

**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**

PROGRAMME'S NAME	<b>MATHEMATICS</b>
DURATION	3 years
PROGRAMME START DATE	01/11/2024 (DD/MM/YYYY)
LANGUAGES	Italian, English
COORDINATOR	Prof. Giovanni Mongardi ( <a href="mailto:mat.dottorato@unibo.it">mat.dottorato@unibo.it</a> )
PhD POSITIONS	2
ADMISSION PROCEDURE	Qualifications evaluation Oral examination

### Available Positions and Scholarships

Pos. n.	Financial Support	Description	Topic-Specific Positions
1	<b>PhD Scholarship PNRR ex M.D. 630/2024</b>	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 Syndiag S.r.l.	Detection of ovarian lesions in ultrasound scans via self-supervised learning
2	<b>PhD Scholarship PNRR ex M.D. 630/2024</b>	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 Thales Alenia Space - Gruppo Leonardo	Mathematical modeling, numerical tools and data analysis for aerospace environments

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
<b>Qualifications evaluation</b>	Applicants' participation is not required	Available from <b>19/08/2024</b>
<b>Oral examination</b>	<b>Date:</b> starting from <b>26/08/2024 – 9.00 a.m. CEST</b> <b>Place:</b> In presence, Aula Seminario II, Department of Mathematics, Piazza di Porta San Donato 5, Bologna. Remotely, using Microsoft Teams	Available from <b>30/08/2024</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>Curriculum Vitae</b>	No specific CV format is required
<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)
SUPPORTING DOCUMENTS	
<b>Thesis abstract</b>	<b>Extended abstract of the second cycle degree thesis (2 to 5 pages, in Italian or in English).</b> Graduands applicants may submit an extended abstract of the draft of their thesis.
<b>Reference letter/s</b>	<b>No more than 3 reference letters</b> 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 <a href="#">Studenti Online</a> , detailed in the Call for Applications (Art. 3.2).
<b>Personal Statement</b>	The statement shall include the reasons prompting the applicant to attend the PhD Programme and <b>those relevant experiences and research interests</b> , that make the applicant suitable for the specific PhD Programme, making explicit reference to Professors of the Department with whom the candidate intends to collaborate, and reference to corresponding scientific fields (max. 1 page).
<b>Other documents</b>	<ul style="list-style-type: none"> <li>- Postgraduate vocational programmes and/or specialisation programmes relevant to the PhD Programme</li> <li>- 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</li> <li>- Periods of study abroad, completed by applicants outside their countries of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>- Other qualifications attesting the suitability of the applicants (scholarships, prizes, etc.)</li> </ul>

## 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

Evaluation of the overall University path and relevant activities	13 points max
Extended thesis abstract	8 points max
Reference letter/s	12 points max
Curriculum Vitae, personal statement and other evaluable documents	17 points max

### 2. Oral examination

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

English language proficiency	2 points max
General knowledge of the PhD programme's main research topics and of the research topics linked to the available PhD positions	48 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”.