PhD Programme Table - 39th cycle
Call for Applications for further PhD positions
funded by Next Generation EU - NRRP ex M.D. 117/2023 and 118/2023
and from other sources - PhD Programmes (39th cycle)
A.Y. 2023/2024

PROGRAMME’S NAME | DATA SCIENCE AND COMPUTATION
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ASSOCIATED PARTNERS | Istituto Italiano di Tecnologia – IIT
Pursuant to art. 3 para 2 lett. b) of the MD n. 226/2021 | INFN
DURATION | 3 years
PROGRAMME START DATE | 01/11/2023 (DD/MM/YYYY)
LANGUAGES | Italian, English
COORDINATOR | Prof. Daniele Bonacorsi (daniele.bonacorsi@unibo.it)
PhD POSITIONS | 1
ADMISSION PROCEDURE | Qualifications and research proposal evaluation
Oral examination

Available Positions and Scholarships

<table>
<thead>
<tr>
<th>Pos. n.</th>
<th>Financial Support</th>
<th>Description</th>
<th>Positions linked to research topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>PhD Scholarship PNRР ex M.D. 117/2023</strong></td>
<td>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. 117/2023) and by Automobili Lamborghini Spa</td>
<td>Data Science: Big Data ed Artificial Intelligence as innovation accelerators in modern super sports cars</td>
</tr>
</tbody>
</table>

The number of positions and scholarships may be incremented in case additional funding becomes available, notwithstanding the terms of the application process as detailed in Art. 3 of the Call for Applications. Any amendment, update or integration of the Programme Table will be published, 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. Moreover, applicants awarded with PhD scholarships funded by Next Generation EU shall fulfill specific obligations foreseen in the relevant funding scheme, in the relevant regulations and in the Call for Applications.

Admission Exams

<table>
<thead>
<tr>
<th>DATE AND TIME</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifications and research proposal evaluation</td>
<td>Applicants’ participation is not required</td>
</tr>
</tbody>
</table>
| Oral examination | Date: starting from 05/09/2023 – 9.30 a.m. CEST*
Place: In presence, Aula BP-28, Department of Physics and Astronomy, Viale Berti Pichat 6/2, Bologna. Remotely, using Microsoft Teams | Available from 12/09/2022** |

* In case that the oral examination cannot be completed in one day due to the large number of applicants, the oral examination detailed schedule shall be made available on the webpage [Studenti Online](#) together with the results of the
qualifications and research proposal evaluation. During the oral examination, applicants may express their interest in one or more positions linked to specific research topics.

** The results of the admission exams will 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). No personal written communication will be sent to applicants concerning the examinations results.

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

<table>
<thead>
<tr>
<th>Identity document</th>
<th>Valid identity document with photo (i.e. identity card, passport)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae</td>
<td>No specific CV format is required</td>
</tr>
<tr>
<td>Degrees</td>
<td>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.</td>
</tr>
<tr>
<td>Research proposal</td>
<td>Brief research statement (2 pages maximum in Times New Roman 11, with references including maximum 20 articles)</td>
</tr>
</tbody>
</table>

### SUPPORTING DOCUMENTS

<table>
<thead>
<tr>
<th>Publications</th>
<th>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.</th>
</tr>
</thead>
</table>
| 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%  
Publications | 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 |
2. **Oral examination**

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Points max</th>
</tr>
</thead>
<tbody>
<tr>
<td>English language proficiency</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Research proposal presentation</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>General knowledge of the PhD programme’s main research topics and of the research topics linked to the available PhD positions</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

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](https://www.unibo.it), selecting the relevant PhD Programme > “More information”.

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| 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 | 15 points max |