PhD Programme Table - 38th cycle
Call for Applications for further PhD positions funded by Next Generation EU - NRRP "National Recovery and Resilience Plan" and from other sources

PROGRAMME'S NAME	ELECTRONICS, TELECOMMUNICATIONS AND INFORMATION TECHNOLOGIES ENGINEERING		
DURATION	3 years		
PROGRAMME START DATE	01/03/2023 (DD/MM/YYYY)		
LANGUAGES	English		
MANDATORY STAY ABROAD	No		
COORDINATOR	Prof. Aldo Romani (aldo.romani@unibo.it)		
PhD POSITIONS	9		
ADMISSION PROCEDURE	Qualifications and Research proposal evaluation Oral examination		

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Position linked to a specific research topic
1	*PhD Scholarship NRRP CN*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Campioni Nazionali (CN HPC) - CUP J33C22001170001	Advanced technologies for sustainable and reliable high-performance computing and big-data
2	*PhD Scholarship NRRP CN*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Campioni Nazionali (CN MOBILITY) - CUP J33C22001120001	Development of innovative CAD tools for the fast characterization of harsh EM environments
3	*PhD Scholarship NRRP PE*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Partenariati Estesi (PE14 - RESTART) - CUP J33C22002880001	Advanced radiating architectures design for dynamic coverage and wireless power transfer applications
4	*PhD Scholarship NRRP PE*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Partenariati Estesi (PE14 - RESTART) - CUP J33C22002880001	Joint communication and sensing in next-generation wireless systems
5	*PhD Scholarship NRRP PE*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Partenariati Estesi (PE14 - RESTART) - CUP J33C22002880001	Physical and MAC Layer design for Next-Generation IoT

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6	*PhD Scholarship NRRP PE*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Partenariati Estesi (PE14 - RESTART) - CUP J33C22002880001	Intelligent Orchestration of Programmable Network Resources and Services in the Edge-to-Cloud Continuum
7	*PhD Scholarship NRRP PE*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Partenariati Estesi (PE14 - RESTART) - CUP J33C22002880001	Macroscopic models for reconfigurable intelligent surfaces
8	*PhD Scholarship NRRP PE*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Partenariati Estesi (PE14 - RESTART) - CUP J33C22002880001	Component performance testing and evaluation for 5G/6G telecom at millimeter-wave frequencies
9	*PhD Scholarship NRRP PE*	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Partenariati Estesi (PE14 - RESTART) - CUP J33C22002880001	Low-cost, low-energy-consumption optical Infrastructure for the distribution of wireless signals in dense/non line-of sight/electromagnetic-interference-exposed environments

Applicants awarded with PhD scholarships funded by Next Generation EU shall fulfil specific obligations foreseen in the relevant funding scheme and in the relevant regulations.

Admission Exams

The admission exams detailed schedule shall be published **starting from December 1st, 2022:**
- on the University website, selecting the relevant PhD Programme > "More information", at the bottom of the page in the section "Notices";
- on Studenti Online (select "summary of the 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**.

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)
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: - it must **mention on the cover page the main research topic** the applicant is interested to and the proposal is about; - **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);

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	- **it must include**: the state of the art; description of the proposal; expected results; articulation of the proposal and implementation times; outline of the proposed findings assessment criteria; references. 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.

SUPPORTING DOCUMENTS

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 (3000 characters maximum, including spaces).
Reference letter/s	**No more than 2 reference letters** 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 detailed in the Call for Applications (Art. 3.2).
Publications	Lists of publications (i.e. monographs, articles on scientific journals), minor publications (conference papers, etc.), abstracts and posters presented during national and international conferences, etc.
Other documents	- Postgraduate vocational programmes and/or specialisation programmes relevant to the PhD Programme - 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 and non-curricular training internships - Documents attesting the applicant's foreign languages proficiency - 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	Second cycle degree (Master's) final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM)	12 points max
	Publications	5 points max
	Other evaluable documents	12 points max
Research proposal evaluation	Scientific value and ground-breaking nature of the proposal	7 points max
	Structure of the proposal	7 points max
	Proposal feasibility	7 points max

2. Oral examination

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

English language proficiency	5 points max
Research proposal presentation	35 points max
General knowledge of the research topics linked to the available PhD positions	10 points max

Oral examination aims to assess the suitability of the applicant for scientific research as well as the general knowledge of the research topics linked to the available PhD positions.

The oral examination is carried out in English.

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