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









Section "Available Positions and Scholarships" integrated on 08/06/2023

PROGRAMME'S NAME	COMPUTER SCIENCE AND ENGINEERING
DURATION	3 years
PROGRAMME START DATE	01/11/2023 (DD/MM/YYYY)
LANGUAGES	English
COORDINATOR	Prof. Ilaria Bartolini (ilaria.bartolini@unibo.it)
PhD POSITIONS	9
ADMISSION PROCEDURE	Qualifications and research proposal evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Positions linked to a specific research topic
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	Funded by the University of Bologna general budget and by the Department of Computer Science and Engineering	
5	PhD Scholarship	Funded by the Department of Computer Science and Engineering with funds made available by the project PRIN 2020 - COMMON-WEARS - PROF. VIROLI MIRKO, Cup J53C20001420001	
5	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	Information technology models and applications for the Public Administration (PA)
6	PhD Scholarship PNRR ex M.D. 118/2023 - Green and digital transitions	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 1, Investment 3.4 (M.D. 118/2023) – Green and digital transitions	Information technology and solutions for the digital transition
7	PhD Scholarship PNRR ex M.D. 118/2023 - PNRR Research	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) – PNRR Research	Innovative technology solutions for the country's digital transformation

8	PhD Scholarship	Funded by the Department of Computer Science and Engineering with funds made available by the project Horizon Europe AEQUITAS – ref. dott. Roberta Calegari - CUP J53C22003540006	Fair-by-design methodologies for bias free AI systems
9	PhD Scholarship	Funded by the Department of Computer Science and Engineering	Software process engineering for the cloud-edge continuum

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 Fxams

	DATE AND TIME	RESULTS
Qualifications evaluation	Applicants' participation is not required	Available from 26/06/2023 **
Oral examination	Date: starting from 13/07/2023 – 9.30 a.m. CEST* Place: In presence, Aula Busi, Department of Computer Science and Engineering, Mura Anteo Zamboni 7, Bologna. Remotely, using Microsoft Teams	Available from 17/07/2023 **

^{*} 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 evaluation. During the oral examination, applicants may express their interest in one or more positions linked to specific research topics.

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 DOCUME	NTS
Identity document	Valid identity document with photo (i.e. identity card, passport)
Curriculum Vitae	No specific CV 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)
SUPPORTING DOCUI	MENTS
Research proposal	Multi-annual research proposal (drawn up in Italian or in English), with special emphasis on the activities to be completed during the first-year course. The proposal must meet the following requirements: - 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; references. The research proposals that successful applicants shall carry out during their PhD career may possibly differ from the one proposed at the application stage. This shall be defined together with the supervisor and approved by the Academic Board.

^{**} The results of the admission exams will be available on the webpage <u>Studenti Online</u> (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.

Thesis abstract	Abstract of the second cycle degree thesis (drawn up in Italian or in English) . 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 3 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 on Studenti Online , detailed in the Call for Applications (Art. 3.2).
Publications	Lists of publications (i.e. monographs, articles on scientific journals) and minor publications (conference papers, etc.), in Italian or in English
Other documents	 Postgraduate vocational programmes and/or specialisation programmes relevant to the PhD Programme Teaching activity carried out at university 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 Documents attesting the knowledge of foreign languages Study periods completed by applicants outside their countries of origin (e.g. Erasmus programme or other similar mobility programmes) Other qualifications attesting the suitability of the applicants (scholarships, prizes, etc.)

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

Second cycle degree (Master's) final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM)

Consistency of the Second cycle degree final thesis with the main topics of the PhD programme 10 points max

Publications 5 points max

Curriculum Vitae, reference letters, other qualifications 10 points max

Research proposal (scientific value, structure and feasibility of the proposal) 15 points max

2. Oral examination

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

English language proficiency	10 points max
Research proposal presentation and general knowledge of the PhD programme's main research	40 points max
topics and of the research topics linked to the available PhD positions	

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 proficiency shall be assessed**.

The oral examination is carried out in Italian or English.

* Possible further evaluation criteria will be available on the <u>University website</u>, selecting the relevant PhD Programme

> "More information".