PhD Programme Table - 39th cycle
Call for Applications for the admission to the PhD programmes (39th cycle), A.Y. 2023/2024 for scholarships funded by Next Generation EU – NRRP ex M.D. 117/2023 and M.D. 118/2023 and from other sources

PROGRAMME'S NAME	HEALTH AND TECHNOLOGIES
DURATION	3 years
PROGRAMME START DATE	01/11/2023 (DD/MM/YYYY)
LANGUAGES	Italian, English
COORDINATOR	Prof. Marco Viceconti (marco.viceconti@unibo.it)
PhD POSITIONS	14
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**	Funded in the framework of the research trainig projects "Territorio: Transizione tecnologica, culturale, economica e sociale verso la sostenibilità" (PR. FSE + 2021/2027– DGR n. 509 del 03/04/2023) - CUP J33C23000610006	Remote monitoring for patients with advanced heart failure: a comparison of different technologies
2	**PhD Scholarship PNRR ex M.D. 118/2023 - Public Administration**	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 1, Investment 4.1 (M.D. 118/2023) - Public Administration	Towards digital diagnosis: models for the evaluation of the intervertebral disc
3	**PhD Scholarship PNRR**	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Project PNRR DARE DigitAl lifelong pRevEntion, PNC0000002 CUP B53C22006450001	Prevention of vertebral fractures: digital diagnosis and computational modelling of vertebrae affected by metastasis
4	**PhD Scholarship PNRR**	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Project PNRR DARE DigitAl lifelong pRevEntion, PNC0000002 CUP B53C22006450001	Digital twins to prevent the risk of joint replacement failure in patients affected by neurodegenerative disorders
5	**PhD Scholarship PNRR**	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Project PNRR DARE DigitAl lifelong pRevEntion, PNC0000002 CUP B53C22006450001	Digital twins informed by wearable sensors to predict joint loads in the real world
6	**PhD Scholarship PNRR**	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and	A data lake-based approach for rapid ingestion, intregration, and

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		Resilience Plan (NRRP) - Project PNRR DARE DigitAl lifelong pRevEntion, PNC0000002 CUP B53C22006450001	mapping of multiple health data types and sources: a digital twin in healthcare as use case
7	*PhD Scholarship PNRR*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Project PNRR DARE DigitAl lifelong pRevEntion, PNC0000002 CUP B53C22006450001	Holistic Digital twins of neuro-motor developmental trajectory in infancy and childhood for a healthy future population
8	*PhD Scholarship PNRR*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Project PNRR DARE DigitAl lifelong pRevEntion, PNC0000002 CUP B53C22006450001	Digital biomarkers discovery for noncommunicable diseases
9	*PhD Scholarship PNRR*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Project PNRR PE06 Heal Italia, CODICE PROPOSTA PE00000019 - CUP J33C22002920006	Novel predictors of infection in cardiac implantable devices
10	*PhD Scholarship PNRR*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Project PNRR DARE DigitAl lifelong pRevEntion, PNC0000002 CUP B53C22006450001	Physiology-driven, sustainable, and technological approaches to large-scale prevention of falls
11	*PhD Scholarship PNRR*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Project PNRR DARE DigitAl lifelong pRevEntion, PNC0000002 CUP B53C22006450001	Capturing hallmarks predicting the transition from pre-clinical to disease state in Parkinson and Alzheimer by a multilayered approach
12	*PhD Scholarship PNRR*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Project PNRR DARE DigitAl lifelong pRevEntion, PNC0000002 CUP B53C22006450001	Digital tools for de-prescribing in frail older persons
13	*PhD Scholarship*	Funded by the University of Bologna general budget and by the Department of Medical and Surgical Sciences	I-BLOSSOM - Instrumented Biomarkers for LOngitudinal aSSessment Of Motor control development
14	*PhD Scholarship*	Funded by the University of Bologna general budget and by the Department of Medical and Surgical Sciences and by the Department of Biomedical and Neuromotor Sciences	A deep clustering framework for personalized post-test risk-stratification in lung cancer screening

All PhD positions winners shall fulfill the learning and research obligations decided by the Academic Board and the obligations foreseen in the relevant regulations, funding schemes and eventual agreements, and in the Call for Applications. Moreover, applicants awarded with PhD scholarships funded by Next Generation EU shall fulfill specific obligations foreseen in the relevant funding scheme, in the relevant regulations and in the Call for Applications.

Admission Exams

	DATE AND TIME	RESULTS
Qualifications and research proposal evaluation	Applicants' participation is not required	Available from **29/06/2023****
Oral examination	**Date**: starting from **04/07/2023** – **10.00 a.m. CEST*** **Place**: In presence Aula Pisi - Pad. 11 – Ground Floor, Sant'Orsola Malpighi, Via Massarenti 9, Bologna. Remotely, using Microsoft Teams	Available from **07/07/2023****

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* 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 Europass format is required
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: - it must **mention on the cover page one of the research topic assigned to a specific PhD position**; - **it cannot exceed 20,000 characters**, including spaces and formula possibly used. This figure does not include: the title of proposal, the outline, references and images (such as graphs, diagrams, tables, etc. - if present); - **it must include**: the state of the art; description of the proposal; expected results; articulation of the proposal and implementation times; outlining of the criteria meant to be used to assess the research results.
SUPPORTING DOCUMENTS	
Thesis abstract	Abstract of the **second cycle degree thesis.** Graduands 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 or 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)
Personal Statement	The statement shall include the reasons prompting the applicant to attend the PhD Programme and **those relevant experiences and research interests**, that make the applicant suitable for the specific PhD Programme (3000 characters maximum, including spaces).
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	- Postgraduate vocational training programmes relevant to the PhD Programme main research topics - Specialisation thesis abstract (max 1,500 characters) - Teaching activities carried out at academic level - 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 (Master's) degree final mark and Weighted Average Mark (WAM). Graduands shall be evaluated according to the Weighted Average Mark (WAM)	7 points max
	Publications	4 points max
	Second cycle thesis abstract	1 point max
	Reference letter/s	1 point max
	Research activity	3 points max
	Interdisciplinarity and balance between technical and clinical scope	6 points max
	Study or research periods abroad	3 points max
	Other evaluable documents	3 points max
Research proposal evaluation	Scientific value and ground-breaking nature of the proposal	18 points max
	Structure of the proposal	2 points max
	Proposal feasibility	2 points max

2. **Oral examination**

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

English language proficiency	10 points max
Research proposal presentation	20 points max
General knowledge of the PhD programme's main research topics and of the research topics linked to the available PhD positions	20 points max

Oral examination aims to assess the suitability of the applicant for scientific research as well as the general knowledge of the PhD programme's main research topics and of the research topics linked to the available PhD positions.

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

The oral examination is carried out in English.

* Possible further evaluation criteria will be available on the [University website](#), selecting the relevant PhD Programme > "More information".

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