





DIREZIONE GESTIONE RISORSE E SERVIZI ISTITUZIONALI SETTORE RICERCA E RELAZIONI INTERNAZIONALI TRASFERIMENTO TECNOLOGICO UFFICIO POST-LAUREAM

# SELECTION CALL FOR ADMISSION TO THE RESEARCH DOCTORATE (Ph.D.) PROGRAMS – XXXIII CYCLE AT THE POLITECNICO DI BARI ACADEMIC YEAR 2017/2018

Rector's Decree n. 346

#### THE RECTOR

- In accordance with the Italian Law dated August 13, 1984, n. 476 concerning University scholarships and Ph.D. programs;
- in accordance with the Italian Law dated February 5, 1992, n. 104, and in particular with art. 20 as amended:
- in accordance with the Italian Law dated December 31, 1996, n. 675 as amended;
- in accordance with the Italian Law dated July 3, 1998, n. 210 as amended by the Italian Law n. 240/2010;
- in accordance with the Italian Ministerial Decree dated April 30, 1999, n. 224;
- in accordance with the Italian Ministerial Decree dated November 3, 1999, n. 509 concerning university teaching autonomy;
- in accordance with the Italian Presidential Decree dated December 28, 2000, n. 445, concerning laws and regulations relating administrative documentation;
- in accordance with the Italian Legislative Decree dated March 7, 2005, n. 82 and later modifications;
- in accordance with the Italian Council of Ministers Presidential Decree dated April 9, 2001, laying down rules for the uniform treatment regarding the right to academic study;
- in accordance with the Italian Legislative Decree dated March 29, 2012, n. 68 and in particular with art. n.18 (8):
- in accordance with the Puglia Regional Law dated December 12, 2012, n. 45 and in particular with art. 11;
- in accordance with the Italian Ministerial Decree dated October 22, 2004, n. 270;
- in accordance with: the Italian Ministerial Decree dated October 23, 2003, n. 198 art. 3 and 6, the Italian Ministerial Decree dated August 9, 2004, n. 263, and the Italian Ministerial Decree dated November 3, 2005, n. 492;
- in accordance with the Italian Ministerial Decree dated June 18, 2008, concerning the increase of Ph.D. scholarships yearly amount;
- in accordance with the Italian Inter-Ministerial Decree dated October 12, 2015: "Definition of apprenticeship standards and general criteria for their implementation";
- in accordance with the Italian Ministerial-Director Decree dated June 05 2017, n. 1377, Call MIUR PON RI FSE-FESR "Research and Innovation 2014-2020" Action I.1 "Industry oriented Innovative

- Ph. D. programs for the Academic year 2017-2018, which aims at promoting and strengthening doctoral studies consistently with the needs of the national industrial system and with the Italian strategy for smart specialization 2014-2020 supported by the European Committee by means of additional doctoral scholarships and their actuation protocol;
- provided that, by such a Decree, the MIUR promotes doctoral programs having a strong industrial interest and involving industries producing goods and services and that each doctoral student possessing one such scholarship has to spend a training period within the involved industry, as well as another period abroad so as to guarantee the industrial and innovative nature of his/her training;
- provided that, since the *Politecnico di Bari* is participating in the aforementioned Call MIUR PON RI FSE-FESR 1377/2017 by proposing specific programs for such additional scholarships, the total number of doctoral scholarships may increase and these further scholarships may be assigned to doctoral students who have obtained a positive evaluation in this selection for admission to the Ph.D. Program, XXXIII cycle, academic year 2017/2018;
- in accordance with the Statute of the *Politecnico di Bari*;
- in accordance with the Italian Ministerial Decree dated February 8, 2013, n. 45 "Regulations on procedures for accreditation of Ph.D. venues and programs and on criteria for the establishment of Ph.D. programs by accredited bodies;"
- in accordance with the Regulation of the *Politecnico di Bari* concerning Ph.D. programs, issued with Rector's Decree n. 286 dated July 1, 2013;
- in accordance with the Italian ministerial note n. 436 dated March 24, 2014, containing the "Guidelines for the accreditation of Ph.D. programs";
- in accordance with the Italian ministerial note, prot. n. 11677, dated April 14, 2017, containing operational indications on accreditation procedures of Ph.D. programs;
- in accordance with the approval by the Board of the Ph.D. School of the proposals concerning the Ph.D. programs of the *Politecnico di Bari* XXXIII cycle, participating in the School, dated May 25, 2017:
- in accordance with the report of the University Evaluation Board dated June 6, 2017;
- in accordance with the resolutions of the Academic Senate dated May 30, 2017;
- in accordance with the resolution of the Administration Council dated May 31, 2017;
- in accordance with the approvals by ANVUR/MIUR;
- in accordance with the agreement protocol between the *Politecnico di Bari* and ASEPA ENERGY which establishes a position for apprenticeship, advanced studies and research, ex art 45 DL 81/2015, within the Ph.D. Program in Electrical and Information Engineering, aimed at developing the following research project: *Analyzing the state of the art of current telecommunications Protocols for IoT systems applied to smart agriculture; defining their uses for practical applications and testing their in-field behavior so as to solve all problems and obtain a stable and robust system; defining new research directions to implement new standards and protocols for the new technologies that will enter the marketplace;*
- in accordance with the Convention with BOSCH CIVIT S.p.A., which committed itself to grant two scholarships to the Ph.D. program in Electrical and Information Engineering, so as to develop the following research themes:
  - Theoretical and experimental study on a mechatronic variable speed drive for HD Fuel-Injection-Common Rail Pump;
  - Development of vehicle architectures and corresponding control strategies for complex powertrain structures focused on the sustainable mobility;
- in accordance with the Convention with BOSCH CIVIT S.p.A., which committed itself to grant one scholarship to the Ph.D. program in Mechanical Engineering and Management, so as to develop the following research theme:
  - Development of calibration strategies for complex powertrain within the scope of sustainable mobility;
- in accordance with the Convention with BOSCH Tecnologie Diesel S.p.A., which committed itself to grant one scholarship to the Ph.D. program in Mechanical Engineering and Management, so as to

develop the following research theme:

- Grinding of not metallic materials (e.g., Plastic, Ceramic, Composite);
- provided the availability of funds for the scholarships partially or entirely funded by the *Politecnico di Bari*;

#### **DECREES**

### ART. 1 Establishment and activation

The *Politecnico di Bari* has opened the XXXIII cycle of the research doctorate (Ph.D.) programs, academic year 2017/2018.

Moreover, the *Politecnico di Bari* has opened a public selection call, based on qualifications and interview, open to both Italian and foreign citizens, for the admission to Ph.D. programs as identified below.

This call identifies, for each Ph.D.:

- the duration and the language of the taught courses;
- the total number of available positions;
- the number of scholarships funded by the *Politecnico di Bari* (Poliba) and by third parties (if any);
- the number of available scholarships for applicants possessing a foreign degree suitable for admission to a Ph.D. program, granted by a foreign university within or outside the European Union;
- the type of degree required for admission;
- the possible specialist *curricula*, if any;
- the compulsory foreign language/s.

#### 1. Ph.D. in MECHANICAL ENGINEERING AND MANAGEMENT.

#### Belonging to the Doctoral School of the *Politecnico di Bari* Offered by the Department of Mechanics, Mathematics and Management Coordinator: Prof. Giuseppe DEMELIO.

- Duration of the courses: three years, starting November 1, 2017;
- language of the taught modules: English;
- total number of available positions: 11
- total number of available scholarships: **9**, including:
  - number of available scholarships awarded by the *Politecnico di Bari*: **7**, one of which being reserved to applicants possessing a foreign degree;
  - number of available scholarships awarded by BOSCH- CIVIT S.p.A., Modugno: **1.** Research theme: Development of calibration strategies for complex powertrain within the scope of sustainable mobility.
  - number of available scholarships awarded by da BOSCH- TECNOLOGIE DIESEL S.p.A Modugno: **1**. Research theme: *Grinding of not metallic materials (e.g., Plastic, Ceramic, Composite).*
- number of positions without scholarship: 2
- type of degree required:
  - Degree diploma awarded by the education system prior to the Italian Ministerial Decree dated November 3, 1999 n. 509: **all types**;
  - Specialist degree awarded in accordance with the Italian Ministerial Decree dated November 3, 1999 n. 509, or Master of Science degree achieved in accordance with Italian Ministerial Decree dated October 22, 2004 n. 270: **all types**;
- compulsory foreign language: English.
- This Ph.D. program is not subdivided into curricula.

#### 2. Ph.D. in ELECTRICAL AND INFORMATION ENGINEERING.

### Belonging to the Doctoral School of the *Politecnico di Bari*

### Offered by the Department of Electrical and Information Engineering

Coordinator: Prof. Vittorio PASSARO

- Duration of the courses: three years, starting November 1, 2017;
- language of the taught modules: English;
- total number of available positions: 12
- total number of available scholarships: **9**, including:
  - number of available scholarships awarded by the *Politecnico di Bari*: **7,** one of which being reserved to applicants possessing a foreign degree;
  - number of available scholarships awarded by BOSCH- CIVIT S.p.A., Modugno: 2. Research themes:
    - Theoretical and experimental study on a mechatronic variable speed drive for HD Fuel-Injection-Common Rail Pump;
    - Development of vehicle architectures and corresponding control strategies for complex powertrain structures focused on the sustainable mobility.
- number of position for apprenticeship, advanced studies and research, ex art 45 DL 81/2015, reserved to a student of age 18-29, offered under contract by Asepa Energy s.r.l. (Employer) Montemesola (TA), having the following research project: Analyzing the state of the art of current telecommunications Protocols for IoT systems applied to smart agriculture; defining their uses for practical applications and testing their in-field behavior so as to solve all problems and obtain a stable and robust system; defining new research directions to implement new standards and protocols for the new technologies that will enter the marketplace, 1.
- number of positions without scholarship: 2
- type of degree required:
  - Degree diploma awarded by the education system prior to the Italian Ministerial Decree dated November 3, 1999 n. 509: **all types**;
  - Specialist degree awarded in accordance with the Italian Ministerial Decree dated November 3, 1999 n. 509, or Master of Science degree achieved in accordance with Italian Ministerial Decree dated October 22, 2004 n. 270: **all types**;
- compulsory foreign language: English. This Ph.D. program is not subdivided into curricula.

### 3. Ph.D. in RISK AND ENVIRONMENTAL, TERRITORIAL AND BUILDING DEVELOPMENT.

### Belonging to the Doctoral School of the *Politecnico di Bari*Offered by the Department of Civil Environmental Land

### Offered by the Department of Civil, Environmental, Land, Building Engineering and Chemistry Coordinator: Prof. Michele MOSSA

- Duration of the courses: three years, starting November 1, 2017;
- language of the taught modules: English;
- total number of available positions: 9
- total number of available scholarships: **7**, including: number of available scholarships awarded by the *Politecnico di Bari*: **7**, one of which being reserved to applicants possessing a foreign degree;
- number of positions without scholarship: 2
- type of degree required:
  - Degree diploma awarded by the education system prior to the Italian Ministerial Decree dated November 3, 1999 n. 509: **all types**;
  - Specialist degree awarded in accordance with the Italian Ministerial Decree dated November 3, 1999 n. 509, or Master of Science degree achieved in accordance with Italian Ministerial Decree dated October 22, 2004 n. 270: **all types**;
- compulsory foreign language: English.
- This Ph.D. program is not subdivided into curricula.

#### 4. Ph.D in Design for heritage: Knowledge and Landscape

#### Belonging to the Doctoral School of the *Politecnico di Bari* Offered by the Department of Civil Engineering- and Architecture-Sciences.

#### Coordinator: Prof. Carlo MOCCIA

- Duration of the courses: three years, starting November 1, 2017;
- language of the taught modules: Italian;
- total number of available positions: 9
- total number of available scholarships: **7**, including: number of available scholarships awarded by the *Politecnico di Bari*: **7**, one of which being reserved to applicants possessing a foreign degree;
- number of positions without scholarship: 2
- type of degree required:

Degree diploma awarded by the education system prior to the Italian Ministerial Decree dated November 3, 1999 n. 509:

#### **Architecture**

#### **Civil Engineering**

#### **Construction Engineering-Architecture**

Specialist degree awarded in accordance with the Italian Ministerial Decree dated November 3, 1999 n. 509, or Master of Science degree achieved in accordance with Italian Ministerial Decree dated October 22, 2004 n. 270:

LM-2 Archeologia

LM-3 Architettura del Paesaggio

LM-4 Architettura e Ingegneria edile-architettura

LM-4 c.u. Architettura e ingegneria edile-architettura (quinquennale)

LM-10 Conservazione dei beni architettonici e ambientali

LM-23 Ingegneria civile

LM-35 Ingegneria per l'Ambiente e il Territorio

LM-48 Pianificazione Territoriale urbanistica e ambientale

2/S (specialistiche in archeologia)

3/S Architettura del Paesaggio

4/S (specialistiche in architettura e ingegneria edile)

10/S (specialistiche in conservazione dei beni architettonici e ambientali)

28/S (specialistiche in ingegneria civile)

38/S (Specialistiche in ingegneria per l'ambiente e il territorio)

54/S (Specialistiche in pianificazione territoriale urbanistica e ambientale)

- compulsory foreign language: English.
- This Ph.D. program is subdivided into the following curricula: (link: http://)
- **Curriculum 1** Historical Heritage;
- <u>Curriculum 2</u> Landscape;
- <u>Curriculum 3</u> Constructions.

There is only one selection, with a single ranking list, as described in detail later.

The number of scholarships may be increased upon funding by public and research institutions and by qualified private bodies, showing their interest after the issue of this admission selection call and before the publication of the ranking list (Rector's Decree of Acts Approval). Without any change in the deadline specified in art. 3 for the application admission and in the number of positions without

scholarships.

Any variation regarding available positions will be published on the Albo Ufficiale on line of the Politecnico di Bari (www.poliba.it, Sezione: Albo on line) being the official notification, as well as on www.poliba.it, path: *Didattica/Offerta formativa/Dottorati di Ricerca*.

The scholarships funded by third parties will be granted to their grantees upon receipt of the funds by the *Politecnico di Bari*.

The grantees of such scholarships may be required to carry out part of their research activity at the site of the funding agency, according to an agreed upon program.

## ART. 2 Requirements for participation

Admission applications can be submitted by Italian and foreign citizens who hold one of the eligible degrees (see ART. 1 above) or an equivalent academic qualification achieved abroad, or will obtain it by October 31, 2017. In the latter case, candidates will be admitted "with reservation" and they will have to produce, upon enrolment, a degree self-certification to enrol, indicating the degree held and the issuing University, under penalty of the loss of the right to admission to the Ph.D. program, in accordance with Italian Presidential Decree n. 445, art. 46, dated December 28, 2000.

The position for apprenticeship, advanced studies and research, offered by the Ph.D. Program in Electrical and Information Engineering is reserved to a student of age 18-29.

Candidates possessing a foreign degree must hold a II level or Master type degree, according to the Bologna process, that enables the holder to enrol into a Ph.D. program in his/her own country and has been granted by an officially recognized University.

If such a degree has been already declared *equivalent*, by an Italian University, the applicant must provide a self-certification indicating the details of the certification document.

In case of a specific qualification issued by a foreign university, which still has not been declared equivalent to the Italian degree, the Evaluation Committee shall decide upon the suitability of the qualification achieved aboard, according to the rules existing in Italy and in the issuing country as well as to the international treaties signed by such countries.

The online application to this call implies the implicit request for verification of the degree. In particular, candidates possessing a degree issued by a non-EU country must provide with the admission application:

- second level degree certificate with final grade, if already held;
- certificate of all exams required to obtain such a degree as well as the first level degree and of the grades obtained in all such exams (of both degrees);
- any other document suitable to prove the required equivalence (e.g., diploma supplement or the like).

All such documents must be translated into Italian or into English.

Except for the degree (which may be obtained no later than October 31, 2017), all titles useful for admission must be held upon applying to the Ph.D. program.

Candidates possessing a foreign degree are admitted with reservation and, if admitted to the program, must provide the value certification of their degree and the transcripts, containing all exams and their grades, legally translated by the embassy/consulate of the country where the degree was obtained. The value certification must also state that the degree held by the candidate allows him/her to enter a Ph.D. level program in his/her country.

All candidates are admitted with reservation until validation of the admission requirements. The *Politecnico di Bari* reserves the right of ascertaining such requirements at any time, also after the start of the courses, according to art. 43 of the T.U. n.445/2000, and, if warranted, may exclude the applicant with written motivation.

# ART. 3 Admission application

The admission application to the above Ph.D. programs is available only online up to the midnight (Italian time) of **September 12, 2017**, on the website www.poliba.it, path: DIDATTICA/PORTALE DEGLI STUDENTI ESSE3.

All communication from the *Politecnico di Bari* regarding this selection, including further communications regarding ranking slides and replacements will be sent to the email indicated by each applicant on his/her online application.

No other application, using different means, will be accepted.

## Notice: the *Politecnico di Bari* is closed from August 7, 2017, to August 19, 2017, but the online application will continue to be active, until the aforementioned deadline.

The applicant is responsible for the correct completion of the registration procedure. No complaint regarding platform procedures will be accepted, so applicants are invited to apply earlier than the deadline date.

In order to access the application procedure it is necessary to have already registered on the ESSE3 platform. Therefore, those applicants who have not yet registered on ESSE3, must select REGISTRAZIONE and insert their personal data. Subsequently, by selecting LOGIN, they must enter their credentials received from the system, access their reserved area and upload the application. It is possible to access the registration procedure in English by clicking on the UK flag on the right hand side of the web page.

Applicants who have already registered on ESSE3 must digit directly the menu item LOGIN, access their reserved area using their own credentials and upload the application. All applicants are invited to update their identifying data at the item **HOME**, in particular their email address to which all information will be sent.

At this point all candidates must choose the item **SEGRETERIA** on the left menu, then TEST DI AMMISSIONE - ISCRIZIONI CONCORSO, and their area of interest.

While filling in their application, candidates must:

- Choose the Ph.D. program which they intend to apply for, and the language (Italian or English) they
  want to use in the exam, indicate any required help for disabled candidates, enter their education
  data and follow all instructions provided by the system.
- Upload all documents and self-certifications, according to the examples provided by the Politecnico di Bari at <u>www.poliba.it</u> Didattica/Offerta formativa/Dottorati di Ricerca, the specific documents required by the Ph.D. program of interest and ID.

All documents must be .pdf files no larger than 5 MB each. Each file must be named according to a code indicating a number and the type of document (e.g., 01.CV, 0.2documento di riconoscimento, etc.), as specified later.

In the online application, applicants with a handicap (according to the Italian laws, n. 104, February, 5, 1992, and n. 17, January 28, 1999) or with specific learning disorders (DSA, according to the Italian law, n. 170, October 8, 2010) must also request any helping tool or any additional time required during the exam.

Applicants who wish to participate in more than one call (Ph.D. course) must apply separately to each of them and provide all documents required by it.

According to the Presidential Decree n. 445, December 28, 2000, and later amendments, Italian and EU citizens may provide a simple statement for the following states and facts certified by public administrations:

- a) Registration to public registers;
- b) Memberships of professional orders;
- c) Degrees held, exams passed;
- d) Any professional title;
- e) Student status.

All applicants must upload together with their application:

1. CV, signed and dated according to the example provided by the Politecnico di Bari available at <a href="https://www.poliba.it">www.poliba.it</a> Didattica/Offerta formativa/Dottorati di Ricerca; File name "01.CV"

2. A signed valid ID (identifying document);

#### File name "02.Documento riconoscimento"

3. a self-certification of any qualification held suitable for his/her evaluation, **dated and signed**, **according to the example provided by the Politecnico di Bari available at <u>www.poliba.it</u>** *Didattica/offerta formativa/Dottorati di Ricerca;* **in accordance with art. 46 (Statements in lieu of certification) and art. 47 (substitutive statements of the affidavit) of Italian Presidential Decree n. 445/2000 (candidates, pursuant to art. 15 of the Italian Law of Stability n. 183/2011, may not submit certificates and affidavits issued by public administrations or by providers of public services relating to the qualifications held to be assessed. The above certificates should be replaced by the statements referred to in art. 46 and art. 47 of Italian Presidential Decree n. 445/2000);** 

File name "0.3Dichiarazione altri titoli"

4. Any publication concerning their activity and indicated in the CV.

File name "11.Pubblicazione 1"

File name "11.Pubblicazione 2"

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#### File name "11.Pubblicazione n"

All of the aforementioned documents must be either in Italian or in English; otherwise, they must be translated into Italian or into English, under the care and responsibility of the applicant.

The online application is correctly completed only when, at the end of the procedure, the applicant will be able to print the .pdf file of his/her application produced by the system.

After confirming his/her data and submitting the application it will no longer be possible to modify it. Each applicant will be allowed to add/eliminate/modify the attached documents, but only before the deadline date. After this, no addition nor modification are allowed.

All applications will be verified by the administrative offices. In case of mistaken or incomplete application, the candidate will be excluded after being notified at his/her email address.

No application being incomplete or lacking the mandatory titles will be accepted.

In case of bulky documents exceeding the allowed MBs or of documents unavailable as .pdf files, applicants may submit them separately (paper or CD), including a list of them, before 2 p.m. of the deadlinedate for presenting the application.

All applicants who submit their application and related documents on paper/CD, must send it in a sealed envelope to the following address: Magnifico Rettore del Politecnico di Bari – Direzione Gestione Risorse e Servizi Istituzionali- Settore Ricerca e Relazioni Internazionali,-Post-Lauream - Ufficio Protocollo – Via Amendola 126/B, 70126 BARI.

On the envelope the name of the candidate must be written together with the following text: "Concorso di ammissione al Corso di Dottorato in (name of the Ph.D. program). Each candidate is responsible for the arrival of the envelope at the Politecnico di Bari before the deadline date.

#### Specific requirements for each Ph.D. program.

Only for candidates to a Ph.D. program in Mechanical Engineering and Management the following documents are also required and must be uploaded together with the application:

- the three-year degree and specialist degree/master of science (or five-year degree) achieved, specifying the degree marks and the list of exams taken in the two courses of study (or in the five-year course of study) and the marks received, using the example provided by the Politecnico di Bari available at <a href="https://www.poliba.it">www.poliba.it</a> Didattica/Offerta formativa/Dottorati di Ricerca; File name "0.4Titoli di laurea"
- the title of the thesis and the name of the supervisor, for the specialist degree/master of science degree (or five-year degree), together with a summary of the thesis (maximum 3000 characters);
   File name "0.5Abstract tesi"

- the proposal of a detailed three-year research project (maximum 6000 characters) indicating the title of the research, the scientific basis of the proposal, the research objectives, the methods to be adopted;

#### File name "0.6Proposta di ricerca"

- no more than two letters of recommendation from professors who have supervised the candidate's university studies. Such letters are not mandatory.

File name "0.7Lettere presentazione 1"

File name "0.7Lettere presentazione 2"

In the preparation of the research proposal, the candidate must refer to the research themes and the scientific projects developed by the research groups belonging to a doctorate, available on <a href="https://www.dmmm.poliba.it/dottorati/course/view.php?id=2#section-1">https://www.dmmm.poliba.it/dottorati/course/view.php?id=2#section-1</a>.

### Only for candidates to the Ph.D. program in Electrical and Information Engineering the following documents are also required:

- the three-year degree and specialist degree/master of science (or five-year degree) achieved, specifying the degree marks and the list of exams taken in the two courses of study (or in the five-year course of study) and the marks received, using the example provided by the Politecnico di Bari available at <a href="https://www.poliba.it">www.poliba.it</a> Didattica/Offerta formativa/Dottorati di Ricerca; File name "0.4Titoli di laurea"
- a summary of the thesis (maximum 1000 characters);

File name "0.5Abstract tesi"

- the thesis of the specialist degree/master of science degree (or five-year degree), or in case such a thesis is not yet completed (see art. 2 above), its draft indicating the title of the thesis and the name of the supervisor.

<u>Please notice:</u> such a draft must contain most of the material to be contained in the final thesis, in terms of chapters and pages, so as to allow the evaluation committee to well judge its content and scientific value. In no case a short abstract will be accepted.

File name "0.6Tesi"

- the proposal of a detailed three-year research project (Ph.D. proposal research) indicating the scientific basis of proposal, the research objectives, the methods to be adopted. In any case, the program will not be subject to assessment by the Evaluation Committee, which will only check that the research programs are relevant to the research areas identified in the proposed doctoral program;

#### File name "0.7Proposta di ricerca"

- no more than two letters of recommendation from professors who have supervised the candidate's university studies. Such letters are not mandatory.

File name "0.8Lettere presentazione 1"

File name "0.8Lettere presentazione 2"

### Only for candidates to the Ph.D. program in Risk, Environmental, Territorial and Building Development the following documents are also required:

- the three-year degree and specialist degree/master of science (or five-year degree) achieved, specifying the degree marks and the list of exams taken in the two courses of study (or in the five-year course of study) and the marks received, using the example provided by the Politecnico di Bari available at <a href="https://www.poliba.it">www.poliba.it</a> Didattica/Offerta formativa/Dottorati di Ricerca; File name "0.4Titoli di laurea"
- the title of the thesis and the name of the supervisor, for the specialist degree/master of science degree (or five-year degree), together with a summary of the thesis (maximum 1000 characters);
   File name "0.5Abstract tesi"
- a report (maximum 2000 characters) which is to summarize a research topic to deal with specifying the objectives and the methods to be adopted; this report will be examined only for the purpose of admission and does not necessarily anticipate the research topic that the Ph.D. student must cover during the training;

#### File name "06Proposta di ricerca"

- no more than two letters of recommendation from professors who have supervised the candidate's university studies. Such letters are not mandatory.

File name "0.7Lettere presentazione 1"

File name "0.7Lettere presentazione 2"

### Only for candidates to the Ph.D. program in Design for heritage: Knowledge and Landscape, the following documents are also required:

- the three-year degree and specialist degree/master of science (or five-year degree) achieved, specifying the degree marks and the list of exams taken in the two courses of study (or in the five-year course of study) and the marks received, using the **example provided by the Politecnico di Bari available at www.poliba.it** Didattica/Offerta formativa/Dottorati di Ricerca;

#### File name "0.4Titoli di laurea"

- the thesis of the specialist degree/master of science degree (or five-year degree), or in case such a thesis is not yet completed (see art.2), its draft, indicating the title of the thesis and the name of the supervisor

**N.B.** As draft it is intended the text written by the person who is about to graduate until the date of the application, and its extent is suitable to represent the entire topic, specifying objectives and methods, to be evaluated by the selection Committee.

#### File name "05.Tesi"

- a motivation letter (maximum 3000 characters) indicating the research interest of the candidate, justifying his/her choice of the specific curriculum and, eventually, the research project proposed for the Ph.D. Program;

#### File name "06.lettera di motivazione"

- no more than two letters of recommendation from professors who have supervised the candidate's university studies. Such letters are not mandatory.

File name "0.7Lettere presentazione 1"

File name "0.7Lettere presentazione 2"

<u>Please notice</u>: Foreign candidates possessing a foreign degree are exempted by the written admission exam provided that he/she attaches at least two recommendation letters by professors who have followed his/her academic career to the application.

#### **ONLINE INTERVIEW**

Only candidates who opt for the online interview in their admission applications can be video called through the Skype contact. In this case the candidate must previously show the coloured identity document whose photocopy was attached to the application.

In the application form, the candidate who opts for the online interview must indicate his/her telephone number and the Skype contact where to be video called for the entire period of the interview.

The choice of the online interview is at the candidate risk. If, for any reason except the direct responsibility of the Politecnico di Bari, the interview cannot take place at the established day and time, or the candidate does not show his ID before the interview, the candidate will be excluded from the admission selection.

This does not hold if a candidate who opted for the online interview in his/her application shows up at the vis a vis *interview*.

### ART. 4 Examinations and dates

The admission examination consists of:

#### Ph.D. program in Mechanical Engineering and Management:

- *An assessment of the qualification* achieved (average mark, final mark, theses, Master, post graduate courses, language certificates, publications, etc.);
- *Interview*, to ensure a proper assessment of the candidates;

#### Ph.D. program in Electrical and Information Engineering:

- *An assessment of the qualification* achieved (average mark, final mark, theses, Master, post graduate courses, language certificates, publications, etc.);
- *Interview*, to ensure a proper assessment of the candidates;

#### Ph.D. program in Risk and Environmental, Territorial and Building Development:

- *An assessment of the qualification* achieved (average mark, final mark, theses, Master, post graduate courses, language certificates, publications, etc.);
- Interview, to ensure a proper assessment of the candidates.

**For such three Ph.D. programs,** each Admission Board will assess the candidates giving each a mark out of 100 (broken down in maximum 40 points for qualifications and maximum 60 points for the interview). Candidates obtaining less than ten points for qualifications are not admitted to the interview.

The evaluation of the assessment of the qualification will be published on the ESSE3 platform, at the private area of each candidate.

#### No communication will be thus sent to the candidates.

At the end of the procedure the Board will provide the general ranking list, based upon the points obtained by each candidate.

A candidate is considered to be suitable if he/she achieves a total score of at least 70 out of 100 points. With the same score, the youngest candidate prevails, except as established by art. 6 below.

The assessment criteria of qualifications will be set out by the Boards.

Concerning the scholarships funded by private bodies aimed at developing the specific research themes indicated in this selection, candidates who are not interested to apply for such positions must indicate it in the online application.

Students applying for the position for apprenticeship, advanced studies and research, offered by the Ph.D. Program in Electrical and Information Engineering, must indicate their choice in the online application. Such an application is binding and forbids applying to other positions within the same Ph. D. Program.

For the **Ph.D. program in Design for heritage: Knowledge and Landscape,** the admission examination consists of:

- *An assessment of the qualifications held* (average mark, final mark, theses, Master, post graduate courses, language certificates, publications, etc.).
- A *written exam*: concerning the themes belonging to the three offered *Curricula*, as described below. Among these, the candidate will select the topic of his/her choice.

Foreign candidates possessing a foreign degree are exempted by the written admission exam provided he/she attaches to the application at least two recommendation letters by professors who have followed his/her academic career. These candidates will be evaluated as prescribed for other candidates applying for the same Ph.D. program. If they fail to provide such recommendation letters in their online application, they must attend the written exam.

#### Curriculum 1 - Historical Heritage.

#### The Heritage of archaeology, architecture and of Italian urban historical landscapes.

Following explicitly Unesco's categories and recommendations, (Cultural Landscapes and Historic Urban Landscapes/HUL) the research activities within this Curriculum focus on Italian cultural landscape (archaeological, architectural, urban and natural), their permanent features and

transformation processes. Such a study aims at addressing the projects of conservation, reuse, restoration and enhancement of the architectural Italian heritage towards a possible reassessment of its various peculiarities.

#### Curriculum 2 - Landscape;

#### The Architecture of town and landscape.

The aim of the research developed within this Curriculum is to examine the architectural design and its main interactions. The studies of land, landscapes and contemporary towns are faced within several research lines that dynamically interact with each other. Such research lines refer to the following themes: relationship between the landscape and human settlements; open and closed spaces within the expanding contemporary town; settling principles for the landscape repairing after catastrophes; the role of the infrastructural and defense interventions in the lie of the landscape.

#### Curriculum 3 - Constructions.

*The structural concept in the architectural design.* 

The research activities within this Curriculum concern the relationship between the architectural design and the structural conception in both new constructions (a) and existing ones (b). The topics of research line (a) are: relationship between the shape and the structure in the architectural design of the XX and XXI centuries; the "invention" of the structural shape in relationship with the building architecture. The topics of research line (b) are: Structural safety evaluation, also with respect to the environmental characteristics and to the seismic action; interventions for adapting, improving and repairing existing buildings by means of innovative materials and seismic protection systems.

- *An interview*, to ensure a proper assessment of the candidates in comparison with each other as well as to verify the applicant's aptitude towards research, his research interests as well as his interest in pursuing a research experience abroad.

**For this Ph.D. program only** each Selection Committee will assess the candidates giving each a mark out of 90 (broken down in maximum 30 points for the assessed qualifications, maximum 30 points for the written exam or for the two recommendation letters for the foreign candidates possessing a foreign degree and maximum 30 points for the interview—a minimum of 18 points being the passing mark for each). The results of the assessment qualification and of the written exam will be published on the ESSE3 platform, at the private area of each candidate. No communication will be thus sent to the candidates.

At the end of the procedure, the Selection Committee will proceed with an overall assessment and publish the results.

With the same score, except for what indicated at the following Art. 6, the younger candidate The assessment criteria of qualifications will be decided by each Selection Committee.

#### For all of the Ph.D. programs:

- the examinations aim at ascertaining the candidate's knowledge of the themes specific to each Ph.D. program as well as his/her aptitude for the research in its scientific and technology areas;
- the candidate must also show a good knowledge at least of English; this can be demonstrated either by possession of an official B2-level certificate, according to the Common European Framework for the Knowledge of Languages, or within the interview;
- foreign candidates must show a B1-level knowledge of Italian; this can be demonstrated either by possession of an official B1-level certificate, according to the Common European Framework for the Knowledge of Languages, or within the interview;
- exams can be taken either in Italian or in English for those candidates who have requested so in the online registration;
- the examinations will be held as follows:

Ph.D. PROGRAM	DATE	VENUE
MECHANICAL ENGINEERING AND MANAGEMENT	Interview: starting from 9.00 a.m., September 21,2017(*) (*) In case of a large number of candidates, interviews will follow the day after at 9.00 a.m.	Room Sezione di Macchine ed Energetica, Department of Mechanics, Mathemetics and Management (main library building, third floor), via E. Orabona, 4, 70125 Bari (University Campus "E. Quagliariello")
ELECTRICAL AND INFORMATION ENGINEERING	Interview: starting from 9.00 a.m., September 20, 2017	Room 2, <b>Department of Electrical and Information Engineering</b> , via E. Orabona, 4, 70125 Bari (University Campus "E. Quagliariello")
RISK AND ENVIRONMENTAL, TERRITORIAL AND BUILDING DEVELOPMENT	Interview: starting from 9.00 a.m., September 19, 2017	Exam room, Water-Engineering building of the <b>Department of Civil, Environmental, Land, Construction Engineering, and Chemistry.</b> (DICATECh) via E. Orabona, 4 – 70125 Bari, (University Campus "E. Quagliariello")
	Written exam: starting from 9.00 a.m., September 22, 2017	Rooms "D" and "E", first floor of the Architecture building, the <b>Department of Civil Engineering-and Architecture-Sciences,</b> via E. Orabona, 4 – 70125 Bari, (University Campus "E. Quagliariello")
DESIGN FOR HERITAGE: KNOWLEDGE AND LANDSCAPE	Interview: starting from 9.00 a.m., September 26, 2017 (*) (*) In case of an exceptional number of candidates, interviews will follow the day after at 9.00 a.m.	Room "Giovannoni", third floor of the Architecture building, the <b>Department of Civil Engineering- and Architecture-Sciences,</b> via E. Orabona, 4 – 70125 Bari, (University Campus "E. Quagliariello")

#### Thus, no further notice relating to the examinations will be sent to candidates.

Any changes concerning the venue, day and time of the above mentioned examinations will be published in the Albo Ufficiale online of the Politecnico di Bari, being the official notification, as well as on the website of the Politecnico di Bari, www.poliba.it, path: *Didattica/Offerta formativa/Dottorati di Ricerca*.

To take the examination, candidates must show the ID uploaded with the online application. Failure to attend the examinations will be considered as withdrawal of the application.

# ART. 5 Evaluation committees and their obligations

The Rector appoints the Evaluation Committees by Rector's decree within 10 days after the applications submission deadline. Each Committee is composed of:

- a) the Coordinator or, if unavailable, a member of the Board, designated by the Coordinator.
- b) two or four members of the Board appointed by the Board itself (at least half of them professors or associate professors) belonging to different SSDs (research areas), also different from the SSD of the member indicated at point a).

The Board may indicate, in addition to the abovementioned members, at most two Italian or foreign experts, selected within public and private research institutions. In particular, in accordance with the art  $45\,$  DL 81/2015, and only for applicants to the position for apprenticeship, advanced

studies and research, within the Ph.D. Program in Electrical and Information Engineering, the Committee may include a referee of the employing company.

At the end of the selection, each Evaluation Committee will draw the ranking list on the basis of the total score obtained by each candidate.

### ART. 6 Rankings and admission to Ph.D. programs

The Rector issues a decree stating the regularity of acts and indicates the names of the accepted candidates by approving the general ranking list (Decreto di approvazione atti) for admission to the Research Doctorate (Ph.D.) Programs – XXXIII Cycle, Academic Year 2017/2018

Candidates are admitted to the courses following the order of the ranking list until completion of the available positions for each program.

The scholarships reserved to applicants with a foreign degree, if available, will be assigned to candidates with a foreign degree following the order of the ranking list. In the absence of eligible candidates, such scholarships will be added to the other ones for each corresponding Ph.D. Program.

The position of Doctorate in Apprenticeship of Higher Education and Research will be awarded, according to the ranking of merit, exclusively among candidates who have opted for that position at the online application stage and who at the end of the competition have obtained the eligibility admission. The recipient appointed for the Ph.D. in Apprenticeship (Ph.D. student) will have to enroll in the Ph.D. Program with High Apprenticeship Course as a non-scholarship, and being subjected to the University rules for non-scholarly Ph.D. students. The recipient of the aforementioned Ph.D. position in Apprenticeship is governed by the terms of the Memorandum of Understanding between Politecnico di Bari and the Employer, attached to this call.

Scholarships funded by the Politecnico di Bari or other public or private institutions will be assigned to the eligible candidates, as decided by the Board of Professors of each Ph.D. program according to the assessment of the interview and of the CV of the candidates.

In order to assign the scholarships funded by other public or private institutions, to applicants who have not renounced to such scholarships in their online application, the Board of Professors of the corresponding Ph.D. Program may also include a consulting referee appointed by the funding institution.

Between candidates having the same score, a place with scholarship is assigned upon assessment of the economic situation, in accordance with Italian Council of Ministers Presidential Decree dated April 9, 2001.

Between candidates having the same score, a place with scholarship is assigned to the younger candidate.

The general ranking list of the accepted candidates (Decreto di Approvazione Atti) will be published online on the Albo Ufficiale of the Politecnico di Bari, being the official notification, as well as on the website of the Politecnico di Bari, www.poliba.it, path: Didattica/offerta formative/ Dottorati di Ricerca.

#### Therefore, accepted candidates will NOT receive any notice.

- provided that, since the *Politecnico di Bari* is participating to the aforementioned Call MIUR PON RI FSE-FESR 1377/2017 by proposing specific programs for such additional scholarships, the total number of doctoral scholarships may increase, for each doctoral program these additional scholarships will be assigned to doctoral students who have obtained a positive evaluation, according to the ranking list.

#### ART. 7 Enrollment

Within five days following the publication of the ranking list, candidates admitted to Ph.D. programs

must enrol online on the ESSE3 platform, using the same credentials already used for the admission selection.

Terms and regulations for enrolment will be published on the Albo Ufficiale of the *Politecnico di Bari*, being the official notification, as well as on the website of the Politecnico di Bari, www.poliba.it, path: Didattica/Dottorati di Ricerca within the date of the aforementioned publication.

If an admitted candidate refuses admission or loses his/her right to admission before the beginning of the program, he/she will be replaced according to the ranking list. If a candidate is admitted to more than one program, he/she must opt for one of them. Candidates may be replaced within two months from the beginning of the program.

Completion of the enrollment will be made after receipt in due time of the fees and contributions, as specified in the ART. 11 below, by means of the MAV available on the personal area of the ESSE3 platform, after pre-enrolment. Each pre-enrolled student may consult and print such a MAV by clicking SEGRETERIA/PAGAMENTI.

The back-office will check the submitted documentation.

### ART. 8 Final exam and achievement of qualification

Ph.D. students enrolled in a Ph.D. program will obtain the Ph.D. title after passing the final exam according to the rules laid down in the Regulations of the Ph.D. Programs of *Politecnico di Bari*, issued with Rector's Decree n. 286 dated July 1, 2013.

## ART. 9 Duties and rights of the Ph.D. students

Admission to the Ph.D. program requires an exclusive and full-time commitment, unless differently stated, according to art. 10 of the Regulations of the Ph.D. Programs of Politecnico di Bari, issued with Rector's Decree n. 286 dated 01/07/2013.

Ph.D. students, being an integral part of the training project, subject to the approval of the Board and without any increase of the scholarship, can carry out tutoring activities for students in a threeyear degree course or in a master's degree, as well as properly documented. supplementary teaching activities, within a maximum of forty hours in each academic year. After the third year of the program, the limit is repealed.

The scholarship is subject to the payment of separate management social security contributions (GESTIONE SEPARATA INPS) referred to in art. 2 (26), of the Italian Law dated August 8, 1995, n. 335, as amended, to the extent of two-thirds paid by the administration and one-third by the student. Students enjoy the related protections and rights. The Ph.D. students with scholarship have to open such GESTIONE SEPARATA INPS position.

Public employees admitted to the programs enjoy, for the duration of the course, the extended leave provided for by collective bargaining or, for employees under public law, a special leave for study purposes, subject to the needs of the administration, in accordance with art. 2 of the Italian Law n. 476, dated August 13, 1984, as amended, with or without pay, explicitly refusal, only if enrolled in a program for the first time, regardless of the research area.

Provisions of Italian Legislative Decree dated March 29, 2012, n. 68 are extended to Ph.D. students.

Suspension of attendance and scholarship is allowed to Ph.D. students, in the case of maternity leave, documented serious illness or in other cases provided for by applicable law. In particular, the Ph.D. students can benefit from the provisions regarding maternity leave pursuant to Italian Decree of the Minister of Labour and Social Welfare, dated July 12, 2007, published in the Official Journal n. 247 of October 23, 2007. In case of suspension for more than thirty days, the scholarship will not be granted for an equal period.

Ph.D. Students cannot be enrolled in any other Ph. D. program unless within a Joint program, nor in any other Degree course.

### ART. 10 Scholarships

Scholarships are annual and are renewed provided that the student has completed the program of activities for the previous year, verified in accordance with the procedures laid down in the Regulation, and will be granted after passing the verification.

The amount of the scholarships, paid in monthly instalments, is initially determined no less than that prescribed by Italian Decree of the Minister dated 18/06/2008, published in the Official Journal n. 241 of 14/10/2008, namely,  $\in 13.638,47$ , including the social security fees due by the percipient. This amount is increased by a maximum of 50 percent for no longer than 18 months, if the student is authorized by the Board to carry out research abroad.

Starting from the second year, within existing financial resources in the budget of the Politecnico di Bari, each Ph.D. student, with or without scholarship, is provided with a fund for research activities in Italy and abroad appropriate to the type of program and no less than  $10\,\%$  of the scholarship. If a student loses or renounces the scholarship, the unused amount remains available to the institution, for the purposes mentioned above.

The same rules—stated for maintaining the scholarships in the program years subsequent to the first—will be applied to the apprenticeship contracts and other forms of financial support referred to in art. 8, par. 3, of the Regulations of the Ph.D. Programs of the Politecnico di Bari, issued with Rector's Decree n. 286 dated July 01, 2013.

The rules above do not apply to foreign Ph.D. students or grantees of financial support within specific mobility programs provided with their own regulations.

Scholarships are awarded after a comparative evaluation of merit and according to the order defined in the ranking lists. With a same score, the assessment of the economic situation prevails, in accordance with Italian Council of Ministers Presidential Decree dated 09/04/2001, published in the Official Journal of the Italian Republic n. 172, July 26, 2001.

Ph.D. scholarships cannot be summed to any other scholarship (including research grants) except those granted by Italian or foreign institutions to support the Ph.D. students abroad (except the scholarships ruled by the Italian law n. 398/89)

The annual personal income considered by the Politecnico di Bari as compatible with a scholarship is  $\in$  12,000, including real-estate and financial income as well as any other source of recurring income, with the exception of occasional work.

Ph.D. students awarded with scholarships financed by external public or private bodies must obey the rules laid down by the relevant Conventions between such bodies and the Politecnico di Bari

### ART. 11 Fees and contributions for admission and attendance to Ph.D. programs

Fees and contributions obey the "Regolamento delle Tasse e contribuzioni studentesche, a.a. 2017/2018", see www.poliba.it/Ateneo, sezione Didattica > Didattica e Studenti > Servizi di Segreteria. Ph.D. students awarded with a scholarship are exempted from paying fees and contributions for admission and attendance of Ph.D. programs.

According to law n. 232/2016 comma 262, also Ph.D. students without scholarship, including those who have refused the scholarship, are exempted from paying fees and contributions for admission and attendance of Ph.D. programs.

However, all Ph.D. students are required to pay the regional fees for the right to study to *ADISU/Politecnico*. The Italian Legislative Decree n. 68 dated 29/03/2012, in particular art. 18, obliges the Regions to establish the level of the fees for the right to study to  $\leq$  120, 140 and 160, depending on the income-level of the student.

The Regione Puglia, with art. 11 of Regional Law n. 45 dated December 28, 2012, established that starting from the academic year 2013/2014 there will be 3 levels of fees. The amount of the lowest level is  $\in$  120 and applies to those who have an income not higher than the minimum level of the equivalent economic indicator (EEI) corresponding to the eligibility requirements for access to essential levels of performance (LEP) of the right to study. The other bands are  $\in$  140 and  $\in$  160 for those whose EEI are above the minimum level and twice the minimum level, respectively. The EEI benchmark is set at  $\in$  23.000.

#### ART. 12 Privacy Policy

According to the Italian Law n. 675/96, the confidential nature of the information provided by each candidate will be respected. All data provided will be used only for purposes connected with the selection call and, concerning the candidates admitted to the program, for the purposes related to the activities of The Ph. D. program, in compliance with current regulations.

However, Applicants, by participating to the call, permit that their personal data as well as those concerning their exams be published on the URL of the *Politecnico di Bari*, as allowed by the aforementioned Law.

According to the Italian Law dated August 7, 1990, n. 241 and to the Presidential Decree dated April 12 2006, n. 184, and later amendments, anybody having a legal interest can have access to the selection documentation, according to the procedures indicated by current legal rules. Accordingly, any documentation provided by any applicant will be made available to the other ones.

#### ART. 13 Administrative referee

The administrative referee for this selection is Dr. Anna Benegiamo of the "Research and International Relationships of the Politecnico di Bari – Post Lauream Office" (anna.benegiamo@poliba.it – tel. +390805962201) Bari, Via Amendola 126/B - second floor.

Other contact persons are Dr. Marco Paternoster, at the same Office, (marco.paternoster@poliba.it - tel. +390805962507) and Dr. Nicola Linsalata (nicola.linsalata @poliba.it - tel +390805963767).

#### ART. 14 Reference rules

For anything not expressly set out by this notice, reference is made to the rules contained in the Regulations of the Ph.D. Programs of Politecnico di Bari, issued with Rector's Decree n. 286 dated 01/07/2013.

This selection-call will be sent to the Ministry of Education, University and Research and will be published in the Official Journal of the Italian Republic and on the website of the Politecnico di Bari www.poliba.it (Albo Ufficiale on line of the Politecnico di Bari as well as website, path: *Didattica /Offerta formativa/Dottorati di ricerca*).

Bari, July 27, 2017

THE RECTOR

Prof. Ing. Eugenio Di Sciascio