



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

AREA
FORMAZIONE E DOTTORATO



PHD PROGRAMME TABLE

Call for applications for the admission to the PhD programmes (41st cycle) - A.Y. 2025/2026
Second round

PROGRAMME'S NAME	SURGICAL SCIENCES AND INNOVATIVE TECHNOLOGIES
DURATION	3 years
PROGRAMME START DATE	01/11/2025 (DD/MM/YYYY)
LANGUAGES	Italian, English
COORDINATOR	Prof. Emanuela Marcelli (emanuela.marcelli@unibo.it)
PhD POSITIONS	12
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	Machine learning algorithms and innovative approaches for the diagnostic and care management of viral infections
2	PhD Scholarship	Totally funded by the University of Bologna general budget	Virtual reality and augmented reality-based applications in maxillo-facial surgery
3	PhD Scholarship	Totally funded by the University of Bologna general budget	Microbiota-gut-brain axis: identification of molecular mechanisms for the development of new therapeutic options
4	PhD Scholarship	Totally funded by the University of Bologna general budget	Technological and surgical innovation for the optimization of outcomes in abdominal solid organ transplantation
5	PhD Scholarship	Totally funded by the University of Bologna general budget	Innovations and refinements in soft tissue reconstruction of the head and neck region
6	PhD Scholarship	Totally funded by the University of Bologna general budget	Machine learning models for predicting long-term survival in pancreatic cancer using multi-omics data
7	PhD Scholarship	Totally funded by the University of Bologna general budget	Design and integration of a 3D point-of-care laboratory for specialized surgeries in hospital settings
8	PhD Scholarship	Funded by the Department of Medical and Surgical Sciences	Study of innovative models for the optimization of multidisciplinary operative planning in oncovascular surgery

9	PhD Scholarship	<p>Funded by Regione Emilia-Romagna in the framework of the research training projects for PhD programmes 41st cycle “High skills for resilience and sustainability of land and communities - ESF+ PR 2021/2027 Priority 2. Education and Training Specific Objective e) - Action No. 3 – Health and Well-being” - under the public notice approved by resolution of the Regional Council n. 344 of 10/03/2025 – funding approved by resolution of the Regional Council n. 732 of 19/05/2025 – CUP J33C25000520006</p> 	Development of molecular strategies for cardiac regeneration
10	PhD Scholarship	<p>Funded by Regione Emilia-Romagna in the framework of the research training projects for PhD programmes 41st cycle “High skills for resilience and sustainability of land and communities - ESF+ PR 2021/2027 Priority 2. Education and Training Specific Objective e) - Action No. 3 – Health and Well-being” - under the public notice approved by resolution of the Regional Council n. 344 of 10/03/2025 – funding approved by resolution of the Regional Council n. 732 of 19/05/2025 – CUP J33C25000520006</p> 	Development of a predictive model for the onset of cutaneous adverse reactions to oncology therapy
11	PhD position without a Scholarship		Ergonomics study in robotic surgery of the alimentary tract: optimisation of operating techniques
12	PhD position without a Scholarship		Use of technology in the phenotyping of the diabetic patient

The yearly gross amount of the scholarships awarded for the PhD Programme in “Surgical sciences and innovative technologies” is €17,805.

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 and research proposal evaluation	Applicants’ participation is not required	Available from 10/07/2025
Oral examination	<p>Date: starting from 17/07/2025 – 9.00 a.m. CEST</p> <p>Place: In presence Aula Barbara, Pad. 5, Policlinico S. Orsola Malpighi, Via Massarenti 9, Bologna. Remotely, using Microsoft Teams</p>	Available from 28/07/2025

The results of the qualifications and research proposal 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	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)
Research proposal	<p>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:</p> <ul style="list-style-type: none"> - it must mention on the cover page the position/s linked to a specific research topic the applicant is interested to and the proposal is about; - it must include: title of the proposal; description of the proposal; main activities and timeline; references. <p>The research proposal 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.</p>
SUPPORTING DOCUMENTS	
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 (3,000 characters maximum, including spaces).
Publications	Lists of publications (i.e. monographs, articles on scientific journals) and minor publications (conference papers, etc.)
Other documents	<ul style="list-style-type: none"> - Postgraduate vocational training programmes relevant to the PhD Programme main research topics - Specialisation thesis - 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 - Work activity - Curricular or non-curricular professional internships - Periods of study abroad, 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

Qualifications evaluation	First (Bachelor's) and second cycle (Master's) degree final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM)	10 points max
	Publications and other evaluable documents	8 points max
	Reference letters	1 point max
	Personal statement	1 point max
Research proposal evaluation	Scientific value and ground-breaking nature of the proposal	20 points max
	Structure of the proposal	5 points max
	Proposal feasibility	5 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 includes the presentation and discussion of the research proposal and 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 Italian or in English.

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