



Politecnico di Bari

CALL FOR APPLICATIONS FOR ADMISSION TO RESEARCH DOCTORATE (Ph.D.) PROGRAMS – XXXVI CYCLE AT POLITECNICO DI BARI ACADEMIC YEAR 2020/2021

Rector Decree n. 371

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 40 dated January 25, 2018, that has modified the Italian Ministerial Decree dated June 18, 2008, concerning the increase of Ph.D. scholarships yearly amount from January 1, 2018, whose new amount is 15.343,28 € instead of previous 13.638,47 € (gross amount including the social security contributions to be paid by the recipient);
- in accordance with Rectoral decree n. 301 dated 10.05.2020 about "Provisions relating to the containment and management of the epidemiological emergency from COVID-19 Phase 2. Provisions for the activities of students, Ph.D. students, postdoctoral fellows, scholarship holders and similar";
- in accordance with Call MIUR PON RI FSE-FESR "Research and Innovation 2014-2020" Action I.1 "Industry oriented Innovative

Ph. D. programs for the Academic year 2018-2019, 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;

- since Politecnico *di Bari* applied for the aforementioned Call MIUR PON RI 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, XXXVI cycle, academic year 2020/2021;
- provided that the Ministry with Directorial Decree n. 2594 of 23 December 2019 intends to allocate in the Notice for the aforementioned additional scholarships, in addition to the resources dedicated to this measure, also additional resources dedicated to the funding of research grants focused on the theme: "Areas of innovation and consolidation of the National Strategy for internal Areas: from essential services (school, health and mobility) and from local development projects to Strategies for marginalized areas ", in line with the National Strategy for Internal Areas;
- in accordance with INPS notice, which ca be found on the INPS website at the following link https://www.inps.it/NuovoportaleINPS/default.aspx?itemdir=52848&lang=IT,concerning "Research and selection of research doctorates in the field of: Industry 4.0, sustainable development, welfare and well-being, statistical and actuarial sciences "for the provision of 100 scholarships, A.A. 2019/2020, in favor of the children and orphans of retired users of the Public Employee Management or members of the Unitary Management of credit and social benefits;
- provided that Ph.D. proposal "Design For Heritage: Knowledge and Landscape" of Politecnico di Bari was funded by INPS, with reference to Academic Year 2020/2021;
- in accordance with Announcement of Regione Puglia n. 2/FSE/2020 about funding of "Ph.D. programs in Regione Puglia XXXVI cycle";
- in accordance with the Statute of 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;"
- having regard to Code of Ethics and Behaviour of Politecnico di Bari approved with D.R. 582 of 28 September 2018;
- in accordance with the Regulation of 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 resolution of the Academic Senate dated 19/05/2020 and the resolution of the Board of Directors dated 20/05/2020 about "Ph.D. programs of Politecnico di Bari – XXXVI cycle";
- in accordance with Framework and implementation Agreements between Politecnico di Bari and Università degli studi di Bari Aldo Moro signed on 02/12/2019 about the activation of 4 joint Ph.D. programs – XXXVI cycles and furthers two cycles, two of which will be managed by Politecnico di Bari, that are:
- Inter-university Ph.D. program in "*Engineering and Aerospace Sciences*" XXXVI cycle Coordinated by Prof. Marco Donato De Tullio offered by the Department DMMM Administrative management at Politecnico di Bari;
- Inter-university Ph.D. program in "*Industry 4.0.*" XXXVI cycle Coordinated by Prof. Mariagrazia Dotoli offered by Department DEI Administrative management at Politecnico di Bari;
- having regard to the Agreement with NIR srl, by which it undertakes to fund n. 2 scholarships referring to Ph.D. program in Electrical and Information Engineering;
- having regard to the Agreement with ISIRES Istituto Italiano Ricerca e Sviluppo Organismo di Ricerca S.r.l., by which it undertakes to fund n. 3 scholarships referring to the Ph.D. program in Electrical and Information Engineering;
- having regard to the Agreement with ISOTTA FRASCHINI MOTORI S.p.A, by which it undertakes to fund n. 1 scholarship referring to the Ph.D. program in Mechanical Engineering And Management, n. 1 scholarship referring to the Ph.D. program in Electrical and Information Engineering; n. 1 scholarship referring to the Ph.D. program in Industry 4.0;

- having regard to the project entitled "*Real-time control of 5G wireless networks*", Coordinator Prof. G. Piro funded by PRIN 2017 Call;
- in accordance with Law n. 232 dated 11/12/2016, art. 1 par. 262 about University fees not to be paid by Ph.D. students without scholarships;
- in accordance with Law n. 232, art. 1, par. 328 and 331 about Excellence Departments;
- provided the availability of funds for the scholarships partially or entirely funded by Politecnico *di Bari*;
- provided that the Regulation of fees and taxes of Academic Year 2020/2021 still has to be approved;
- provided that all Ph.D. programs of Politecnico di Bari still have to be approved by ANVUR/MIUR and they are subject to positive response;

HEREBY DECREES

ART. 1

Activation

Politecnico di Bari has activated the XXXVI cycle of the Research Doctorate (Ph.D.) programs, academic year 2020/2021.

Moreover, Politecnico di Bari has opened this Call for applications, based on qualifications and oral examination, open to both Italian and foreign citizens, for the admission to Ph.D. programs as listed below.

This call identifies, for each Ph.D. program:

- the duration and the teaching language;
- the total number of available positions;
- the number of scholarships funded by Politecnico di Bari (Poliba) and by third parties (if any);

Ph.D. in MECHANICAL ENGINEERING AND MANAGEMENT Belonging to the Doctoral School of Politecnico *di Bari* Offered by the Department of Mechanics, Mathematics and Management. Coordinator: Prof. Giuseppe Pompeo DEMELIO

DURATION	START DATE	TEACHING LANGUAGE	TOTAL NUMBER OF AVAILABLE POSITIONS: 13			TYPE OF DEGREE REQUIRED	COMPULSORY FOREIGN LANGUAGE
			D	IVIDED INTO:		-	
3 years	1/11/2020	English	8 number of available scholarships awarded by Politecnico <i>di</i> <i>Bari</i> (3 of which awarded by MIUR "Departments of Excellence" funding 1 scholarship awarded by external entity ⁽¹⁾	1 number of available scholarship awarded by Politecnico <i>di Bari</i> reserved to applicants with foreign degree	3 number of positions without scholarship	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	English

	Decree dated October 22, 2004 n. 270: all types Degree diploma awarded by the education system prior to the Italian Ministerial Decree dated November
	dated

⁽¹⁾ <u>1 available scholarship awarded by ISOTTA FRASCHINI MOTORI S.p.A about the following research theme:</u>

• Strategies and methods for predictive maintenance and remote monitoring of energy generation systems

Ph.D. in ELECTRICAL AND INFORMATION ENGINEERING. Belonging to the Doctoral School of Politecnico <i>di Bari</i> Offered by the Department of Electrical and Information Engineering Coordinator: Prof. Alfredo GRIECO <u>This Ph.D. program is not divided into curricula.</u>							
DURATION	START DATE	TEACHING ACTIVITIES	TOTAL NUMBER OF AVAILABLE POSITIONS: 16	TYPE OF DEGREE REQUIRED	COMPULSORY FOREIGN LANGUAGE		
			DIVIDED INTO:				
3 years	1/11/2020	English	5 number of available scholarships awarded by Politecnico <i>di Bari</i> 1 number of available scholarships awarded by Politecnico <i>di Bari</i> reserved to applicants with foreign degree	Italian Ministerial Decree dated November 3, 1999 n.	English		
			number of available scholarships funded by PRIN 2017 Call ⁽¹⁾	Degree diploma awarded by the education system prior to the Italian Ministerial Decree dated November 3, 1999 n. 509:			

	all types;	
6		
number of		
available		
scholarships		
awarded by		
external entities ⁽²⁾		
3		
number of		
positions without		
scholarship		

⁽¹⁾ Project entitled "*Real-time control of 5G wireless networks*", Coordinator: Prof. G. Piro funded by PRIN2017 Call;

⁽²⁾ 6 available scholarships awarded by external entities. In details:

• 2 scholarship funded by NIR srl on the following topic:

Research activity for the development of innovative components, intelligent electricity distribution and management systems

- 3 scholarships funded by ISIRES Istituto Italiano Ricerca e Sviluppo Organismo di Ricerca S.r.l. on the following topics:
 - IoT Technologies for Secure Transport Management Systems;
 - Microservices Architecture for Transport Management Systems;
 - Control Systems and optimization methodologies for Transport Management Systems
- **1 scholarship funded by ISOTTA FRASCHINI MOTORI S.p.**<u>A</u>**on the following topics**: - Hybrid-electric propulsion systems for naval applications

Ph.D. in RISK AND ENVIRONMENTAL, TERRITORIAL AND BUILDING DEVELOPMENT. Belonging to the Doctoral School of Politecnico di Bari

Offered by the Department of Civil, Environmental, Land, Building Engineering and Chemistry Coordinator: Prof. Vito IACOBELLIS

DURATION	START DATE	TEACHING LANGUAGE	TOTAL NUMBER OF AVAILABLE POSITIONS: 8 DIVIDED INTO:	TYPE OF DEGREE REQUIRED	COMPULSORY FOREIGN LANGUAGE
3 years	1/11/2020	English	5 number of available scholarships awarded by Politecnico di Bari 1 number of available scholarships awarded by Politecnico di Bari reserved by Politecnico di Bari reserved to applicants with foreign degree 2 positions without scholarship 1	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 ; Degree diploma awarded by the education system prior to the Italian Ministerial Decree dated November 3, 1999 n. 509: all types ;	English

Ph.D. IN " DESIGN FOR HERITAGE: KNOWLEDGE AND LANDSCAPE" Belonging to the Doctoral School of Politecnico *di Bari* Offered by the Department of Civil Engineering- and Architecture-Sciences. Coordinator: Prof. Carlo MOCCIA

<u>This Ph.D. program is divided into the following curricula:</u> <u>Curriculum 1 – Historical Heritage:</u> <u>Curriculum 2 – Landscape</u> <u>Curriculum 3 – Constructions</u>

DURATION	START DATE	TEACHING LANGUAGE	TOTAL NUMBER OF AVAILABLE POSITIONS: 9 DIVIDED INTO:	TYPE OF DEGREE REQUIRED	COMPULSORY FOREIGN LANGUAGE
3 years	1/11/2020	English	5 number of available scholarships awarded by Politecnico di Bari 1 number of available scholarships awarded by Politecnico di Bari reserved to applicants with foreign degree 2 positions without scholarship 1 scholarship funded by INPS reserved for children and orphans of INPS-Management Public Employees and "Unitary management of credit and social benefits"	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 (quinquennale) LM-10 Conservazione dei beni architettonici e	English

LM-23 Ingegne	ria civile
LM-24 Ingegeg Sistemi Edilizi	neria dei
LM-35 Ingegn l'Ambiente Territorio	eria per e il
LM-48 Piant Territoriale ur e ambientale	ficazione banistica
2/S (specialis archeologia)	tiche in
3/S (specialis Architettura Paesaggio)	tiche in del
4/S (specialis architettura ingegneria edil	e
10/S (speciali conservazione architettonici ambientali)	
28/S (speciali ingegneria civi	
38/S (Speciali ingegneria l'ambiente territorio)	stiche in per e il
54/S (Speciali pianificazione territoriale ur e ambientale)	

Interuniversity Ph.D. program between Politecnico di Bari and Università degli studi di Bari Aldo Moro in "ENGINEERING AND AEROSPACE SCIENCES" Belonging to the Doctoral School of Politecnico *di Bari* Offered by the Department of Mechanics, Mathematics and Management. Coordinator: Prof. Marco Donato DE TULLIO

DURATION	START	TEACHING	IG TOTAL NUMBER OF AVAILABLE TYPE OF COMPULSORY						
Dominion	DATE	LANGUAGE	POSITIONS:			DEGREE	FOREIGN		
			8			REQUIRED	LANGUAGE		
				DIVIDED INTO:					
						Specialist			
			3	3	2	degree			
			number of number of number of		awarded in				
			available available positions		accordance				
3 years	1/11/2020	English	scholarships	scholarships	without	with the	English		

1.1.1	1 1 1 1	1 1 1.	T. 1.	1
awarded by		scholarship	Italian	
Università	Politecnico		Ministerial	
degli studi			Decree	
di Bari Aldo	which		dated	
Moro	reserved to		November	
	applicants		3, 1999 n.	
	with		509, or	
	foreign		Master of	
	degree)		Science	
			degree	
			achieved	
			in	
			accordance	
			with	
			Italian	
			Ministerial	
			Decree	
			dated	
			October	
			22, 2004 n.	
			270: all	
			types	
			Degree	
			diploma	
			awarded	
			by the	
			education	
			system	
			prior to	
			the Italian	
			Ministerial	
			Decree	
			dated	
			November	
			3, 1999 n.	
			509: all	
			types	

Interuniversity Ph.D. program between Politecnico di Bari and Università degli studi di Bari Aldo
Moro in "INDUSTRY 4.0"
Belonging to the Doctoral School of Politecnico di Bari
Offered by the Department of Electrical and Information Engineering.
Coordinator: Prof. Mariagrazia DOTOLI

DURATION	START DATE	TEACHING LANGUAGE	TOTAL NUMBER OF AVAILABLE POSITIONS: 9	TYPE OF DEGREE REQUIRED	COMPULSORY FOREIGN LANGUAGE
			DIVIDED INTO:		
			3 number of available	Specialist degree awarded in accordance with the Italian Ministerial Decree dated	

3 years	1/11/2020	English	scholarships awarded by Politecnico <i>di</i> <i>Bari</i> (1 of which reserved to applicants with foreign degree) 3 number of available scholarships awarded by the Università degli studi di Bari Aldo Moro	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 ;	English
			2numberofpositionswithoutscholarshipvithout11numberofavailablescholarshipsawardedbyexternalentities(1)vithout	Degree diploma awarded by the education system prior to the Italian Ministerial Decree dated November 3, 1999 n. 509: all types;	

(1) **1** scholarship funded by ISOTTA FRASCHINI MOTORI S.p.<u>A</u> on the following topic:

Intelligent systems of power management.

There is only one selection, with a single ranking list, as described in details 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 modification regarding available positions will be published on the Albo Ufficiale on line of Politecnico di Bari (www.poliba.it, Sezione: Albo on line) being the official notification, as well as on www.poliba.it, path: *Ricerca/Dottorato di Ricerca*.

The scholarships funded by third parties will be granted to their grantees upon receipt of the funds by 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 and recognized by Politecnico di Bari according to Law n. 148/2002 or will obtain it within October 31, 2020. In the latter case, candidates will be admitted "under condition" 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.

With reference only to candidates who are about to graduate at Politecnico di Bari, it will be possible to submit the application for admission to the competition for a Ph.D. program only after having electronically applied for the achievement of the second level qualification, following rules and timelines issued by "Centro Servizi per la Didattica" administrative offices.

Candidates possessing a foreign degree must hold an 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 awarded;
- certificate of all exams together with grades required to award both first and second level degree;
- any other document suitable to prove the required equivalence (e.g., diploma supplement or Declaration of Value issued by Italian diplomatic representation located in country of graduation).
 All such documents must be translated into Italian or into English.

Except for the degree (which may be obtained no later than October 31, 2020), all titles useful for admission must be held before the application deadline to this Ph.D. Selection call.

Candidates possessing a foreign degree are admitted "under condition" 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 programme in his/her country.

All candidates are admitted "under condition" until validation of the admission requirements. 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. programmes is available only online from 00:01 of 25/06/2020 until 23:59 (Italian time) of **September 6, 2020**, on the website poliba.esse3.cineca.it. ESSE3 portal.

All communication from 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.

The applicant is responsible for the correct completion of the registration procedure.

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 right 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 Politecnico di Bari at <u>www.poliba.it – path:</u> *Ricerca/Dottorati di Ricerca*, the specific documents required by the Ph.D. program choosen and ID. It is compulsory to upload an ID currently valid or with validity extended until 31.08.2020 according to Decree-Law n. 18 dated 17.03.2020.

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 candidates 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.
- **1.** CV, signed and dated according to the example provided by Politecnico di Bari available at <u>www.poliba.it</u> *Ricerca/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 Politecnico di Bari available at <u>www.poliba.it</u>** *Ricerca/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" etc...

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 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 Politecnico di Bari available at** <u>www.poliba.it</u>. path: *Ricerca/Dottorati di Ricerca;*
- *File name "0.4Titoli di laurea":* Candidates with a non-EU degree must indicate, for the course or degree courses or masters held, the duration and the minimum and maximum scores set by the relevant regulations.
- 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 <u>https://www.dmmm.poliba.it/dottorati/course/view.php?id=2#section-1</u>.

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 Politecnico di Bari available at** <u>www.poliba.it.</u> path: *Ricerca/ 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 Politecnico di Bari available at www.poliba.it, path: *Ricerca/ 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 Politecnico di Bari available at <u>www.poliba.it , path:</u> *Ricerca/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"

- Project proposal that will be evaluated together with titles during selection interview.

- possible expression of interest to run for scholarship funded by INPS reserved for children and orphans of INPS-Management Public Employees and "Unitary management of credit and social benefits". In this case, it has to be filled in Politecnico's form.

Only for candidates to the Ph.D. program in "ENGINEERING AND AEROSPACE SCIENCES", 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 both courses of study (or in the five-year course of study) and the marks received, using the example provided by Politecnico di Bari available at <u>www.poliba.it, path:</u> *Ricerca/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"*
- 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. In any case, thesis abstract subject to a specific upload will be considered a thesis draft carried out up to the date of submission of the application.

File name "06.Tesi"

- 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".

- Optional two letters of introduction of professors who have followed his/her academic career to the application.

File name "0.8 Lettere presentazione 1"

File name "0.8 Lettere presentazione 2"

Only for candidates to the Ph.D. program in "INDUSTRY 4.0.", 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 both courses of study (or in the five-year course of study) and the marks received, using the example provided by Politecnico di Bari available at www.poliba.it, path: *Ricerca/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"*
- 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. In any case, thesis abstract subject to a specific upload will be considered a thesis draft carried out up to the date of submission of the application.

File name "06.Tesi"

- 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".

- Optional two letters of introduction of professors who have followed his/her academic career to the application.

File name "0.8 Lettere presentazione 1" File name "0.8 Lettere presentazione 2"

INTERVIEW BY TELECONFERENCE

Oral exam will take place using Microsoft Teams platform, according to indications that will be provided to candidates before the test, by public notice in the Research Doctorates section of Politecnico website.

Candidate will be excluded from the competition procedure in the event of absence of connection on date and time indicated, unless this is due to technical problems caused by Politecnico or due to force majeure, or if the candidate is not available on the day set for the interview or in case of non-identification.

ART. 4 Examinations and dates

FOR Ph.D. PROGRAMME in

- 1. Ph.D. program in Mechanical Engineering and Management
- 2. Ph.D. program in Electrical and Information Engineering
- 3. Ph.D. program in Risk and Environmental, Territorial and Building Development
- 4. Ph.D. program in Engineering and Aerospace Sciences
- 5. Ph.D. program in Industry 4.0

The admission examination consists of:

- *assessment of the qualifications* achieved (average mark, final mark, theses, Master, post graduate courses, language certificates, publications, etc.);
- *Interview*, to ensure a proper assessment of the candidates, aimed at verifying the aptitude for research, the willingness to carry out experience abroad and the scientific interests of the candidate.

For Ph.D. programs above mentioned, 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 10 points for qualifications are not admitted to the interview.

Only for candidates to the Ph.D. program in "Design for heritage: Knowledge and Landscape", the admission examination consists of:

- *assessment of the qualifications* achieved (average mark, final mark, theses, Master, post graduate courses, language certificates, publications, etc.);
- evaluation of project proposal
- *Interview*, to ensure a proper assessment of the candidates, aimed at verifying the aptitude for research, the willingness to carry out experience abroad and the scientific interests of the candidate

Only for candidates to the Ph.D. program in "Design for heritage: Knowledge and Landscape", each Admission Board will assess the candidates giving each a mark out of 100 (broken down in maximum 30 points for qualifications, max 30 points for project proposal, max 40 points for the interview). Candidates obtaining less than 12 points for qualifications are not admitted to evaluation of project proposal; candidates obtaining less than 18 points for project proposal will not be admitted to interview.

The evaluation of the assessment of the qualifications and project proposal 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.

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.

FOR ALL PH.D. PROGRAMS:

- The admission to Ph.D. programs is by public competition based on qualifications and oral examination, whose aim is to ascertain 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 OF COMPETITION PROCEDURE
MECHANICAL ENGINEERING AND MANAGEMENT	Starting from 23/9/2020
ELECTRICAL AND INFORMATION ENGINEERING	Starting from 23/9/2020
RISK AND ENVIRONMENTAL, TERRITORIAL AND BUILDING DEVELOPMENT	Starting from 21/9/2020
DESIGN FOR HERITAGE: KNOWLEDGE AND LANDSCAPE	Starting from 23/9/2020
ENGINEERING AND AEROSPACE SCIENCES	Starting from 23/9/2020
INDUSTRY 4.0	Starting from 24/9/2020

Thus, no further notice relating to the oral examination will be sent to candidates.

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

If the candidate does not participate to examination on the date and time indicated, he/she will excluded from the competition.

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.

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 referring to qualifications and oral examination.

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.) Programmes – XXXVI Cycle, Academic Year 2020/2021.

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.

Scholarships funded by 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, 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 Politecnico di Bari, being the official notification, as well as on the website of Politecnico di Bari, www.poliba.it, path: *Ricerca/Dottorati di Ricerca*.

Therefore, accepted candidates will NOT receive any notice.

As Politecnico *di Bari* applied to the aforementioned Call MIUR PON-RI FSE-FESR 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.

As Politecnico *di Bari* applied to Call of Regione Puglia, n. 2/FSE/2020 "*Dottorati di ricerca in Puglia XXXVI Ciclo*", the total number of doctoral scholarships may increase. For each doctoral programme these additional scholarships will be assigned to doctoral students who have obtained a positive evaluation, according to the ranking list.

ART. 7

Enrolment

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 Politecnico *di Bari*, being the official notification, as well as on the website of Politecnico di Bari, www.poliba.it, path: *Ricerca/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 enrolment will be made after receipt in due time of the fees and contributions, as specified in the ART. 11 below, by means of invoice issued by ESSE3 platform, after pre-enrolment. Each pre-enrolled student may consult and print such invoice by clicking SEGRETERIA/PAGAMENTI. These fees have to be paid by using the online platform *PagoPA* managed by AgID (https://www.poliba.it/it/didattica/bacheca/pagopa)

The back-office will check the regularity of 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 15.343,28, 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 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 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 Politecnico di Bari as compatible with a scholarship is \notin 20,000,00 including real-estate and financial income as well as any other source of recurring income, with the exception of occasional work.

In case the above amount limit is exceeded, the candidate will be required to refund the scholarship accruals received in the fiscal year in which the limit of \notin 20,000.00 has been exceeded.

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 Politecnico di Bari

ART. 11 Fees and contributions

Fees and contributions are based on the applicable "Regolamento delle Tasse e contribuzioni studentesche" during the enrolment (www.poliba.it/Ateneo, sezione Didattica> 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 for the enrolment the regional fees for the right to study to *ADISU/Politecnico*, whose amount is $136,00 \notin$ (stamp duty and regional fee). 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 \notin 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 economic condition will be determined annually on the basis of the ISEE Certification for the subsidized services for the right to university study: regarding the certification of income, for the purpose of determining the contribution the student will have to obtain the ISEE Certificate for the subsidized services as soon as possible for the right to university study, even after enrolment, as long as under the terms established by the aforementioned current tax regulations.

This certificate will be acquired automatically directly from the INPS information system (therefore it will not have to be attached) and will appear in the "Self-certification" section of the Esse3

portal of each Ph.D. student who is regularly enrolled. It should be noted that in the absence of the aforementioned ISEE certification, the maximum tax rate set by the current Student Contribution Regulation will be assigned.

ART. 12 Privacy Policy

According to the Italian Law n. 675/96 and GDPR Regulation (Eu) 2016/679, 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 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 Mr. Giuseppe LUCATORTO of the "Research, International Relationships and Post-lauream Sector of Politecnico di Bari – Post Lauream Office"– post-lauream@poliba.it; giuseppe.lucatorto@poliba.t tel. +39 080 5962139/2201.

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 "Call for applications" is the translation of the Italian "Bando di concorso per l'ammissione ai corsi di Dottorato di Ricerca XXXVI - ciclo con sede presso il Politecnico di Bari a.a. 2020/2021". If clarifications or interpretations are necessary or in case of incongruities, the said Italian version of this Call for applications is seen as the legally binding version.

This selection-call will be published on the website of the Ministry of Education, University and Research and on the website of Politecnico di Bari <u>www.poliba.it</u> ((Official list – Albo ufficiale of Politecnico di Bari as website, Ph.D. Section, path: *Ricerca/Dottorati di ricerca*),

Bari, 19/06/2020

f.to THE RECTOR Prof. Francesco CUPERTINO