

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	BIOMEDICAL, ELECTRICAL AND SYSTEM ENGINEERING
DURATION	3 years
PROGRAMME START DATE	01/11/2024 (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	7
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 PNRR ex M.D. 630/2024	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 Field Robotics S.r.L.	1	Advanced teleoperation in agriculture
2	PhD Scholarship PNRR ex M.D. 630/2024	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 ENRX IPT GmbH	3	Study and development of multi-phase systems for inductive power transmission
3	PhD Scholarship PNRR ex M.D. 630/2024	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 Greenbone Ortho SpA	2	Evaluation of osteoinductive potential of bio-inspired bioactive scaffolds
4	PhD Scholarship PNRR ex M.D. 630/2024	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 I.M.A. S.p.A.	1	Optimal control and learning for complex systems in smart industry
5	PhD Scholarship PNRR ex M.D. 630/2024	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 Versalis S.p.A.	3	Development of innovative polymeric materials for high voltage energy transport

6	PhD Scholarship PNRR ex M.D. 630/2024	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 SACMI Imola S.C.	1	Control and optimization methods and tools for autonomous mobile robots
7	PhD Scholarship	Funded by G&W Altea S.r.L.	3	Analysis and optimization of the deployment of Sensors in the Distribution grids for Diagnostic purpose

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
Qualifications and research proposal evaluation	Applicants' participation is not required	Available from 19/08/2024
Oral examination	Date: starting from 23/08/2024 – 9.30 a.m. CEST Place: Remotely, using Microsoft Teams	Available from 26/08/2024

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	
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	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: <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 . Graduands applicants may submit the draft of the thesis. 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	<ul style="list-style-type: none"> - Full text publications (i.e. monographs, articles on scientific journals) – max n.3 - Full text minor publications (conference papers, etc.) – max n. 2
Other documents	<ul style="list-style-type: none"> - 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*

Scores will be expressed in points out of 100, as follows. Note that the qualifications and research proposal will be evaluated based on the consistency with the chosen 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”.