**Requirements and admission procedures**

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<tr>
<th>Requirements</th>
<th>Admission procedures</th>
<th>Notes on admission</th>
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<tbody>
<tr>
<td>An Italian university degree (laurea specialistica/ magistrale - 3+2 years) or pre-reform degree (vecchio ordinamento - 4 years) or an equivalent degree obtained abroad. Also applicants whose degree will be awarded no later than December 31, 2013 can participate to the selection procedures.</td>
<td>1. Evaluation of qualifications and research project 2. Oral examination</td>
<td>For applicants residing abroad, the oral examination can be done remotely through video-conference based on the IP protocol (such as through Skype with webcam). In this case, at the time of application for admission, applicants should indicate the choice of this mode for the Interview and indicate a valid address/contact. The request must be authorized by the Admission Board upon verification of the conditions needed to ensure the proper conduct of the test (via a trustee, who will verify the applicant’s identity and will be staying on the applicant’s site during the examination). The applicant must ensure his/her availability to the address indicated in the application in the day and at the time indicated by the Admission Board and for the next 2 hours. In case the applicant is not found for 2 times by members of the Admission Board, he/she will be considered as not registered to the Interview.</td>
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**Mandatory documents to be enclosed with the online application (failure to comply with such requirements will result in the exclusion from the competition)**

1. Curriculum Vitae
2. Copy of Bachelor’s and Master’s degree, list of exams taken with grades and final mark (in Italian or English)
3. Only for those who do not hold a Master’s degree when submitting the application: copy of the exams taken with grades

**For documents listed at points 2. and 3., please note that:**
- for degrees obtained in Italian Universities: upload a SIGNED self-declaration;
- for degrees obtained in non-EU Countries: upload the degree certificate issued by the relevant University, translated in Italian or English;
- for degrees obtained in EU countries (except Italy): you can either upload a SIGNED self-declaration or the degree certificate issued by the relevant University, translated in Italian or English;
- all documents must contain the following information: personal data, name of the University, degree name, final score, transcript (see art. 2 of the call).

4. Research project that the applicant would conduct during the PhD Programme, focusing on one of the research topics of the PhD Programme (max. 1.000 words in English). Such a project will not necessarily be the subject of the successful applicant’s doctoral studies. The research project must be original and innovative and subdivided into: state of the art; description of the project; aims; planning and timing of the project; expected results.
5. A half-page abstract of graduation thesis (in English); for graduands: abstract of the graduation thesis’ draft approved by the Supervisor (in English).
Other documents to be enclosed, if available

- Reference letters (max 2 and in English) (to be sent through the procedure available at the URL http://studenti.unibo.it)
- Publications
- Any other relevant document (scholarships, awards, attendance to courses and Masters, participation to Erasmus or other exchange programmes, etc.)

Agenda

<table>
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<tr>
<th>Description</th>
<th>When</th>
<th>Where</th>
<th>Time</th>
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<tbody>
<tr>
<td>Evaluation of qualifications and research project</td>
<td>02/10/2013</td>
<td>Dipartimento di Ingegneria dell’Energia Elettrica e dell’Informazione «Guglielmo Marconi» - Viale Risorgimento 2 – Bologna</td>
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<tr>
<td>(Applicant presence not requested)</td>
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<td>(Applicant presence according to &quot;Notes on admission&quot;)</td>
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<tr>
<td>Oral examination</td>
<td>15/10/2013</td>
<td>Dipartimento di Ingegneria dell’Energia Elettrica e dell’Informazione «Guglielmo Marconi» - Viale Risorgimento 2 – Bologna</td>
<td>9 a.m.</td>
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Assessment criteria

Total score: 100/100

1. Evaluation of qualifications and research project
   - minimum score required for the admission to the oral examination: 30
   - maximum score: 50
   Score is assigned as follows:
     - evaluation of the final grade (in the case of applicants who have a degree / master’s degree or Master’s course or graduation old system) or evaluation of marks obtained in the course of university studies (in the case of applicants not owing the degree, but will get it by December 2013): maximum score 10
     - graduation thesis: maximum score 10
     - research project: maximum score 15
     - publications: maximum score 10
     - other qualifications: maximum score 5

The results of the evaluation of qualifications and research project will be posted on the bulletin board of the Department and on the site http://studenti.unibo.it, restricted access by University credentials (by selecting: sintesi delle richieste in corso → vedi dettaglio → risultati prova).

2. Oral examination
   - minimum score required in order to be listed in the final ranking: 30
   - maximum score: 50
   The oral examination will focus on the explanation and discussion of the applicant’s research project and will assess the applicant’s aptitude for scientific research, as well as her/his general competences.
   The results of the oral examination will be posted on the bulletin board of the Department and on the site http://studenti.unibo.it (by selecting: sintesi delle richieste in corso → vedi dettaglio → risultati prova2).
   The final ranking with details of winners will be published on the site http://studenti.unibo.it, restricted access by University credentials.
   Any information concerning the publication of the final ranking will be available on www.unibo.it/Dottorati/Bandi29.
   The Admission Board will not send any communication to the applicants about the outcome of the admission procedure. It is the responsibility of the applicants to be informed on the outcome (see art. 6 of the call).

Language requirements

The interview will be held either in English or Italian, depending on the applicant’s choice. If the oral examination is carried out in Italian, the applicant’s knowledge of English will be tested.
For foreign applicants the knowledge of Italian is not mandatory.

Positions and scholarships

Total number of positions: 22, of which:

- 6 positions with scholarship granted by University of Bologna, of which:
  - four scholarships made available with funds fully provided by the University of Bologna
  - one scholarship made available with funds fully provided by the Department of Electrical, Electronic and Information Engineering «Guglielmo Marconi», in memory of Professor Pier Ugo Calzolari
  - one scholarship made available with funds provided in part by the Department of Electrical, Electronic and Information Engineering «Guglielmo Marconi»
- 2 positions with scholarship "Fondo Giovani 2012" granted by MIUR, devoted to:
  - Scope of Investigation 7 “Broadband Innovative Terrestrial and Satellite Communications Systems for Security, Crisis management, and Emergency Applications”
  - Scope of Investigation 9 “ICT and electronic components”
- 1 position: Research Apprenticeship in collaboration with Rete Ferroviaria Italiana, Società del gruppo F. S. Italiane for the implementation of the following research topic: “Evolution of communication and monitoring systems from wired to wireless, with the adoption of heterogeneous advanced technologies, for the management of traffic and safety control systems in railway sites”
- 13 positions without scholarship