



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

AREA
FORMAZIONE E DOTTORATO

PHD PROGRAMME TABLE

Call for applications for the admission to the PhD programmes (42nd cycle) - A.Y. 2026/2027
Second round

Section "Available Positions and Scholarships" integrated on 27/05/2026

PROGRAMME'S NAME	NANOSCIENCE FOR MEDICINE AND THE ENVIRONMENT
DURATION	3 years
PROGRAMME START DATE	01/11/2026 (DD/MM/YYYY)
LANGUAGES	English
COORDINATOR	Prof. Matteo Calvaresi (matteo.calvaresi3@unibo.it)
PhD POSITIONS	12
ADMISSION PROCEDURE	Qualifications evaluation Oral examination

Available Positions and Scholarships

Position n.	Financial Support	Description	Positions linked to research topics
1	PhD Scholarship	Totally funded by the University of Bologna general budget	Detection Systems Based on Luminescent Polymers and Biomolecules
2	PhD Scholarship	Totally funded by the University of Bologna general budget	Analytical Method Development for the Identification, Quantification, and Characterization of Micro- and Nanoplastics and Other Polymeric Materials in Complex Environmental Matrices
3	PhD Scholarship	Funded by the University of Bologna general budget with funds made available by the "Dipartimenti di Eccellenza" initiative	Non-classical adsorption processes
4	PhD Scholarship	Funded by the Department of Chemistry "Giacomo Ciamician" - CHIM	Mechanistic strategies for next-generation electrochemiluminescence biosensing
5	PhD Scholarship	Funded by the Department of Chemistry "Giacomo Ciamician" - CHIM	Synthesis and characterization of photoactive crystalline materials
6	PhD Scholarship	Totally funded by the University of Bologna general budget	Light as a tool of biological and nanotechnological significance in the activation of (i) electron transfer within the DNA double helix and (ii) molecular motors capable of converting photons energy in mechanical work

7	PhD Scholarship	Funded by the Department of Physics and Astronomy "Augusto Righi" – DIFA with funds made available by Project FIS2_HERMES_MAZZARO FIS2023- 01817 CUP J53C25001840001 High-Throughput Exploration of Rising Materials for photoElectrochemical Solar fuels production (Ref. Prof. Mazzaro)	Combinatorial Synthesis of Photoelectrode Materials Libraries and Heterostructures
8	PhD Scholarship	Co-funded by the University of Bologna general budget and the Department of Chemistry "Giacomo Ciamician" - CHIM	Design, preparation and applications of peptide-based supramolecular materials
9	PhD Scholarship	Co-funded by the University of Bologna general budget and the Department of Physics and Astronomy "Augusto Righi" - DIFA with funds made available by Project FIS2_HERMES_MAZZARO FIS2023- 01817 CUP J53C25001840001 High-Throughput Exploration of Rising Materials for photoElectrochemical Solar fuels production (Ref. Prof. Mazzaro)	Selective solar fuels production enabled by high-throughput photoelectrochemical methods
10	PhD Scholarship	Funded by the Institute for Organic Synthesis and Photoreactivity (ISOF) of the National Research Council of Italy (CNR)	Development and characterization of sustainable molecules and materials for agri-food, environmental, or biomedical applications
11	PhD Scholarship	Funded by the Institute for Organic Synthesis and Photoreactivity (ISOF) of the National Research Council of Italy (CNR)	Development and application of Deep Learning algorithms for the characterization and functionalization of complex biosensor arrays
12	PhD position without a scholarship		3D Bioprinting-Based Models to Study Metabolism and Drug Response in Acute Myeloid Leukemia

The yearly gross amount of the scholarships awarded for the PhD Programme in "Nanoscience for medicine and the environment" is €18,341.04.

All winners of PhD positions must fulfil the study and research obligations decided by the Academic Board, as well as the obligations set out in the relevant regulations, in the call for applications, in the funding schemes and in any agreements relating to specific positions.

Admission Exams

	DATE AND TIME	RESULTS
Qualifications evaluation	Applicants' participation is not required	Available from 03/07/2026
Oral examination	Date: starting from 14/07/2026 – h. 09:30 am CEST Place: Remotely, using Microsoft Teams	Available from 21/07/2026

The results of the qualifications evaluation, as well as the oral examination detailed schedule, shall be available on the webpage [Studenti Online](#) (select "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.

During the oral examination, applicants will express their interest in one or more PhD positions linked to specific research topics.

Required and Supporting Documents to be attached to the application

Only documents in Italian or English will be considered valid and will be assessed by the Admission Board. Identity documents and diplomas/degree certificates issued in a language other than Italian or English must be accompanied by an official translation. The translation must be carried out by an authorized body or by the awarding university. Only qualifications obtained in the last 5 years will be taken into account, with the exception of university degrees. 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 must be drawn up using the CV Form , downloadable in .docx from the University website (select the PhD Programme → “More information”, then check “Notices” at the bottom of the page).
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 DOCUMENTS	
Thesis abstract	Abstract of the second cycle degree thesis . Graduands applicants may submit an abstract of the thesis to be defended. 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.
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 (3,000 characters maximum, including spaces).
Other documents	- 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 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 thesis abstract with the PhD programme main topics	14 points max
Personal statement	20 points max
Other evaluable documents	6 points max

2. Oral examination

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

English language proficiency	5 points max
General, theoretical and methodological knowledge of the PhD programme's main research topics and of the research topics linked to the available PhD positions, suitability of the applicant for scientific research	45 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 applicants'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”, at the bottom of the page in the section “Notices”.