

# PHD PROGRAMME TABLE 40TH CYCLE

ERRATA CORRIGE		
Section "Available Positions and Scholarships" integrated on 27/05/2024		
PROGRAMME'S NAME	AEROSPACE SCIENCE AND TECHNOLOGY	
DURATION	3 years	
PROGRAMME START DATE	01/11/2024 (DD/MM/YYYY)	
LANGUAGES	Italian, English	
COORDINATOR	Prof. Alessandro Talamelli (alessandro.talamelli@unibo.it)	
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	PhD scholarship	Funded by the University of Bologna general budget and by the Department of Industrial Engineering with funds DOTDASTP2, ECOIRICMODENINI (Modenini) and CT18MODE00 (Modenini)	Radio occultation experiments at the Jovian system
2	PhD scholarship	Funded by the University of Bologna general budget and by the Department of Industrial Engineering	Experimental analysis of turbulent industrial flows
3	PhD scholarship	Funded by the University of Bologna general budget and by the Department of Industrial Engineering with funds ECOIRICTALAMELLI (Talamelli) and with funds made available by the project FFO Ciclope	Strengthening of the CICLOPE Infrastructure (Center for International Cooperation in Long Pipe Experiment) for the study of the dynamics of turbulent flows aimed at Sustainability and Consumption Reduction
4	PhD scholarship	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - M4C2I1.3 by Partenariato Esteso 15 - Space It Up! Project (topic 15 PNRR "Space activities") - CUP J53C24000580006	Advanced radiometric navigation techniques for Space It Up
5	PhD scholarship	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - M4C2I1.3 by Partenariato Esteso 15 - Space It Up! Project (topic 15 PNRR "Space activities") - CUP J53C24000580006	System engineering activities for Space It Up

6	PhD scholarship	Funded by the EU - NextGenerationEU with funds made	Advanced
		available by the National Recovery and Resilience Plan	telecommunication and
		(NRRP) - M4C2I1.3 by Partenariato Esteso 15 - Space It	navigation techniques for
		Up! Project (topic 15 PNRR "Space activities") - CUP	Space It Up
		J53C24000580006	
7	PhD scholarship	Funded by the Department of Industrial Engineering	Development of a
		with funds made available by the project HEU BOOST -	rechargeable solid iodine
		Building blOcks for iOdine thruSTer - G.A. 101135216 -	tank for electric propulsion
		Ref. Prof. Fabrizio Ponti - CUP J53C23003080006	

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 Fxams

	DATE AND TIME	RESULTS
Qualifications and research proposal evaluation	Applicants' participation is not required	Available from 02/07/2024
Oral examination	Date: starting from 08/07/2024 – 9.30 a.m. CEST Place: In presence, Aula 0.4 - Department of Industrial Engineering – UOS Forlì, Via Montaspro 97, Forlì. Remotely, using Microsoft Teams	Available from <b>15/07/2024</b>

The results of the qualifications and research proposal evaluation shall be available on the webpage <u>Studenti Online</u> (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)
Research proposal	<ul> <li>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> <li>it must mention on the cover page the main research topic/s the applicant is interested to and the proposal is about;</li> <li>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);</li> </ul> </li> </ul>

	- <b>it must include</b> : the state of the art; description of the proposal; expected results; 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 DOCU	MENTS
Thesis abstract	Abstract of the <b>second cycle degree thesis.</b> Graduands applicants may submit an abstract of 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 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).
Personal Statement	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 (3,000 characters maximum, including spaces).
Publications	Lists of publications (i.e. monographs, articles on scientific journals)
Other documents	<ul> <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>Study periods 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 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 (or international applicants who have been awarded their degree in a University system that does not provide a final mark) shall be evaluated according to the Weighted Average Mark (WAM)	20 points max
	Publications and other evaluable documents	5 points max
Research proposal evaluation	Scientific value and ground-breaking nature of the proposal	15 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	30 points max
General knowledge of the PhD programme's main research topics and of the research topics linked	15 points max
to the available PhD positions	

The applicant is preliminarily asked to declare any intention to compete for one or more topic-related positions (see the table "Available Positions and Scholarships" in the present document, updated to the date of the interview). The oral examination includes a discussion of the research topics for which the candidate is applying and any in-depth questions relating to the candidate's knowledge and mastery of the main research topics of the PhD programme.

## The oral examination is carried out in English.

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