



## PHD PROGRAMME TABLE 40TH CYCLE

PROGRAMME'S NAME	<b>BIOTECHNOLOGICAL, BIOCOMPUTATIONAL, PHARMACEUTICAL AND PHARMACOLOGICAL SCIENCES</b>
DURATION	3 years
PROGRAMME START DATE	01/11/2024 (DD/MM/YYYY)
LANGUAGES	Italian
COORDINATOR	Prof. Maria Laura Bolognesi ( <a href="mailto:marialaura.bolognesi@unibo.it">marialaura.bolognesi@unibo.it</a> )
PHD POSITIONS	7
ADMISSION PROCEDURE	Qualifications and research proposal evaluation Oral examination

### Available Positions and Scholarships

Pos. n.	Financial Support	Description	Positions linked to research topics
1	<b>PhD scholarship</b>	Totally funded by the University of Bologna general budget	Design and synthesis of chimeric small molecules for drug discovery and chemical biology applications
2	<b>PhD scholarship</b>	Totally funded by the University of Bologna general budget	Pharmaceutical technology strategies for the development of innovative drug delivery systems
3	<b>PhD scholarship</b>	Totally funded by the University of Bologna general budget	Role of inflammatory mediators and their epigenetic regulation in neuropathic pain
4	<b>PhD scholarship</b>	Totally funded by the University of Bologna general budget	Single-cell transcriptomic and proteomic analysis in virus-cell interactions
5	<b>PhD scholarship</b>	Totally funded by the University of Bologna general budget	Study of 3D cell models using synchrotron light techniques and artificial intelligence
6	<b>PhD scholarship</b>	Funded by the University of Bologna general budget and by the Department of Pharmacy and Biotechnology	Drug discovery and development
7	<b>PhD scholarship</b>	Funded by the Department of Pharmacy and Biotechnology	Identification of new targets for neuropathic and gastrointestinal pain

The number of positions and scholarships may be incremented in case additional funding becomes available, notwithstanding the terms of the application process in the Call. Any amendment, update or integration of the Programme Table will be published on the University website, even after the Call for applications has expired. Any further PhD positions shall be integrated in the PhD Programme Table within ten days before the oral examination.

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.

## Admission Exams

	DATE AND TIME	RESULTS
Qualifications and research proposal evaluation	Applicants' participation is not required	Available from <b>30/06/2024</b>
Oral examination	<b>Date:</b> starting from <b>15/07/2024 – 9.00 a.m. CEST</b> <b>Place:</b> Remotely, using Microsoft Teams	Available from <b>22/07/2024</b>

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	
<b>Identity document</b>	Valid identity document with photo (i.e. identity card, passport)
<b>Degrees</b>	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)
<b>Curriculum Vitae</b>	<p><b>The Curriculum Vitae must be drawn up using exclusively the <a href="#">Curriculum Vitae form</a></b>, in Attachment 1 to the present PhD programme table and downloadable in .docx from the <a href="#">University website</a> (select the PhD Programme → “More information”, then check “Notices” at the bottom of the page). <b>A 5 points penalty on the total qualification evaluation score shall be applied to applicants not using the attached form.</b> The curriculum vitae must contain the following pieces of information, subject to evaluation:</p> <ul style="list-style-type: none"> <li>- Name and final mark of the awarded second cycle degree, name of the awarding institution, thesis title and supervisor</li> <li>- Lists of publications (i.e. monographs, articles on scientific journals), minor publications (i.e. contributions in proceedings of national and international conferences, book chapters) and abstracts and posters presented during academic conferences</li> <li>- Research activity (please, indicate the kind and lengths of the research period; include research activities covered by research grants, and as a staff member of research units)</li> <li>- Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>- <b>Chosen position/s linked to a specific research topic (max n. 2)</b></li> </ul>
<b>Research proposal</b>	<p>Multi-annual research proposal, with special emphasis on the <b>activities to be completed during the first-year course</b>. The proposal must meet the following requirements:</p> <ul style="list-style-type: none"> <li>- It must be drawn up <b>in English</b>;</li> <li>- it must <b>mention on the cover page the topic-specific position/s</b> the applicant is interested to and the proposal is about;</li> <li>- <b>it cannot exceed 20,000 characters</b>, 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);</li> <li>- <b>it must include:</b> 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; references.</li> </ul>

	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.
<b>SUPPORTING DOCUMENTS</b>	
<b>Publications</b>	Publications will be assessed by taking into consideration their relevance to the chosen PhD programme's main topics, the applicant's position in the author list, the international reputation of the journal and the originality of the research. In particular: <ul style="list-style-type: none"> <li>- Full text publications (i.e. monographs, articles on scientific journals)</li> <li>- Full text minor publications (conference papers, abstracts and posters presented during national and international conferences, etc.)</li> </ul>

## 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

<b>Qualifications evaluation</b>	Second cycle degree (Master's) final mark	<b>10 points max</b> distributed as follows: (in brackets the points awarded to applicants holding a non-Italian degree, calculated according to the percentage with respect to the maximum score) <ul style="list-style-type: none"> <li>- 10 points - 110 e lode (maximum score with honour)</li> <li>- 8 points - from 109 to 110 included (98-100% with respect to the maximum score)</li> <li>- 6 points - from 105 to 108 included (95-97% with respect to the maximum score)</li> <li>- 4 points from 101 to 104 included (90-94% with respect to the maximum score)</li> <li>- 3 points from 95 to 100 included (89-90% with respect to the maximum score)</li> </ul>
	(for graduands only) Weighted Average Mark (WAM)	<b>8 points max</b> (in brackets the points awarded to applicants holding a non-Italian degree, calculated according to the percentage with respect to the maximum score) <ul style="list-style-type: none"> <li>- 8 points - from 29 to 30 included (98-100% with respect to the maximum WAM score)</li> <li>- 6 points da 27 a 28 included (95-97% with respect to the maximum WAM score)</li> <li>- 4 points da 25 a 26 included (90-94% with respect to the maximum WAM score)</li> <li>- 3 points da 23 a 24 included (89-90% with respect to the maximum WAM score)</li> </ul>
	Publications	<b>7 points max</b> <ul style="list-style-type: none"> <li>- 3 points for each publication on an internationally renowned scientific journal, or per book chapter</li> <li>- up to 1 point for minor publications, posters and other evaluable publications</li> </ul>
	Other qualifications (research activities, period of study or training, in Italy or abroad for no less than 1 continuative month)	<b>3 points max</b> <ul style="list-style-type: none"> <li>- up to 1 point per month, for postgraduate experiences</li> <li>- up to 0,5 per month for Erasmus or other curricular experiences</li> </ul>
<b>Research proposal evaluation</b>	Scientific value and ground-breaking nature of the proposal	7 points max
	Structure of the proposal	7 points max

	Consistency of the proposal with the PhD programme's main research topics and with the research topics linked to the available PhD positions	12 points max
	Proposal feasibility and potential impact	4 points max

## 2. Oral examination

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

English language proficiency	5 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	25 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 Italian or in English.

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

## Curriculum Vitae

### *PhD Programme in Biotechnological, Biocomputational, Pharmaceutical and Pharmacological Sciences*

#### **Personal information**

First name(s) / Surname(s)	
Nationality	
Date of birth [day, month, year]	
Gender	

#### **University Education**

##### ***Master (2-years)***

Dates (start -end or planned end)				
Awarding institution	<i>(e.g. University of Bologna - Italy)</i>			
Title of qualification awarded	<i>(e.g. MSc in Biology)</i>			
<b>Marks</b>	<b>YOUR mark</b>	<b>Minimum PASS mark</b>	<b>Maximum mark</b>	<b>ECTS conversion (if available)</b>
Final grade (if available)				
Weighted average of the exams (if you are yet to obtain your degree)				
Title and topic of the Master's Thesis				

##### ***Master (5-years / Single cycle)***

Dates (start -end or planned end)				
Awarding institution	<i>(e.g. University of Bologna - Italy)</i>			
Title of qualification awarded	<i>(e.g. MSc in Pharmacy)</i>			
<b>Marks</b>	<b>YOUR mark</b>	<b>Minimum PASS mark</b>	<b>Maximum mark</b>	<b>ECTS conversion (if available)</b>
Final grade (if available)				
Weighted average of the exams (if you are yet to obtain your degree)				
Title and topic of the Master's Thesis				

## **Employment**

Currently employed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Summary of current employment	
Past employment record and skills obtained	

## **Publications**

*Please, list:*

- *Publications of the last five years (considering the last day of the call)*
- *Only papers accepted or published at the last day of the call will be considered - Submitted papers will be excluded*
- *Abstracts/posters to conferences already held at the last day of the call*

***ALL PAPERS/ABSTRACT MUST BE UPLOADED (or they will not be evaluated)***

Abstract/poster presented in national and international conferences
Publication on national and international journals
Chapters in books

### **Research Experiences**

*Please, list scholarships, fellowships and research periods at Universities or in public/private institutions occurred after getting the Master's degree.*

- *Periods of time are calculated at the date of closure of the call*
- *Periods must be within the last 5 years excluding the calendar year of this call.*

*Please, list scholarships, fellowships and research periods at foreign Universities or in public/private institutions occurred during your Master's degree (including Erasmus periods of study abroad, "Tesi all'estero", etc.).*

- *Periods of time are calculated at the date of closure of the call*
- *Periods must be within the last 5 years excluding the calendar year of this call*

### **Research topic selection**

*Please, list which research topic/s you are applying for (the list of the positions and the related topic is on the PhD Programme Table)*