

PHD PROGRAMME TABLE
Call for Applications for further PhD positions
funded by Next Generation EU – NRRP ex M.D. 629/2024 and 630/2024
and from other sources - PhD programmes (40th cycle)
A.Y. 2024/2025

Section “Admission Exams” integrated on 17/07/2024

ERRATA CORRIGE

PROGRAMME'S NAME	COMPUTER SCIENCE AND ENGINEERING
DURATION	3 years
PROGRAMME START DATE	01/11/2024 (DD/MM/YYYY)
LANGUAGES	English
COORDINATOR	Prof. Ilaria Bartolini (ilaria.bartolini@unibo.it)
PhD POSITIONS	10
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 PNRR ex M.D. 630/2024	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by Imola Informatica S.r.l.	Multidisciplinary aspects for intelligent systems and reliable/advanced global infrastructures
2	PhD Scholarship PNRR ex M.D. 630/2024	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by Arca Tecnologie S.r.l.	Project of support platforms for virtualization with Guaranteed Security and Functional Safety in the Automotive/Industrial field
3	PhD Scholarship PNRR ex M.D. 630/2024	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by Gruppo Maggioli S.p.A.	Design and Development of Advanced AI Solutions Based on Knowledge-Enhanced Natural Language Processing and Large Language Models
4	PhD Scholarship PNRR ex M.D. 630/2024	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by BI-REX	Machine Learning and Cloud Continuum for Digital Twins in the Tile Manufacturing Domain
5	PhD Scholarship PNRR ex M.D. 630/2024	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by Ferrari S.p.A.	Research and Development of AI and Neural Network software for "Text to image" applications
6	PhD Scholarship	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan	Development of an Intelligent System for Automated

	PNRR ex M.D. 630/2024	(NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by GD S.p.A.	Transformation of Electrical/Wiring Drawings into PLC Projects with Multi-Platform Compatibility
7	PhD Scholarship PNRR ex M.D. 630/2024	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by Imola Informatica S.r.l.	Evolved infrastructure and services for "Industry 5.0"
8	PhD Scholarship PNRR ex M.D. 630/2024	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by Gruppo Maggioli S.p.A. Dinova S.r.l.	Knowledge-Enhanced Natural Language Processing Methods and Applications to Compliance Text Generation
9	PhD Scholarship PNRR ex M.D. 630/2024	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by L&G Solution S.r.l.	Enhanced Large Language Models and Applications to Legal Domains
10	PhD Scholarship PNRR ex M.D. 630/2024	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 630/2024) and by Eyecan.ai s.r.l.	Deep learning models for image depth estimation

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, in the Call for Applications, and in the MM.DD. 629/2024 and 630/2024.

Admission Exams

	DATE AND TIME	RESULTS
Qualifications evaluation	Applicants' participation is not required	Available from 26/08/2024
Oral examination	Date: starting from 02/09/2024 – 9.00 a.m. CEST Place: In presence, Department of Computer Science and Engineering, Mura Anteo Zamboni 7 Viale Risorgimento 2 - Sala riunioni del DISI , Bologna. Remotely, using Microsoft Teams	Available from 04/09/2024

The results of the qualifications and research proposal evaluation shall 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) together with the oral examination detailed schedule. **No personal written communication will be sent to applicants concerning the examinations results.**

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 DOCUMENTS	
Identity document	Valid identity document with photo (i.e. identity card, passport)
Curriculum Vitae	The Curriculum Vitae shall contain on the first page the CV Summary , duly filled, downloadable in .docx from the University website (select the PhD Programme → "More information", then check "Notices" at the bottom of the page). Versions of the Summary modified in content and/or in the order in which they are presented, or not complete, will not be accepted: therefore, it is mandatory to use only and exclusively the form provided by

	the University. If the uploaded Curriculum does not contain such a Summary as per the instructions above, the Admission Board will not proceed to the evaluation of any title provided by the applicant and he/she will be automatically excluded from the oral examination.
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	<p>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:</p> <ul style="list-style-type: none"> - it must be written following the Research Proposal Template, downloadable in .docx from the University website (select the PhD Programme → “More information”, then check “Notices” at the bottom of the page). Versions of the research proposal modified in content and/or in the order in which they are presented, or not complete, will not be accepted, therefore it is mandatory to use only and exclusively the form provided by the University. Should the research proposal not be drawn up as per the instructions above, the Admission Board will not proceed to assess any of the qualifications provided by the candidate and he/she will be automatically excluded from the oral examination; - 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. <p>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 name of the possible PhD thesis supervisor should not be given, as this will only be identified by the PhD Academic Board after enrolment.</p>
SUPPORTING DOCUMENTS	
Thesis abstract	Abstract of the second cycle degree thesis (drawn up in Italian or in English) . Graduates 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	<ul style="list-style-type: none"> - 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)	10 points max
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 topics and of the research topics linked to the available PhD positions	40 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 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".