
4. Innovazioni nel settore orto-floricolo - Innovation in horticultural sciences (Referente scientifico: S. Nicola)
5. Applicazioni della genomica strutturale, comparativa e funzionale al miglioramento genetico delle specie di interesse agrario - Application of structural, comparative and functional genomics to crop breeding (Referente scientifico: S. Lanteri)



6. Strumenti, macchine e tecnologie per l'agricoltura di precisione - Tools, machines and technologies for precision agriculture (Referente scientifico: P. Gay)
7. Tecniche Geomatiche a sostegno di pratiche gestionali sostenibili nel settore agro-forestale per un efficace trasferimento tecnologico - Geomatics-based approaches for Sustainable Practices in the Agro-Forestry Sector: towards an effective technology transfer (Referente scientifico: E. Borgogno Mondino)
8. Interazioni degli insetti con altri organismi (piante, artropodi, microrganismi e virus) - Interactions between insects and other organisms (plants, arthropods, microorganisms and viruses) (Referente scientifico: A. Alma)
9. Patogeni emergenti in orto-frutticoltura: biosicurezza in un contesto di salute circolare - Emerging pathogens in the horticultural sector: biosecurity in the frame of circular health (Referente scientifico: M.L. Gullino, V. Guarnaccia)
10. Biogeochimica degli elementi nel sistema suolo-pianta dalla scala molecolare alla scala di campo - Biogeochemical cycling of elements in the soil-plant system from molecular to field scale (Referente scientifico: L. Celi)
11. Processi pedogenetici e funzionalità del suolo in ambiente forestale - Pedogenic processes and soil functions in forest ecosystems (Referente scientifico: E. Bonifacio)
12. Innovazione di prodotto e processo per lo sviluppo di alimenti sostenibili e funzionali nel contesto della dieta mediterranea - Product and process innovation for a more sustainable and functional food in the Mediterranean diet context. (Referente scientifico: G. Zeppa)
13. Funghi entomopatogeni per il controllo di emitteri fitomizi - Entomopathogenic fungi for the control of sap-sucking hemipteran. (Referente scientifico: P. Dolci)
14. Interazione microbiche e microbioma nei sistemi alimentari - Microbial interactions and microbiome in food systems (Referente scientifico: K. Rantsiou)
15. Sostenibilità e qualità delle produzioni animali: dalle tecniche di allevamento ai servizi ecosistemici - Animal production sustainability and quality: from breeding techniques to ecosystem services (Referente scientifico: L. Battaglini)



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16. Prospettiva multidisciplinare sull'utilizzo degli insetti nell'alimentazione animale - A multidisciplinary perspective on the use of insects in animal feeding (Referente scientifico: I. Biasato)
17. Dinamiche di popolazione e interazioni tra pentatomidi e nemici naturali, esotici e indigeni, in sistemi agroforestali - Population dynamics and interactions among stink bugs and natural enemies, both indigenous and exotic, in agroforestry systems. (industrial Ph.D. in agreement, reserved to Centro di sperimentazione Laimburg's employees, Referente scientifico: L. Tavella)
18. Innovazione e sostenibilità nei processi enologici (dottorato in apprendistato, Referente scientifico: V. Gerbi)
19. Tecniche geomatiche per il rilievo e la rappresentazione digitale in agricoltura (titolo abbinato al posto con contratto di alto apprendistato presso SAGEA Centro di Saggio s.r.l.; Referente scientifico: E. Borgogno Mondino)
20. Indagini sul complesso di specie fitofaghe del vigneto: interazioni insetto-microrganismi e implicazioni per la difesa della vite - Investigations on the vine-feeding species complex: insect-microorganism interactions and their implications for vineyard management (Referente scientifico: A. Alma)(titolo di ricerca abbinato a borsa finanziata dal Dipartimento di Scienze Agrarie, Forestali e Alimentari / research project linked to a scholarship funded by Dipartimento di Scienze Agrarie, Forestali e Alimentari)
21. Disciplinari di coltivazione e di prima trasformazione per il miglioramento della qualità nutrizionale e sanitaria di leguminose da granella ad uso alimentare - Crop practices and milling operations for the nutritional and sanitary enhancement of grain legumes for food (Referente scientifico: M. Blandino) (titolo di ricerca abbinato a borsa finanziata dal Dipartimento di Scienze Agrarie, Forestali e Alimentari / research project linked to a scholarship funded by Dipartimento di Scienze Agrarie, Forestali e Alimentari)



22. Applicazione del telerilevamento per il miglioramento produttivo e qualitativo dei cereali per le filiere avanzate - Application of remote sensing for the yield and qualitative improvement of cereal cultivation for advanced supply chains (Referente scientifico: A. Reyneri di Lagnasco) (titolo di ricerca abbinato a borsa finanziata dal Dipartimento di Scienze Agrarie, Forestali e Alimentari / research project linked to a scholarship funded by Dipartimento di Scienze Agrarie, Forestali e Alimentari)
23. Ottimizzazione del controllo simbiotico delle cimici del nocciolo: dalla scala locale a quella globale - Advancements in symbiotic control of stink bug pests of hazelnut from the local to the global scale (Referente scientifico: E. Gonella) (titolo di ricerca abbinato a borsa finanziata da FERRERO TRADING LUX SA / research project linked to a scholarship funded by FERRERO TRADING LUX SA)