



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	BIOMEDICAL, ELECTRICAL AND SYSTEM ENGINEERING
DURATION	3 years
PROGRAMME START DATE	01/11/2025 (DD/MM/YYYY)
LANGUAGES	Italian, English
COORDINATOR	Prof. Michele Monaci (michele.monaci@unibo.it)
CURRICULA	1. Automatic Control and Operational Research 2. Bioengineering 3. Electrical Engineering
PhD POSITIONS	12
ADMISSION PROCEDURE	Qualifications and research proposal evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Curriculum	Topic-specific positions
1	PhD Scholarship	Totally funded by the University of Bologna general budget	3	
2	PhD Scholarship	Totally funded by the University of Bologna general budget	3	
3	PhD Scholarship	Totally funded by the University of Bologna general budget	3	
4	PhD Scholarship	Totally funded by the University of Bologna general budget	1	
5	PhD Scholarship	Totally funded by the University of Bologna general budget	1	
6	PhD Scholarship	Totally funded by the University of Bologna general budget	2	
7	PhD Scholarship	Funded by the University of Bologna general budget and by the Department of Electrical, Electronic, and Information Engineering "Guglielmo Marconi"	1	
8	PhD Scholarship	Funded by the Department of Electrical, Electronic, and Information Engineering "Guglielmo Marconi"	2	
9	PhD Scholarship	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	1	Integration of Artificial Intelligence and robotics techniques for manufacturing

		<p>communities - ESF+ PR 2021/2027 Priority 2. Education and Training Specific Objective e) - Action No. 1 - Digital Transition” - 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> 		
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. 2 - Ecological Transition” - 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> 	3	Synchronized measurements and digital twin for diagnostics in electric power networks
11	PhD Scholarship	<p>Funded by the Department of Electrical, Electronic, and Information Engineering "Guglielmo Marconi" with funds made available by the project Prin2022_Scorrimento Code 2022NTZRFM_001 - Title: I-SHARM: Intelligent SHared Autonomy for Robotic Manipulation systems (ref. Prof. Claudio Melchiorri) CUP J53C24002760006</p>	1	Intelligent systems for human-in-the-loop collaborative robotic manipulation
12	PhD Scholarship	<p>Funded by the Department of Electrical, Electronic, and Information Engineering "Guglielmo Marconi" with funds made available by the project FISA2023-00210 – APACHE - Advanced maniPulation, grasping and control for enhanced machinery Autonomy and reConfigurability in pHarmaceutical processes and E-commerce packaging - CUP J53C25000520001. The decree granting the FISA funding from the MUR is currently being registered with the competent bodies. The position is therefore advertised under a resolute suspension clause.</p>	1	Advanced control methods for enhanced autonomy in robotic systems and intelligent machines

The yearly gross amount of the scholarships awarded for the PhD Programme in “Biomedical, Electrical and System Engineering” 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 16/07/2025
Oral examination	Date: starting from 28/07/2025 – 9.30 a.m. CEST Place: In presence, Sala Giunta, Department of Electrical, Electronic, and Information Engineering "Guglielmo Marconi", Viale Risorgimento 2, Bologna. Remotely, using Microsoft Teams	Available from 31/07/2025

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 may express their interest in one or more PhD position 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)
SUPPORTING DOCUMENTS	
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 Curriculum the applicant is interested to and the proposal is about. In case the applicant were not to indicate one of the available Curricula, the Admission Board will assign the applicant the Curriculum most consistent with the research proposal and all the submitted documents. The assigned Curriculum will be communicated within the qualifications evaluation results; - 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); <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.</p>
Thesis abstract	Abstract of the second cycle degree thesis . Graduating 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.
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)
Publications	- Full text publications (i.e. monographs, articles on scientific journals) – max n.3

Other documents	- Full text minor publications (conference papers, etc.) – max n. 2
	- Postgraduate vocational training programmes relevant to the PhD Programme main research topics
	- Teaching and/or tutorship activity 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
	- Documents attesting the applicant's foreign languages proficiency
	- 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*

The scores will be expressed in points out of 100, as follows. Note that the qualifications and the research proposal will be assessed on the basis of their consistency with the chosen (or, in the case described above, assigned by the Admission Board) Curriculum.

1. Qualifications and research proposal evaluation

Minimum score for admission to the oral examination: 30 points, Maximum score: 50 points

Qualifications evaluation	Second cycle (Master's) degree final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM)	15 points max
	Publications	5 points max
	Other evaluable documents	15 points max
Research proposal evaluation	Scientific value and ground-breaking nature of the proposal	5 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	5 points max
Research proposal presentation	25 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 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, with particular reference to the chosen Curriculum (or to the Curriculum assigned by the Admission Board if the candidate does not indicate it).

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".