



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

AREA
FORMAZIONE E DOTTORATO

PHD PROGRAMME TABLE

Call for applications for the admission to the PhD programmes (42nd cycle) - A.Y. 2026/2027
Second round

Section "Available Positions and Scholarships" integrated on 27/05/2026

PROGRAMME'S NAME	DATA SCIENCE AND COMPUTATION
ASSOCIATED PARTNERS <i>Pursuant to art. 3 para 2 lett. b) of the MD n. 226/2021</i>	Istituto Italiano di Tecnologia – IIT INFN
DURATION	3 years
PROGRAMME START DATE	01/11/2026 (DD/MM/YYYY)
LANGUAGES	Italian, English
COORDINATOR	Prof. Daniele Bonacorsi (daniele.bonacorsi@unibo.it)
PHD POSITIONS	15
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	Totally funded by the University of Bologna general budget	
2	PhD Scholarship	Funded by the University of Bologna general budget, by the Dept. Electrical, Electronic, and Information Engineering "Guglielmo Marconi" and by the Dept. of Computer Science and Engineering	
3	PhD Scholarship	Funded by Fondazione Istituto Italiano di Tecnologia - IIT	Genomics and Bioinformatics, Medicina personalizzata e Computational Chemistry & Physics
4	PhD Scholarship	Funded by the Italian Institute for Nuclear Physics- INFN	Computational Physics
5	PhD Scholarship	Funded by the Italian Institute for Nuclear Physics- INFN	Computational Physics
6	PhD Scholarship	Funded by The Translational Genomics Research Institute – Tgen, in memory of Renzo Tomasetti. The position requires research activities to be carried out at least in part at the funding body's headquarters in the USA - Phoenix (AZ)	AI applications in translational genomics

7	PhD Scholarship	Funded by the Italian Institute for Nuclear Physics- INFN CNAF	Design and development of an API ecosystem around the Sant'Orsola genomic database for enabling clinical analysis at scale
8	PhD Scholarship	Funded by the Italian Institute for Nuclear Physics - INFN CNAF	Development of an architecture for dynamically allocating computing and storage resources on cloud and HPC
9	PhD Scholarship	Funded by Fondazione Istituto Italiano di Tecnologia - IIT	Genomics and Bionformatics, Medicina personalizzata e Computational Chemistry & Physics
10	PhD Scholarship	Funded by INGV - National Institute of Geophysics and Volcanology	Artificial Intelligence in a virtual environment for oceanographic data quality analysis within the European Open Science Cloud
11	PhD Scholarship	Funded by the Dept. of Computer Science and Engineering with funds made available by the Horizon Europe project 'From Lab to School: Helping Children with Developmental Coordination Disorder – Lab2School4All' - GA: 101288610 - CUP: J33C26000540006 - Project HEU_2025_LAB2SCHOOL4ALL_DIIORI_A PI Prof. Angelo Di Iorio	Artificial Intelligence for Adapting Learning Materials and School Exercises
12	PhD Scholarship	Funded by CINECA	Efficient numerical methods on innovative AI and HPC computing architectures
13	PhD Scholarship	Funded by E4 Computer Engineering S.p.A.	Optimization of generative AI services on heterogeneous RISC-V-based computing systems
14	PhD Scholarship	Funded by The Italian Institute of Artificial Intelligence - AI4I	Advanced research on use of HPC for AI training, Multi Tenant Infrastructure and Secure & Regulated Computing
15	PhD position without a scholarship		Bioinformatic analyses of gastrointestinal tumor and matched normal tissue genomes across a large cohort of patients

The yearly gross amount of the scholarships awarded for the PhD Programme in “Data Science and Computation” is €19,700.76.

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 01/07/2026

Oral examination	Date: starting from 13/07/2026 – 9.30 a.m. CEST Place: Remotely, using Microsoft Teams	Available from 20/07/2026
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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 positions 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	The Curriculum Vitae must be drawn up using the CV form , downloadable in .docx from the University website (select the PhD Programme → “More information”, then check “Notices” at the bottom of the page). A 5 points penalty on the total qualification evaluation score shall be applied to applicants not using the above-mentioned CV form.
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). Applicants are required to indicate the Weighted Average Mark (WAM) for each degree submitted.
Research proposal	Brief research statement (3 pages maximum in Times New Roman 11, with references including maximum 20 articles). A 5 points penalty on the total Research Statement evaluation score shall be applied to applicants exceeding the indicated maximum lengths. In accordance with the University's policy on the ethical and responsible use of Generative Artificial Intelligence in teaching and research activities , candidates must explicitly state whether they have used Generative Artificial Intelligence systems in the production of the research proposal attached to their application form, specifying which tools were used and for which parts of the document. During the oral examination, the Admission Board will assess the candidate's full mastery of the content included in the document and their ability to justify the methodological and scientific choices made in the project.
SUPPORTING DOCUMENTS	
Publications	Lists of publications (i.e. monographs, articles on scientific journals), minor publications (conference papers, book's chapters etc.), abstracts and posters presented during national and international conferences, etc.
Other documents	- Postgraduate vocational training programmes relevant to the PhD Programme main research topics - Teaching activity carried out at university 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 - Work activity - Curricular or non-curricular professional internships - 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	First cycle degree Weighted Average Mark (WAM) - 50% Second cycle degree Weighted Average Mark (WAM) - 50% Or Single cycle degree Weighted Average Mark (WAM) - 100% Or "Vecchio ordinamento" Italian degree (pre-1999 reform) average mark - 100% For degrees awarded abroad – CGPA - 100%	25 points max
	Publications	4 points max
	Postgraduate scholarships, research grants, research activity carried out in Universities, public or private bodies, in the last 5 years and after being awarded a second cycle degree	2 points max
	Other qualifications attesting the applicant's training and skills	3 points max
	Participation in conferences as a speaker or author/co-author of original contributions	1 points max
Research proposal evaluation	Scientific value and ground-breaking nature, structure and feasibility of the proposal (note that a 5 points penalty on the total evaluation score of this item shall be applied to applicants exceeding the maximum lengths of three pages)	15 points max

2. Oral examination

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

English language proficiency	10 points max
Research proposal presentation	15 points max
General knowledge of the PhD programme's main research topics and of the research topics linked to the available PhD positions	25 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 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".